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COMPUTE!

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Editor's Notes

We're just back from the Winter Consumer Electronics Show (WCES) in Las Vegas, a huge display of all the latest televisions, audio and video systems, VCRs, computers, software, electronic musical instruments, printers, and other technological gadgets that will be headed your way in catalogs and on store shelves over the next 12 months.

The computer and software section was dominated by the massive exhibit from Nintendo, the Japanese company that now controls 70 percent of the billion-dollar-plus videogame market. Only slightly smaller was the Sega booth, another videogame giant. The startling resurgence of that segment of the industry during the past year and a half is remarkable when you consider that the business was pronounced dead just four years ago. With dozens of game cartridges-many of them conversions of computer software products-Nintendo and Sega attracted a lot of attention at the show.

Despite the flashy presence of the videogame companies, there were scores of new computer software products being demonstrated at the show and in hotel suites throughout Las Vegas by dozens of companies. And there were significant displays of several IBM-compatible computer systems from companies who are offering good prices and loads of options.

The presence of Apple, Atari, and Commodore at WCES, on the other hand, was largely oblique. While virtually every major software publisher was showing new and exciting products for the 64 and the 128, Commodore sponsored no floor display. The same could be said for Atari, which had a suite away from the show floor and sponsored ads in the daily show magazines for its Atari game systems. Despite Atari's emphasis on its lucrative game machines, there was still a variety of new software packages for the ST computers and a smaller number for the Atari XL/XE systems.

Unlike Atari and Commodore, Apple Computer and IBM have never considered the CES shows necessary for distribution of their computers. It appears now that, at least for the Winter CES, Atari and Commodore are adopt-

ing the same attitude. They have apparently decided that their resources are better spent by promoting Commodore Amigas and Atari STs at the semiannual Computer Dealers Exposition (COM-DEX) in Las Vegas and Atlanta, leaving their machines to be promoted at WCES through the software developed and peddled by third-party companies.

And that, in a way, is unfortunate. While Nintendo and Sega are delightful systems, they may be seizing the lion's share of the game market by default. There's no question that Apple, Atari, Commodore, and now IBM-compatible systems are all terrific game machines. What's more, these machines carry an added consumer benefit that the dedicated game systems simply can't offer: As computers, they're far more than just game-playing devices; they are anything machines. Not only can consumers play games on their computers, they also can take a break from gaming and use the machines for word processing, spreadsheets, paint programs, telecommunications, and all the other software applications that have made the computer such an influential piece of technology.

We would love to see Atari and Commodore return to both CES shows in the future, if only to continue to remind the industry assembled there just how good their computers are. But whatever eventually happens on that score, the more important point is that software, peripheral, and new hardware companies are fueling a consumer computer market that's still growing. In next month's issue, we'll take an indepth look at some of the most significant stories from WCES.

Keith Ferrell and Selby Bateman

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Last year, for the first time, electronic musical instruments outsold acoustic ones. Turn on a radio or television, and it's impossible to miss the change that is happening in the musical world: The electronic chip and the computer are joining the violin, piano, and guitar in the ranks of serious musical instruments. While some would rather ignore its presence, many musicians are embracing the technology that provides them with a new tool for composing, recording, and playing music.



Tom Netsel, Assistant Features Editor

In 1983, Americans bought more than 233,000 pianos and 392,000 digital keyboards. Two years later, piano sales had declined by almost half, while the demand for their electronic counterparts more than doubled. Last year, electronic keyboard sales topped two million. Of the \$3 billion spent on musical instruments in 1987, more than half went for the purchase of electric or electronic instruments.

Digital keyboards, electric guitars, electronic violins, drum machines, synthesizers, and sound samplers are being connected together and controlled by computers to create new sounds impossible to play on traditional instruments. In addition to creating new sounds, computers can bend, shape, compress, and stretch musical notes to imitate traditional instruments or whole orchestras in ways never imagined by musicians just a few years ago.

Today's Folk Music

Jon Appleton, professor of music at Dartmouth College, is not surprised by the shift in popularity from traditional acoustic instruments to electronic ones. "Digital instruments are the folk instruments of our time," he says. "That's what people are making music on today."

Some critics contend that computers cannot make music, arguing that electronic parts and components produce an unnatural or artificial sound. In the past, musicians made music by four basic methods: striking an object (piano or drum), rubbing two items together (violin or cello), blowing air through an object (trumpet or bagpipe), or plucking a string (guitar or harpsichord). Today, these methods have been extended vastly by digital technology.

Digital Sound

When sound is recorded on a compact disc or digital tape, audible vibrations enter a microphone and are converted into numbers (digits). These numbers can be stored and played back without being affected by dust, warpage, or other problems that can plague conventional analog recordings.

Once stored, the digits can be processed, and that's what a computer does best. A computer can change the pitch, adjust the volume, or manipulate the waveform of the sound in dozens of ways, depending on its programmed instructions.

A Musical Revolution

Computers such as the Commodore 64 and the Apple IIGS have internal sound chips that lend themselves well to musical applications, but most personal computers can be used to control external digital musical instruments. This was made possible by the introduction of MIDI.

In the early 1980s, the giants of the electronic music industry got together to develop a standard that would enable digital musical instruments to exchange data. The hardware and software specifications the manufacturers agreed upon is called MIDI (Musical Instrument Digital Interface). This standard, released in August 1983, enabled musicians to control multiple synthesizers, sequencers, and sound samplers, all made by different manufacturers, from a single control unit.

Previously, if you wanted to play something on an Oberheim keyboard, a Yamaha synthesizer, and a Roland drum machine, you needed an extra set of hands or more musicians. It was impossible to connect instruments made by various manufacturers in any productive manner. With MIDI, it's now possible to play up to 16 different synthesizers or drum machines from one controller or keyboard. This standard has permitted digital music to evolve at a tremendous rate. If the major computer makers showed such cooperation, you would be able write a program on your IBM, save it to disk, and then run it on a friend's Atari.

MIDI And Computers

While MIDI was not developed with personal computers in mind, their processing capabilities make them ideal controllers for digital instruments. Software and hardware manufacturers jumped on the MIDI bandwagon, and, before long, interfaces and programs for IBM, Commodore, Atari, and Apple were on the market.

Now there are hundreds of programs for sequencers, samplers, controllers, librarians, and printers designed for the amateur musician and for the seasoned professional.

Using such a system allows one musician to compose, record, edit, and play multiple-voiced compositions that can sound like traditional instruments or have electronic voices never heard before. Professional artists, impressed with MIDI's creative flexiblity, push the technology to new limits. Peter Gabriel recently contacted Frank Foster, president of Hybrid Arts, which is a major supplier of MIDI software for Atari. Gabriel was impressed with the Atari ST, which has a built-in MIDI port, and he recently added one to his studio. Foster says Gabriel was particularly interested in Hybrid's Android programs, which can supply a musician with hundreds of new sounds.

Each week Jan Hammer composes and records the music for *Miami Vice* at his home studio in New York. An IBM PC XT helps Hammer control an array of synthesizers and digital instruments.

Philip Glass, Frank Zappa, Pat Metheny, Mike Pinder, Stevie Wonder, and Herbie Hancock are just a few of the musicians who have turned their talents to digital technology.

While the professionals have a wide range of powerful (and expensive) equipment at their disposal, the amateur musician or



computer hobbyist can still assemble a sophisticated MIDI system for a modest cost. The Casio CZ-101 and the Yamaha DX-100 are two popular MIDI-equipped keyboards priced at \$499 and \$445, respectively, but which can be found discounted to about half those prices.

On the other end of the price scale is

New England Digital's Synclavier Digital Music System. This top-of-theline instrument-chosen by Stevie Wonder, Frank Zappa, Sting, Leonard Bernstein, and Chick Corea-stores, records, reproduces, or synthesizes sounds instantly at the touch of a button. As many as 304 different sound effects can be active on the keyboard at one time. Prices begin at \$60,000, but more sophisticated models are priced a few

dollars higher.

Synclavier And Apple

Last year, New England Digital donated a \$500,000 Synclavier to Dartmouth College's Bregman Electronic Music Studio. The studio was created in 1968 when computer wizard John Kemeny, father of the BASIC programming language, was president of the college. The Synclavier is the center of one of the most advanced music instruction studios of its kind in the United States.

"Apple Computers donated a Macintosh Plus for each of 16 student workstations," says Professor Appleton, co-director of the studio, "but Apple is upgrading the gift to Macintosh IIs."

Appleton, who pioneered work on the digital synthesizer with an engineer at Dartmouth and a student who later formed New England Digital, is himself a programmer and an electronic composer with more than 30 compositions recorded on Folkways and Flying Dutchman labels. He formed the class around the Synclavier and the Macintoshes to teach students about music made with computers and digital devices and how to compose on them.

Students have complete control of the Synclavier from their workstations, which are equipped with the Mac II and a Casio CZ-1 MIDI keyboard. Compositions can be played or edited instantly using the Syncla-

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Professor Jon Appleton and students analyze a violin's waveform during a session of Dartmouth College's Electro-Acoustic Music Program.

vier's synthesized or sampled sounds. The results can be heard, but more importantly, the other students can use their monitors to see what is happening.

"Any of the 16 terminals may be designated as the master terminal, thereby enabling any of the other 15 to see exactly what the master is doing," Appleton says. "They can very rapidly move through different programs and types of music and see what everybody's done instead of having to call up one program at a time and have people huddle around one terminal."

Music students and computer students work together at Dartmouth. The goal of the computer science students is to develop the software that will make it as easy as possible for the musicians to access the synthesizer's capabilities. "More often than not," Appleton says, "musicians are not used to working with computers. It's important to develop a front end for the (Synclavier) system which is user-friendly in the best sense of the word not simple, but one that takes into consideration the way musicians approach computers."

An Invisible Workstation

Appleton's goal is to train young composers and to introduce them to computer systems that are flexible. A professional system such as the Synclavier is powerful but very complex. The undergraduates at Dartmouth work with engineers at New England Digital to produce software that will enable a composer to use the Synclavier's power without having to devote most of his energy trying to master the system. When a composer has an idea or an elusive piece of melody that he or she wants to capture, the ideal workstation would be nearly invisible. It would allow the composer to move through the various computer tasks instantly, so his or her energy could be devoted to composing or performing.

"It doesn't really matter what instrument a person plays," Appleton says. "There are very effective MIDI interfaces for keyboards, guitars, and wind instruments. If a traditionally-trained musician comes to such a system, he should be able to generate what we call note lists in the manner most comfortable for him and not have to type in code."

Digitized music is here and its impact on music is expected to be even greater in the future. Synthesizers and electric guitars are the instruments of our times and the instruments most played by young musicians. Appletons feels young people are approaching music with a more playful and inventive bent. Whether they play a traditional instrument or a modern one, the computer and a MIDI interface are tools to help them create music, record it, and play it back flawlessly, enabling them to realize their musical potential more easily.

Goodbye, Guitar

In addition to being a tool that can free musicians from mechanical chores that stand in the way of producing music, computers with built-in voices are themselves used as musical instruments. If music is defined as a series of pleasing or harmonious sounds, then the determination of what is pleasing lies in the ear of the beholder. Lorne Strider is one musician who turned to a computer and liked what he heard.

Strider is an accomplished classical guitarist who once vowed that he had no need for a computer. He practiced his guitar in the evening, performed occasional concerts with another guitarist, and made a living selling real estate. When he decided a computer could help his business, he bought a Commodore 64. His music was never the same.

Fascinated by the 64's SID (Sound Interface Device) chip, Strider tried a variety of programs, looking for ones to demonstrate the computer's capacity for reproducing music. "I started ordering any music disks that came on the market," Strider says. "Eventually, I realized that none of them involved much effort or art."

Disappointed by the commercial programs he found, Strider took up programming as a hobby. He spent his evenings at the keyboard trying to coax Bach's fugues and Mozart's sonatas from his computer. His guitar gathered dust.

Strider's musical efforts succeeded, and he thought others might enjoy listening to classical music played on a computer. Ever the entrepeneur—he once proposed opening a branch of his real estate office on the moon—Strider launched a new enterprise called Strider's Computer Classics. He programs the works of master composers on disks that play through the computer's three voices.

Well-Tempered Computer

Strider now has ten disks that range from Renaissance music of the 1500s, through Mozart, Bach, and Clementi, to the turn-of-thecentury ragtime sounds of Scott Joplin. The disks, which sell for \$9.95, contain 7–15 selections and provide up to an hour of music. Each musical selection has four screens of information about the composer, his life, and his music.

Strider does the historical research as well as the musical programming. For example, the disks of J. S. Bach's *Two-Part Inventions, Three-Part Inventions*, and *Well-Tempered Clavier* each contain 15 selections and a total of 60 screens of text.

The real-estate broker and musicologist is somewhat surprised to find himself a software developer, albeit not one of the big guns of the industry. "It took me two or three months to design the basic structure of the disk," he says, "but once that was worked out, all I have to do is write the music files, then change the text and menus." His latest disks take about a week to complete. They are available from several distributors, including Free Spirit Software.

Strider, who calls himself more of a "whacker" than a "hacker" when it comes to programming, credits Jeff Johnson's *Virtuoso* 64 for helping him with the mechanical chores of creating music on a computer. The software produces code that can be used to create sound effects or background music for any type of BASIC or machine language program. "It's a no-frills music processing utility, but it is very powerful," he says, "and it serves its purpose completely." *Virtuoso* 64 is distributed through Chipmunk Software.

Strider is content with his new form of musical expression, but his former partner, Paul Brower, was disappointed when the guitar duo disbanded. Brower, who is a bit derisive about computer music, found a cartoon and sent it to his former musical partner. It shows a concert stage with two musicians bowing to the applause of the audience. One musician is holding a classical guitar, while the other holds a computer. Brower added a caption that reads, "Paul and Lorne go on tour again."

Chipmunk Software P.O. Box 403 Battle Ground, WA 98604 Free Spirit Software 538 S. Edgewood LaGrange, IL Hybrid Arts 11920 W. Olympic Blvd. Los Angeles, CA 90064 Strider's Computer Classics P.O. Box 554 Laytonville, CA 95454

Buyer's Guide To Tax Preparation Software

Caroline D. Hanlon

April 15th always comes too fast. Home tax preparers with personal computers, though, have a powerful tool to aid in computing their returns. As this buyer's guide shows, there is a wide range of software available for a variety of tax situations, including a program for Canadian taxpayers. This guide includes software for home users preparing Form 1040 and its accompanying forms and schedules. Nearly all the programs incorporate the new tax laws resulting from the 1987 Tax Reform Act.

DivorceTax

Research Press IBM PC and compatibles *Lotus 1-2-3* or compatible spreadsheet required \$65

This template is designed to help structure a divorce settlement so both parties can save on taxes. It takes into account issues such as alimony, child support, property settlements, dependents, and child care. The program must be used with a spreadsheet, and it has a money-back guarantee.

Estate Tax Planner Randle, Coray & Associates IBM PC \$95

ETP helps users plan the growth of their estates and then estimate the annual estate and gift taxes for the next 20 years. The program considers consumptions or gift of assets; changing estatetax rates and credits; marital deductions; and death of first or second spouse. What-if scenarios can be created to observe the effect of certain financial decisions on estate taxes. The manual includes instructions, forms, checklists, and information on wills, trusts, gifts, and estate planning.

Everything You Need To Do Your Taxes With Lotus 1-2-3 Woodbury Software IBM PC Lotus 1-2-3 required \$39.95

This tax planning and preparation package can help users compare one to six alternate tax strategies, or evaluate taxes for one to six years. The program helps determine the tax effects of financial decisions, and aids in sorting tax records. Major IRS forms—such as the 1040 and Schedules A, B, C, D, G, SE, and W—can be completed. Help screens appear throughout the menu-driven program. The package includes a book containing instructions and examples.

EZTax-Prep 1040

EZ Ware Corporation Apple II-series; IBM PC, PCjr, and compatibles; Macintosh Commercial spreadsheet required, printer optional \$99.95 (Macintosh); \$129.95 (all other systems)

EZTax-Prep 1040 includes templates for completing 26 IRS forms and schedules: 1040, 1040ES, 2106, 2119, 2210, 2441, 3800, 3903, 4952, 4562, 4684, 4797, 4972, 6251, 6252, 8582, 8598, 8615, and Schedules A–F, R, and SE. Computations are performed by the program and the results are automatically applied to the appropriate form. The forms can be printed in an IRS-approved format on 1040 stock or transparent overlays using standard or laser printers. The program can also be used to create what-if scenarios and plan future tax strategies. The audit-alert feature points out deductions that could possibly trigger an IRS audit, and data can be exported to EZ Ware's *EZTax-Plan* for more in-depth tax planning. *EXTax-Prep 1040* is designed to be used with *Lotus 1-2-3, Multiplan, Excel,* or *Symphony 1.2.* Annual updates that include all tax law changes are available for a fee.

EZTax-Plan, Personal Edition EZ Ware Corporation

IBM PC, PCjr, and compatibles; Macintosh

Commercial spreadsheet required \$95

This tax preparation package is designed to be used with Lotus 1-2-3, Multiplan, Excel, or Symphony. It helps individuals project future taxes, compare different tax strategies, plan for retirement, and complete tax form 1040 and schedules A, D, R, and SE. The Audit Alert feature also signals if planned deductions may lead to an IRS audit. *EZTax-Plan* takes into account charitable contributions, self-employment taxes, credits, itemized deductions, and assets such as bonds, stocks, and real estate. Updates incorporate any changes in tax laws that may occur. The package includes a coupon for one free update. This program can be used with *EZTax-Prep 1040*, also from EZ Ware.

Future-Tax

Taxaid Software Commodore 64 and Plus/4 \$39.95

Future Tax incorporates the new tax laws of the Tax Reform Act to help users calculate income taxes for 1988 and 1989, and plan future tax strategies. The menu-driven program includes the new tax rates and automatically figures standard deductions, exemptions, limitations on IRAs, surtax, deductions for the elderly, and itemized deduction limitations. The data can also be output to the screen or printer.

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J. K. Lasser's Your Income Tax 1988

Simon and Schuster IBM PC and compatibles 256K, DOS 2.1, color or monochrome monitor \$69.95

This tax preparation package combines software with the J.K. Lasser Tax Institute's tax guide, to help users complete their tax returns based on the new tax laws, and learn how to save on taxes and avoid penalties. An interview feature helps users select the correct forms, and the questions can be modified for individual needs. There is an onscreen calculator to use with either the worksheets or actual forms, and data can be transferred among the forms. Various tax strategies can be input to compare liabilities. Help screens contain excerpts from the book. Individuals and professional tax preparers can use the program, and the results can be printed in IRS-approved format or on original IRS forms. Owners of the 1987 edition can buy the 1988 edition for \$39.95 with proof of purchase.

MacInTax Softview Macintosh with 512K memory \$119

This tax preparation program displays the IRS forms on the screen, and the user fills in the appropriate lines. The program automatically performs the calculations and transfers data among the forms. There are 13 worksheets to aid in computing taxes, and itemization windows help break down any amount into a detailed listing. Instructions for each line in the forms can be displayed on the screen, and the IRS instruction book is included. The completed forms can be printed using a dot-matrix or laser printer. MacIn-Tax includes forms 1040, 1040A, 1040EZ, 1040ES, 2106, 2119, 2210, 2441, 3903, 4562, 4562A, 4684, 4797, 4868, 4952, 6251, 6252, 8283, 8582, 8598, 8615, and schedules 1, A–F, R, and SE. The program operates with *MultiFinder*. Annual updates are available for \$55. State tax programs to supplement MacInTax are available for California and New York for \$65 each; state updates cost \$35.

PC/TaxCut Best Programs IBM PC and compatibles \$75

The QuickTax feature in this program can automatically recalculate tax owed, refund due, current tax bracket, and taxable income, each time a number changes in the program. This helps users see how variations will affect the tax return. *PC/TaxCut* offers context-sensitive onscreen help for whatever topic or calculation the user may be preparing. Forms can be displayed on the screen before printing, and the 1040 can be printed on plain paper with an IBM or Epson dot-matrix printer. A telephone tax advisory service is available for registered owners of *PC/TaxCut* for \$1 per minute, with a minimum of 15 minutes. There is no charge for questions concerning program operation. Updates for previous owners of *PC/TaxCut* are available for \$45.

Quick Returns!

Ontek Development Corp. Apple II; Macintosh; IBM PC and compatibles

IBM PC version requires 256K RAM and DOS 2.0 or higher and supports CGA, EGA, Hercules, and monochrome display adapters; Apple II versions require Pro-DOS and 80-column capability \$24.95

Designed specifically for Canadians, this program helps users in any Canadian province or territory complete their Canadian income tax returns. It is available in 11 versions. Each version includes the main return, 11 subsidiary federal schedules, and the appropriate provincial and territorial forms. The user enters the data in the highlighted areas, and the totals, deductions, and tax payable are updated. Total amounts are automatically transferred between the main return and the schedules. Over 120 screens of context-sensitive instructions provide onscreen help. Returns can be printed out in a Revenue Canada-approved format. A checklist of items to mail with the return can also be printed.

Swiftax Timeworks Commodore 64 and 128 \$49.95

Swiftax handles tax forms 1040, 1040A, 2441, and 1040EZ and schedules A, B, C, D, G, W, and SE. It automatically calculates tax alternatives—such as income averages—to show the lowest tax to pay. Changes can be made to the tax return at a later date, using the taxpayer file. Information can be printed directly on tax forms or onto blank paper. Update disks with new tax law information and tables can be obtained each year at extra cost. The 64 version operates in 40-column mode and the 128 version in 80-column mode.

Taxaid

Taxaid Software Commodore 64 and Plus/4 \$44.95

An income tax preparation program, *Taxaid* helps users complete IRS forms 1040 and 2441, and schedules A, B, C, D, and E. It incorporates the 1987 tax law changes and tax tables, and calculations are automatic. Results can be printed on plain paper in an IRS-approved format. The program is menu-driven and includes a manual.

TaxView Planner SoftView Macintosh; IBM PC and compatibles Requires *MacInTax* or *TaxView* from SoftView \$79

This tax planning program includes tax tables for 1987–1991, along with worksheets to calculate taxes, tax bracket, child care credit, itemized deductions, capital loss limitations, taxable social security benefits, and the maximum IRA deduction. Users can compare up to five alternate tax strategies against the yearly taxes. The program can compute withholding allowances for throughout the year, and print W-4 and 1040ES forms.

Tax Advantage Arrays Apple II; IBM PC \$69.95

A tax preparation program for Forms 1040, 2106, 2441, 4562, and 6251, and Schedules A, B, C, D, E, G, SE, and W, *Tax Advantage* automatically computes the totals, displays the forms, and prints out the data. It can handle income averaging, calculate brackets and liabilities, and provide year-round tax planning. This program works with *Home Accountant*, also from Arrays.

The Tax Advantage

Double Eagle Software IBM PC and compatibles; Apple II-series; Atari; Atari ST; Commodore 64 and 128 \$59.95

This federal tax preparation program incorporates the tax law changes for the 1987 tax year and prints out IRS-acceptable forms and supporting statements. It can help users prepare Forms 1040, 2106, 2441, 4562, and 6251, and schedules A, B, C, D, E, F, and SE. The program can also be used for tax planning. Owners of *The Tax Advantage Early Bird Edition*, which includes all changes through August 1, 1987, can purchase the final edition for \$15.95. The two editions are fully compatible; the final edition includes all tax law changes through November 1987.

Tax Command Planner

Practical Programs

Commodore 64 and 128; Apple II; IBM PC

Apple version requires 128K; IBM PC version requires 128K and DOS 2.0 or higher

\$69.95

With this ten-year tax planning program, users can compare six tax options for up to five years at a time. The program uses current tax tables to calculate marginal tax rates, long and short term gains and losses, and taxes from income averaging. Tax rates can be adjusted according to tax law changes, and updates will be available each year. A manual provides line-by-line instructions.

Tax Command Professional Practical Programs

Commdore 64 and 128; Apple II; IBM PC

Apple version requires 64K; IBM PC version requires 128K and DOS 2.0 or higher \$49.95

In this program, IRS forms appear on the screen as a series of menus into which the user enters dollar amounts. A calculator and current tax tables are incorporated into the program to automatically calculate the totals. The program can complete Forms 1040, 1040ES, 2106, 2119, 2441, 3903, and 8615, and Schedules A, B, C, D, E, F, R, and SE. (The Commodore 64 and 128 versions do not include Form 1040ES or Schedule F.) It compares itemized to standard deductions and provides lineby-line tax information entry. A summary of the information can be printed for personal records, or the data can be printed directly onto IRS forms.

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1040 Department of the Treasury—Internal Revenue Service 1987

The program works with most printers with PICA spacing. The IBM version displays in 80-column mode. A disk drive is required and a manual is included. Annual updates are available to registered users at half price. A money-back guarantee is offered.

Tax Master Master Software Commodore 64 Printer optional \$30

Individuals can use this program to prepare their federal tax forms 1040 and 4562, and schedules A–F. The program includes the tax tables and a calculator function to automatically compute the amounts. Results can be transferred from one form to another, and more than one schedule can be completed for each user. *Tax Master* is a menudriven program that can store data for more than one taxpayer, and the information can be printed to screen or printer. The package includes an instruction manual and a coupon for a discount on the 1988 version.

Tax Master

Master Software Commodore 64 and 128 Disk drive required \$30

The 1987 version of *Tax Master* helps users complete Federal tax forms 1040 and 4562, and Schedules A, B, C, D, E, and F. The program uses a built-in calculator and tax tables to calculate taxes. Data can be transferred between forms and printed out in 80-column mode. This version incorporates the 1987 tax law changes.

Tax Preparer HowardSoft IBM PC and compatibles 128K or GW-BASIC with 192K \$295

Tax Preparer includes all the tax law changes through 1990 based on the Tax Reform Act, and enables users to forecast their tax liabilities beyond 1987. The user enters the data, and the program automatically performs all calculations relative to the tax year entered. The data is then transferred to over 20 IRS forms and schedules. Results are checked against the tax code to make sure limits have not been exceeded, and to make sure the forms, schedules, and worksheets can be printed in IRSapproved formats. Users can also create what-if scenarios to plan future tax strategies. Onscreen instructions are provided along with a handbook and telephone support. The program uses split screens and windows.

Tax Preparer HowardSoft Apple II-series 64K required \$250

Tax Preparer includes all the tax law changes through 1990 based on the Tax Reform Act, and enables users to forecast tax liabilities beyond 1987. The user enters the data, and the program automatically performs all calculations relative to the tax year entered. The data is then transferred to over 20 IRS forms and schedules. Results are checked against

the tax code to make sure limits have not been exceeded, and to make sure the forms, schedules, and worksheets can be printed in IRS-approved formats. Users can also create what-if scenarios to plan future tax strategies. Onscreen instructions are provided along with a handbook and telephone support. The program uses split screens and windows.

Tax ZipFiles Petit Design Apple II series Appleworks required \$19.95

Tax ZipFiles is a template for use with *Appleworks* in completing IRS Form 1040 and Schedules A, C, D, and E. The tax-ledger feature can sort tax-deductible expenses, and the speedmaps and speedpaging features aid in using the program. A 100-page manual is included. Wisconsin residents must add 5 percent sales tax to the cost.

TAXAID

Taxaid Software Commodore 64 and Plus/4 \$44.95

An income tax preparation program written by tax accountants and designed for home use. The latest edition includes all the current changes in the tax laws for the tax year 1987. *TAXAID* prepares IRS Form 1040, Schedules A, B, C, D, E, and Form 2441 (child care). The menu-driven program calculates automatically with all tax tables built in. An editing feature allows users to make changes and revisions at any time. Printout is in IRS-approved format.

TaxEase Park Technologies IBM PC and compatibles 256K memory and spreadsheet required \$69.95

TaxEase helps users complete both federal and state tax forms, automatically computing the taxes and printing the results on IRS-approved forms. Values can then be transferred among the forms. Versions are available for 20 states: Arizona, California, Colorado, District of Columbia, Georgia, Illinois, Indiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, North Carolina, New Jersey, New York, Ohio, Oklahoma, Pennsylvania, Virginia, and Wisconsin. A version containing only the federal tax forms is also available. Updates are available for \$34.95.

TaxView

SoftView Apple IIGS; IBM PC and compatibles \$119

TaxView helps users complete their tax forms or create what-if scenarios to determine the best tax plan. Replicas of 27 major IRS tax forms and schedules appear on the screen, and when completed, can be printed out to a dot-matrix or laser printer. The forms and schedules can be linked together, and data can be imported from text files. The program checks for errors and any violation of an IRS rule. Instructions for each line in a form can be called at any time, and there are 13 worksheets to help in calculations. Versions are also available for some states, including California and New York, for \$65. Annual updates to the federal tax package are \$55, and state updates are \$35. The IBM version operates under Microsoft Windows; a runtime version of that system is included on the disk.

Taxpertise Preparer Marnoble Software MS-DOS or PC-DOS machines Lotus 1-2-3 or Symphony required \$49.95

Taxpertise uses a fill-in-the-blanks format, so the screens look like the actual tax form. The completed forms can be printed onto a tax form, on blank paper for use with transparancies, or in an IRS-approved format. This program helps users complete the following tax forms: 1040, 1040A, 1040EZ, 1040ES, 1040X, 1116, 2106, 2119, 2210, 2210F, 2441, 3468, 3800, 3903, 3903F, 4562, 4684, 4797, 4868, 5695, 6551, 8598, 8606, and 8615, and schedules A–F, R, and SE. State forms can also be purchased for \$20 for California, Georgia, Illinois, Maryland, New Jersey, New York, Ohio, Pennsylvania, Virginia, and Washington D.C. Disks are available in 5¼- or 3½-inch formats.

Taxpertise Preparer State Programs

Marnoble Software MS-DOS or PC-DOS machines Lotus 1-2-3 or Symphony, and Taxpertise Preparer required \$59.95

State tax returns can be completed for California, Georgia, Illinois, Maryland, New Jersey, New York, Ohio, Pennsylvania, Virginia, or Washington D.C. The program must be used in conjunction with *Taxpertise Preparer*. When purchased with the federal tax package, each state package costs \$20. If purchased separately, each state package costs \$59.95.

TurboTax 1988, Version 5.0 ChipSoft IBM PC with 256K memory \$75

TurboTax is a tax preparation, planning, and recordkeeping package. With this program, users can complete over 35 IRS forms, plus supporting schedules and worksheets. Online instructions, including a 30-second manual at the beginning of the program, help answer questions about the forms, and customer support is provided by telephone or through the ChipSoft bulletin board. A data examiner option can point out anything left out of a return, and the tax window feature displays the current tax status throughout the program. Most of the math calculations are performed automatically, but a pop-up calculator and notepad are also available. The next year's tax laws are built into the planning mode of the program to facilitate tax recordkeeping and planning. The data can be printed onto supplied 1040 forms, or the forms can be printed on IBM- or Epson-compatible dotmatrix printers. The Price Waterhouse Personal Tax Advisor guide to 1987 and 1988 taxes is included in this software package. There are 26 integrated state tax packages available for \$40 each. A version for professional tax planners is also available for \$295.

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Tax Preparation Software Publishers

For more information on the tax preparation software listed in the Buyer's Guide, contact the publishers listed alphabetically below.

Arrays 6711 Valjean Ave. Van Nuys, CA 91406 818-994-1899

Best Programs 2700 S. Quincy St. Arlington, VA 22206 703-820-9300

ChipSoft 5045 Shoreham Pl., Suite 100 San Diego, CA 92122 619-453-8722

Double Eagle Software 2210 Wilshire Blvd., Suite 875 Santa Monica, CA 90403 213-459-9748

EZ Ware Corporation P.O. Box 620 29 Bala Ave., Suite 206 Bala Cynwyd, PA 19004 215-667-4064

HowardSoft 1224 Prospect St., Suite 150 La Jolla, CA 92037 619-454-0121

Marnoble Software 3730 Kirby Dr., 12th Floor Houston, TX 77098 713-831-6866 Master Software 6 Hillery Court Randallstown, MD 21133 301-922-2962

Ontek Development Corp. #3206, 24 Mabelle Ave. Toronto, Ontario Canada M9A 4X8 416-234-1489

Park Technologies Box 1317 Clifton Park, NY 12065 518-877-5881

Petit Design 2650 S. Shore Dr. Milwaukee, WI 53207 414-483-9056

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Randle, Coray & Associates Box 1228 Utah State University Post Office Logan, UT 84322 801-753-2020 Research Press 4500 West 72nd Terrace Prairie Village, KS 66208 913-362-9667

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The Avalon Hill Game Company A MONARCH AVALON, INC. COMPANY 4517 Harford Road ★ Baltimore, MD 21214

Civil War. This strategy game puts you in command of the armies of the North and South. Each player must determine in advance where his major campaigns will take place in the East, West or Trans-Mississippi Theatre, From there, armies must be formed and leaders assigned. Once movement orders are issued, it is up to the individual commanders to gain the initiative, move their forces and engage the enemy, \$35.00

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Top Fuel Eliminator

Russ Fisher

Requirements: Commodore 64, Apple II series.

Top Fuel Eliminator is a drag-racing simulation. Included in the game are time trials for practice sessions and entire racing seasons. Start with the time trials first, to become familiar with the dragster's characteristics and how they can be modified for various racing conditions. An entire racing season consists of nine events and may take 30 to 60 minutes to play, depending upon your skill and how much time you use between races to make adjustments to the car. Top Fuel Eliminator is a combination action/strategy game, where the action lasts five to seven seconds for each run down the drag strip.

With much of the newer software employing highly detailed graphics, it is surprising that the graphics here appear somewhat cartoonish. It also takes time to reload the program after choosing either Time Trials or Play Game. It would have been more convenient to switch between playing rounds, especially when first learning to play.

Competition By Computer

Competition in *Top Fuel Eliminator* is provided by eight computer-controlled drivers and their dragsters. Some of the competitors are very good indeed. There are nine different contests during the game, such as Winter Nationals, North Nationals, and Summer Nationals, culminating in the World Event.

The racing season progresses through all four of the actual seasons, and racing conditions are affected accordingly. Prior to each race, you have an opportunity to make various adjustments to your car in an attempt to compensate for varying track conditions. At each event, you can check air temperature, track temperature, humidity, altitude, and whether the condition of the track is excellent, average, or downright slippery. Some of the adjustments, such as the supercharger setting, engine timing, and fuel mix, are related to engine horsepower. At lower humidities, you might want to crank up the supercharger pressure. But setting up a very "hot" engine can lead to more engine failures during the course of a race, so be careful.

Reviews

Other dragster adjustments are related to traction and include the clutch, tire, and wing settings. You may vary the tire pressure, clutch slippage, and wing angle. Poor traction will result in excessively smoking tires during the race. Too much traction can have the opposite effect and bog down the car. Sometimes the track conditions change rapidly, so be sure to check them before each race. Astute adjustments are called for if you want to stay in the running.

Qualifications Required

You must qualify for each race. You have two attempts to qualify under the posted time, which is the slowest time of the nine drivers. Of course, you must qualify without jumping the "Xmas tree" yellow light count-down, and you must stay in your lane at all times. One gear shift is also required during each run. Watch the tachometer, and try to shift between 9000–9500 rpm. Going over 9500 rpm will cause your engine to blow.

After qualification, a ladder chart shows the matchups for the first round of races. The chart is shown again after each race until a winner is decided. If you do not qualify, or you lose one of the races, the completed chart shows how each of the computer players performed during that event.

Points are awarded for performance after each event, and a summary of the points is displayed. You receive between 100 and 800 points at each event: 100 points for showing up, 800 for winning. You also receive 1 to 8 points for qualifying—8 for the fastest qualifier and 1 for the slowest.

Shifting Sounds

Although the actual racing times are very short, there is a lot of action happening during the race. The Xmas tree is displayed at the lower-left corner of the screen, the driver's view is at the bottom center, the tachometer is at the lower-right corner, and an overhead view of the track spreads across the top



Top Fuel Eliminator, combining action with strategy, pits you against eight other dragsters in a variety of competitions.

of the screen. Watch the Xmas tree carefully to get a quick start without redlighting. Then pay attention to keeping your car in the lane, watch the tach for the proper shift point, and glance at the top of the screen to see what is happening to your competitor. You may want to push your chair back a few feet and hope to catch a glimpse of the tach while struggling to keep the car in your lane. Fortunately, the sound effects give a clue to engine rpms; you may find yourself shifting gears when it sounds right. I've driven into the wall too many times while trying to sneak a glance at the tach.

After each race or qualifying round, a performance analysis is presented. Examine this screen to see your reaction, shift, power, and traction performance. This screen also shows if you had an engine failure, crash, red light, or if you crossed the line. Finally, your time and top speed are posted. The attention to detail makes *Top Fuel Eliminator* a good game choice for armchair racing fans.

Top Fuel Eliminator Activision (Gamestar) P.O. Box 7287 Mountain View, CA 94039 \$29.95

Thexder

James V. Trunzo

Requirements: Apple IIGs with 512K RAM (reviewed here); IBM PC, XT, AT or true compatible with 256K RAM; IBM PS/2, supports MCGA color mode; Amiga.

While "Buy American" is a laudable suggestion and one worth heeding on most occasions, that isn't the case here; if IIGS owners wish to purchase the best arcade games for their machines, they've got to buy Japanese. From Game Arts of Japan via Sierra On-Line (via California) comes the first true arcade game for the Apple IIGS: *Thexder*.

A runaway best seller in Japan, *Thexder* has been converted to American machines and is certain to gain a following here. Its theme is certainly popular with the younger set: The Thexder is a super-assault vehicle—a hyper dual-armor Robot-Jet transformer that mimics the popular cartoon and toy Transformers. A single keystroke changes the Thexder from a powerful robot into a sleek jet, and in either form, it can fire heat-seeking lasers at its foes.

When the game begins, the only Thexder in existence—piloted by you, of course—is trapped inside a heinous alien complex. Twenty different enemy creatures are doing their best to be sure you don't traverse the 16 levels of play and make it to the central computer. They have good reason to want to stop you: If you make it to the computer and destroy it, you'll not only escape, you'll end the alien's only means of reproduction.



Thexder, a best-seller in Japan, is now available for U.S. machines.

Thexder is the standard shoot-'emup arcade space game: A powerful good guy must destroy even more powerful bad guys. It's far above the standard in graphics, animation, control of the central character—the Thexder vehicle and challenge. The screens are beautifully drawn, and the scrolling is seamless and unobtrusive. Graphically, *Thexder* delivers on its promise to be the game by which all others of its type will be judged, mainly due to its attention to details. Control of the *Thexder* is through the use of the numeric keypad (or the top number keys, if you prefer) with no mouse or joystick option. This should not be considered a drawback, however, because the keypad system works quickly and efficiently. Actually, it's similar to the multiple-button control panels of many popular full-size arcade games.

One Life To Live

As for the challenge of play, be forewarned. *Thexder* is not an easy game, and in my opinion, it can be very frustrating—especially for younger children who have short attention spans. It takes a while to get the hang of maneuvering the *Thexder* and even longer to figure out strategies. These features can be pluses for ardent gamers, but work in an opposite manner for the casual or younger gamer. Also, if the Thexder is destroyed, game play starts over, but at least it starts over from the beginning of the last level completed. In *Thexder*, you only live once.

The 20 different opponents out to thwart your mission are a paradox: Each of them is unique in its overall appearance, yet many of them are so similar in shape, they can confuse the



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player during early play sessions.

It's important to know which alien form is a Tribar as opposed to an Arbalest, for example, because some aliens provide you with needed energy when destroyed, while others do not. Because you use energy when destroying aliens, fleeing or outmaneuvering aliens is a good strategy at times, especially if the aliens are not energy providers.

Start-Up

Booting *Thexder* on the GS is an experience. It requires that you use both the *Thexder* disk and your System Master each time you play. I can only hypothesize that there is so much code on the *Thexder* disk that the System info couldn't fit; or possibly it had to do with licensing agreements. In any case, it's a minor annoyance to have to go through a three-disk swapping procedure to begin play.

Thexder is one of a growing number of games that allows you to make a back-up copy but requires that the original be used at some point during the loading process. Because it is an arcade game, I can't quibble with this scheme: It gives the player a chance to protect his master, yet it prevents mass copying and distribution of copyrighted material.

[Ed. Note: The IBM version of Thexder is hard-disk installable, requiring the use of the master Thexder disk as key disk during boot-up. Incidentally, Thexder is, according to Sierra On-Line,

the first game to support IBM PS/2's MCGA color mode.) Finally, don't be alarmed at the paucity of instructions that come with Thexder. At first glance, especially after experiencing initial problems in playing the game, I thought that what appeared to be a lack of documentation was a major problem. However, it was patience that were lacking, not instructions. The six panels of instruction and the walk-through map of the first several levels provides you with the information needed to play the game; and comparing it to the instructions given on arcade machines-which Thexder pare is in all other phases—the directions are more than adequate.

Overall, *Thexder* jumps into the past to grab a theme that was the rage in the boom days of video arcades, and it leaps into the future with 16-bit computer technology. If you like hot-and-heavy combat action coupled with great graphics and sound, *Thexder* is sure to satisfy you while giving you excellent play value for your dollar.

Thexder Sierra On-Line P.O. Box 485 Coarsegold, CA 93614 \$34.95 Amiga version distributed by: Electronic Arts 1820 Gateway Dr. San Mateo, CA 94404 \$34.95

ProDrive For The Amiga

Scott Thomas

Third-party hardware support for the Amiga appears to be accelerating at surprising speed. Attributable mainly to the marketing success of the Amiga 500, third-party manufacturers in recent months have come out with a panoply of hardware peripherals for the Commodore Amiga. One of these thirdparty hardware peripherals, the Pro-Drive from Progressive Peripherals & Software, is a good example of thirdparty support that benefits Amiga owners with higher quality products at less expensive prices.

Like the Amiga 1010 3¹/₂-inch external floppy drive, the ProDrive draws its power from the computer power supply. Additionally, the ProDrive is designed to be 100-percent compatible with the Amiga 1010 external drive. Similarities between the two drives, however, end there. The ProDrive is compact, consuming only about 40 percent of the space that the Amiga 1010 drive requires. Its dimensions are a mere 7 inches deep by 4¹/₄ inches wide by 1¹/₂ inches in height. Removing the metal housing of the drive revealed the reason for its compactness. The drive is an NEC brand internal 3¹/₂-inch drive, undoubtedly developed for IBM PC clones.

Physically Distinguished

Other physical characteristics of the ProDrive that distinguish it from the Amiga 1010 drive are its sturdy metal housing, spring-loaded door to keep dust out of the drive, and its three-foot cable to connect to the computer. One woefully inadequate feature of the Amiga 1010 is its stubby cable. For Amiga 500 owners, the 1010 must sit immediately next to or on top of the computer in order for proper connection of the cable. My work station would not accommodate such an arrangement and I was forced to buy a special extension cable to connect my Amiga 1010 drive. The ProDrive's extra cable length, therefore, provides needed flexibility for your work space. In my examination of the drive, I found the ProDrive to be truly 100 percent compatible with the Amiga 1010. All reads and writes to the drive perform flawlessly, and all commercial software, including many with copy protection, ran on the ProDrive without a glitch. I detected no distinguishable differences in the speed of reading and writing to disk between the ProDrive and the Amiga 1010. Its quietness of operation, however, was pleasantly noticeable in comparison to the noisy operation of the 1010.



Pinned

The only drawback to the ProDrive is the absence of a 23-D-pin drive connection out of the drive to permit daisychaining of additional drives. As most Amiga owners are aware, the operating system of the Amiga will support up to four floppy drives. However, the power supply of the computer will support only one external floppy drive, making it impossible to connect more than one Amiga 1010 drive to the computer. That fact was undoubtedly the consideration of Progressive Peripherals when it decided to leave off the drive connection on the ProDrive. However, the absence of such connection prevents one from daisy-chaining an Amiga 1020 5¼-inch external drive. The Amiga 1020 has its own power supply and can be daisy-chained with an Amiga 1010. The absence of the drive connection on the ProDrive, therefore, is a significant consideration for any Amiga owner who is considering obtaining a 51/4-inch drive down the road.

In summary, the ProDrive is an excellent high-quality hardware peripheral for the Amiga. It is better built than the 1010 external drive and has significant feature enhancements over the Amiga drive. Its compactness, quiet operation, and sturdiness make it a very attractive peripheral. And with a list price \$60 less than the 1010, it's very much a bargain. Unless you have or are considering the Amiga 1020 5¼-inch drive, I recommend serious consideration of the ProDrive as an inexpensive yet higher-quality alternative to the Amiga 1010 drive.

ProDrive Progressive Peripherals & Software 464 Kalamath St. Denver, CO 80204 \$239.95

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Dark Castle

Rhett Anderson

Requirements: Amiga (reviewed here), IBM PC and compatibles, Macintosh, Atari ST, Commodore 64. IBM version works in CGA, EGA, or Hercules Monochrome modes, or in 16-color mode on the Tandy 1000 series.

Are you the type who would enter a haunted house for fun? If you are, *Dark Castle* may be your kind of game. If you're not, *Dark Castle's* two disks of beautiful screens, realistic animation, and blood-curdling digitized stereo sound may still be able to lure you into the danger.

In Dark Castle, your goal is to slay the Black Knight. Of course, the Knight knows you're after him, but he's not especially worried—after all, what chance do you stand in his heavily protected castle? Not much, as you'll find out when you begin play.

Work Of Art

Dark Castle's main achievements are to be found in its brilliant graphics, sound, and atmosphere. Each room shows lavish attention to detail. In this review, I'll focus on the Amiga version of the game—the most impressive—but most of the following comments apply to the other versions as well.

Simply put, the artwork in this game is beautiful. Each room is handdrawn and is loaded from disk when you enter. The animation is second to none—each character in the game has a generous number of animation frames.

Each room is populated by the castle's undesirables, and each "undesirable" has its own digitized sound effects—the crows caw, the bats shriek, the rats squeak, and some strange little characters make faces at you and yell "Nya nya nya nya."

Dark Castle has a distinctive style that pulls the animation and sound into a coherent whole. More than any other game available for the Amiga, this game has atmosphere and class. As you travel through the rooms, you can almost feel the clammy walls and cold floors. This is one of the programs you'll use to show off your Amiga.

Game Play

In *Dark Castle*, you progress through the castle's rooms, trying to find the Black Knight in order to slay him. You face many different kinds of opponents, which, if you're accurate, can be disposed of with rocks. To do this, you first point your arm in the direction you wish to throw, and then make the toss.



Dark Castle features stunning graphics with careful attention to detail.

It doesn't take much to dispose of your character—if you trip over a small step or fall in the water, you're dead.

The most severe problem with *Dark Castle* is that game play is so difficult. Your character can be controlled by either a joystick or the combination of the mouse and keyboard. After years of playing games with joysticks, I found the keyboard/mouse duo unfathomable. Unfortunately, the many actions that need to be performed in the game become hopelessly complex under joystick control.

Even considering the trouble with controlling the character, the game seems overly difficult. For over a week now (in *Easy* mode), I've been leaping off a certain precipice, trying in vain to grab hold of a swinging rope. I've never caught it. Frankly, if I weren't so anxious to see the flying monkeys and other enemies the package illustration promises, I would have given up several days ago.

Other Problems

There are other flaws in this game which will keep it from occupying my list of favorites. The first is its copyprotection scheme. While it's understood that game producers have more to lose from piracy than other software producers (after all, you don't need a manual to play most computer games), I can't bear to hear my disk drive grinding its way through the protection sequence each time I want to play. I simply don't trust that the software respects my expensive computer equipment. In the case of Dark Castle, the protection is so severe that the game occasionally crashes my computer on boot-up-or worse, while loading the screen for the next room.

That brings up another problem the frustrating wait between levels, as *Dark Castle* loads the graphics and sound data. Players with two disk drives will be annoyed. Those with one will be positively aggravated. It would be great if you could put this game on your hard drive, but the copy protection prevents that. (Note: The IBM version is

hard-disk installable.)

Nonetheless, *Dark Castle* deserves admiration for its excellent sound and graphics. Whether it is worthy of play is another matter. *Dark Castle* has shown us what a game on the Amiga can be. We hope that future games will combine the excellent presentation of *Dark Castle* with better playability.

Dark Castle

Three-Sixty Pacific 2105 South Bascom Campbell, CA 95008 \$39.95 IBM, Amiga, and Atari ST versions \$34.95 Commodore 64 version

Macintosh version available from: Silicon Beach Software 9770 Carroll Center Rd. Suite J San Diego, CA 92126 \$49.95

Postcards

Ervin Bobo

Requirements: Apple II series (reviewed here), Macintosh, Commodore 64, IBM PC and compatibles.

Many years ago there was a fad for comic postcards. These cards usually carried a message of wry humor or ironic understatement, and were illustrated by rather outlandish drawings one might show an outhouse with a moon carved in the door and the caption "Wish you were here," or an ear of corn as big as the truck bed on which it rested and the caption "You should see the big ones."

Juvenile by today's standards of humor, back then they offered a quick and easy form of communication, a way of letting the folks back home know you had not only survived this far but were actually enjoying yourself. The price was five or ten cents, and postage was a one- or two-cent stamp—I told you this was long ago—and everybody in America probably received one at some point between 1935 and 1955.

Lost now and only dimly remembered, save for a few collectors, the penny stamp and comic postcard gave way to higher postage and to the need for a flashy, full-color postcard showing the interior of Meramec Caverns or the faces on Mount Rushmore. Lost with it was a piece of Americana.

Recalling The Past

Fortunately, someone at Activision remembers older and simpler times and has brought these comic postcards back (but not the penny stamp) in a new

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program called *Postcards*. The program consists of a library of line-art images, a drawing program for customizing or enhancing the artwork, and a text processor for captions. *Postcards* allows you to print out a part of the past on a dot-matrix printer, paste it on postcard stock, and mail it to someone who will either appreciate the nostalgia or be buffaloed into thinking you've invented a new art form.

Testing the Apple version, I was pleased to find that the setup program first asks you for the type of computer you're using. The list of choices includes the Laser 128 and the Franklin 500, making Activision one of the first software companies to come to grips with the newer realities of the Apple software market. Following this, you are asked for the number of disk drives and the type of printer you are using. All this information is stored on the master disk.

The working screen is really two screens. You switch between them by pressing the 1 or 2 key. Running vertically along one edge of the screen is a list of commands. Each is as simple to implement as the page command: Strike only the first letter of the command word, and you are instantly there.

Bathing Beauties On The Moon

There are ten full-screen backgrounds from which to choose and more than a hundred pieces of clip art, the latter divided into such categories as People, Edibles, Animals, and Transportation. During the heyday of these cards, a great part of the humor was in juxtaposing subjects or scale. The *Postcards* libraries and the quick reference guide to them will suggest their own incongruities—bathing beauties on the moon, a kangaroo looking at the Eiffel Tower.

Properly, you should load a background onto the palette screen, then transfer clip art or drawings onto it from the Clipboard screen. This process is made easy through the use of a "rubberband" frame that is invoked when you use the Copy command. Stretch it around the clip art until you've included only what you feel is necessary and then click the joystick button to clip it. Press Esc to take you back to the working screen; next, switch to screen 2 and press P for paste. The picture reappears, "attached" to your cursor, and can be moved wherever you wish. Once there, it can be pinned down with another click of the fire button.

There seems to be no limit to the number of elements you can include in this manner, though you'll be the best judge of how much is necessary to express whatever wacky thought you have in mind. As an aid to keeping such built-up pictures coherent, the Copy command includes a Transparent mode, in which your background will not be blocked out by the white frame of your clip art.

The drawing portion of the program is strictly freehand. There are no premade circles or squares such as are found in stand-alone programs, but you'll probably find the drawing program adequate. While it will be possible for the more talented to draw their own pictures, the primary use of the drawing program appears to be as a means to enhance or personalize the drawings from the *Postcards* library.

Although the drawing program can be called minimal, I was pleased to find a Zoom feature which allows editing on a pixel level and a Fill command that will invoke one of six fill patterns.



Postcards offers ten different backgrounds and more than a hundred pieces of clip art for creating your own ready-to-mail postcards.

Words And Pictures

Completing the program is a text processor. You can type your message within the picture—which is framed or outside the frame. Text is erased by using the backspace key, but that should be enough. Remember that we are creating captions, not documents.

Because we are dealing with a picture the size of a postcard, printing will be done quickly. The drawing is printed on standard paper, then cut out and pasted to the postcard stock included in the package. For those of us who can never seem to find the tools needed to do a job, a glue stick has also been included. After this, of course, you address the card, affix a stamp, and mail a piece of personalized nostalgia to someone who will appreciate it.

In bringing back an almost forgotten piece of Americana, Activision is to be commended. An outgrowth of the utility printing programs that began with *PrintShop*, *Postcards* has its own approach, its own subject, and, as evidenced by the library of drawings, its own sense of humor. As for being a utility, I think of it as more of a luxury, to be savored in the way one might savor a fine piece of carnival glass or a plaster miniature of the Empire State building.

One problem: When loading a sheet from the library, there is no warning that you will erase whatever else is on the active screen. For that reason, it is important to develop a routine for screen use and switching. Otherwise, your carefully crafted picture on screen 2 can be erased by accidentally loading clip art onto the same screen.

With that one exception, I think *Postcards* is well thought out, well documented, easy to use, and that it will fill an empty space in many hearts.

Postcards Activision 2350 Bayshore Pkwy. Mountain View, CA 94043 \$29.95 Apple IIGs and Macintosh \$24.95 Apple II series, Commodore 64, IBM

Empire

Neil Randall

Requirements: Atari ST (reviewed here); IBM PC, XT, AT or true compatible; Apple II series; Amiga

WARNING! the box says. This program is highly addictive. Considerable otherwise productive time might be lost. Play only during vacations. Usually, of course, such warnings are best disregarded. Some games are addictive, but few as addictive as the packaging would have us believe. In the case of Interstel's Empire, though, the warning may be worth heeding.

Also on the box is a statement that *Empire* is an updated version of the popular game of the same name that appeared on mainframes and minicomputers as early as 1977. I never played *Empire*, and I'm glad I didn't know it existed. As it is, I had enough trouble just writing this review. See, every time I sat down to boot up my word processor, the copy of *Empire* kept staring at me. Day by day, my resistance weakened....

A Dose Of Documentation

Empire comes with a 72-page Command Manual, a Command Reference Card (specific to your computer), and a disk that is not copy-protected (and is therefore copyable to a hard drive). In place of copy-protection the program opens with a Confirmation system, instructing you to type the first word from line *x* on page *x*. Like most elements of the game, even the confirmation system is friendly: Since it always specifies

the first word on the line, you need only count lines, not words. Furthermore, the request contains a message stating that distributing the program may be injurious to your conscience. For me, this works far better than the usual legal warnings—I prefer butter to guns.

The manual is complete, wellorganized, and daunting. It opens with a memorandum and a short story, both of which relate the game (rather weakly) to Interstel's StarFleet software. The manual provides instructions on backing up the disks and copying the program onto a hard disk. Next come 24 pages on how to load, set up, and play the game, and this is followed by 26 pages describing the individual play commands. After an extremely useful 4-page section on strategy and hints, the manual gives a 7-page overview of the creation of worlds using the game's Map Generator. Last comes some peripheral information, including an interesting description of the programming history of the game.

Any 72-page manual, though, is intimidating, and this is the only unfortunate element of Empire. Like most players, I boot a game and start playing it before I even look at the manual, but a manual this size almost discourages such impetuosity. In Empire's case, especially, the intimidation is needless. I was able to play the game after only 20 minutes or so of experimentation-and I mean really playing it, not just mindlessly moving armies around. Before my first hour was out, I was already planning devious and brilliant strategies for capturing an innocuous-looking peninsula from the green army. By the end of the second hour I was engaged in a fullscale war with that same army (their idea of "innocuous" differed from mine). Only then did I turn to the manual.

Empire is a strategy wargame, but it is much different from most computer wargames. The premise is that you have been sent by Star Fleet Command to oppose the Krellan conquest of a planet. You land in a city, and the rest of the map is black. From that city you begin producing your war machine, with the goal of recapturing all 66 cities from the Krellans. The game allows either a two-player or a three-player version, and the computer will handle as many or as few of the three commands as you wish. All three can be human players.

Strategy Is Everything

What makes *Empire* different is its strict emphasis on strategy. You create a host of armies, but their attributes are identical. So, too, are the fighters, battleships, transports, carriers, destroyers, and submarines. In other words, the game is not designed for the historical game buff. Its purpose is to let you fight a global war quickly and easily, demanding only your best strategy. It sacrifices small detail for the sake of emphasizing strategy.

The interface is extremely welldesigned. You can execute all commands from the keyboard or with a mouse, or you can combine both freely. When you capture a city, an attractive display allows you to set production for that city, and it even insures that you don't start producing battleships in a city not located on the coast. Each city produces only one type of unit at any one time, but you can easily change the production by calling up the production map, selecting the city, and making the change.



Empire is an addictive strategy wargame (Atari ST version pictured above.)

Moving units is what you'll be doing most, and here, the interface shines. The unit to be moved flashes, and you can either go to the (GEM) menus, type a one-letter command on the keyboard, or point with the mouse. With the mouse pointer, you simply go to the desired destination square and press the left button. A white line appears, linking the unit to the square. If you want that destination, simply release the button. The unit may take several turns to reach its destination, after which it will start flashing again, waiting for orders.

Worlds To Conquer

Not content with even this friendly a system, though, Insterstel has provided more. You can lump a bunch of units together (Group Survey command) and issue them all the same order. You can put armies on sentry duty, in which case they won't flash at all until you take them off duty. And you can command a transport unit to load all units that come adjacent to it, without having to load each one individually.

You can fight any adjacent enemy unit. To fight, simply move the unit to the enemy's square. The battle is over when one unit is destroyed. Extremely simple, the system is highly effective. You both destroy and lose many units in this game, especially in a large-scale war. Two things about *Empire* are particularly appealing. First, since you learn about the planet only as you actually move across it, the game contains the excitement of exploration (the heart of all adventure games). Second, it truly rewards strategy. To launch a full-scale amphibious invasion, for example, demands a host of armies and transports, protection from enemy fleets, and fighters and ships to bombard the shore. But unlike most games, creating these units and using them is extremely easy; what's difficult is getting everything to the right place intact and at the right time.

Strategy gamers should find nothing to dislike here. *Empire* contains one of the best interfaces I've seen on any complex game, and its design foundation is strong. It contains a Map Generation system (it produces random maps as well), so you will never run out of new worlds to liberate. It plays as well with three players as it does with one, and the one-player game is a constant challenge. This is a superb, addictive game.

Empire

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Casino Blackjack

Win your ticket home or lose your shirt in this accurate simulation of the most popular Las Vegas card game. Originally written for the Commodore 64, we've included versions for the Atari eight-bit computers, Apple II series, IBM PC/PCjr and compatibles, and the Amiga. The PC version requires BASICA or GW-BASIC or Cartridge BASIC for the PCjr. The Apple II version works on any Apple II-series computer under either DOS 3.3 or ProDOS. The Amiga version requires 512K of RAM.

"Casino Blackjack" is *real* blackjack, played the same way it's played in the best Las Vegas casinos. Starting with a bankroll of \$100, you play against an intelligent computer dealer. Just like in the casinos, you can "split" your hand, double down, or buy insurance.

The original version of Casino Blackjack was written on the Commodore 64. We've included translations for the Atari 400, 800, XL and XE, Amiga, Apple II series, and IBM PC/PCjr and compatibles. Type in the version for your computer and save a copy; then, run the program. John Hamilton

In The Cards

The rules for Casino Blackjack are simple to learn. The object of the game is to get more points than the dealer—without exceeding 21 points. An Ace can be counted as either 1 point or 11 points. Jacks, Queens, and Kings are all worth 10 points. All other cards count as their face value.

Before each hand, you decide how much of your bankroll you want to bet. Next, four cards are dealt—two to you, and two to the computer dealer. The dealer's bottom card is face down and his top card is face up, so you can only guess at the total number of points he has. Both your cards are dealt face up.

If you've been dealt a "blackjack" (21 points), you automatically win 1¹/₂ times your bet, unless the dealer was also dealt a blackjack, in which case no money exchanges hands.

After you've taken a look at your cards, decide whether you want to take a hit (take another card) or stand with the cards you have. If you take a hit and exceed 21 points, you have gone "bust" (lost the hand). If you take a card and still have less than 21 points,



"Casino Blackjack" for the 64—so realistic you'll think you're in Las Vegas.



The Apple II version of "Casino Blackjack" features custom-designed cards.

you're free to take another hit if you like. This process continues until you stand or bust.

If you stand, the dealer may deal himself a card. The dealer

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"Casino Blackjack" for the Atari 400, 800, XL, and XE.

takes a hit if he has 16 or less points. He stands on 17 or more. If the dealer doesn't go bust, the cards are inspected to see who came closest to 21. A tie is known as a "push." In the case of a push, no money is lost, otherwise, the winner takes the money.

Special Plays

If the dealer's top card is an Ace, you may elect to insure yourself against the dealer having blackjack. You pay half your original bet for insurance. If the dealer does have blackjack, you keep your bet. You lose the insurance money, whether the dealer has blackjack or not.

If you're dealt a total of 10 or 11 points, you may double your bet. This is known as "doubling down." If you choose to double down, you're dealt one more card and then you automatically stand. If you think the dealer will win the hand, you may choose to "surrender" instead. Surrendering costs half your bet.

If you're dealt two cards of the same denomination, you may elect to "split" your hand. When you split, you double your original bet and play the two cards as two separate hands, one after the other. Each hand has a chance to beat the dealer.

Commodore 64 Version

Two programs make up the 64 version of Casino Blackjack—a BASIC program and a machine language program. Type in Program 1 (the BASIC program) and save it to disk. Do not run it yet—it attempts to load Program 2 when it runs.

Program 2 (the machine language program) must be entered with the "MLX" machine language entry program found elsewhere in this issue. Here are the addresses you need to type in the program



The IBM PC and compatible version of "Casino Blackjack."

with MLX: Starting Address: C000 Ending Address: C247

After you've typed in all the data from Program 2, be sure to save a copy as BLACKJACK.OBJ before you leave MLX.

Apple II Version

The Apple version of Casino Blackjack is made up of two programs. Program 3 is the BASIC portion. Type it in and save it to disk. Do not run the program until you've entered and saved Program 4—it attempts to load the machine language program when it's run.

Program 4 is written in machine language. It's the same ML program used for "Canfield" in January 1988. If you've already typed in CANFIELD.ML, you can copy it to the same disk you saved Program 3 to.

If you haven't typed in CAN-FIELD.ML, type in Program 4 using the "Apple MLX" machine language entry program. When prompted for starting and ending addresses, respond with the following values:

Starting Address: 8000 Ending Address: 86A7

Be sure to save a copy of the program as "CANFIELD.ML" after you've finished typing in the data.

Atari 400, 800, XL, And XE Version

On the Atari, Casino Blackjack is written entirely in BASIC. Type in Program 5 and save a copy before you run the program.

IBM PC/PCjr And Compatibles

Casino Blackjack runs under both BASICA and GW-BASIC on both color and monochrome monitors.



"Casino Blackjack" for Amiga.

Type in Program 6 and save a copy before you run the program.

Amiga

The Amiga version of Casino Blackjack is written in Amiga Basic and requires 512K of memory. Type in Program 7 and save a copy to disk before running the program.

For instructions on entering these programs, please refer to "COMPUTEI's Guide to Typing In Programs" elsewhere in this issue.

Program 1: Commodore 64 Casino Blackjack—BASIC

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мн	20	VRIGHT 1988 COMPUTEI PUB
		L., INC."
CA	30	PRINTTAB(11)"ALL RIGHTS
		[SPACE] RESERVED"
BH	40	IFA=ØTHENA=1:LOAD"BLACKJ
5.		ACK. OBJ", 8, 1
BX	50	SYS49152: POKE 53272, 21
GK	60 3	X=RND(-TI):CLR:DIMCH(13,
		4): POKE 53280, 5: POKE 53281
		, 5: POKE53265, 91: POKE5328
TK	70	DRINT"{CLR}"TAB(15)"
UN	10	111 DOWN BLK BLACKJACK"
		FORU=1T01000:NEXT
PS	80.	$SIS(1) = "Z[{DOWN}{2 LEFT}$
	-	£]":SI\$(3)="[[DOWN]
		[2 LEFT] £]":SI\$(2)="\$%
		[DOWN] {2 LEFT] &' "
RR	90	SI(4) = "Z[{DOWN}{2 LEFT}$
		<pre>##":PRINT"{CLR}":V=0:H=0</pre>
		:TY=4: POKE 53272, 29:FORB=
		1TO4:FORC=ØTO11
PJ	100	A=C:A1=B:GOSUB1070:H=H+
		3:NEXTC:V=V+6:H=Ø:NEXTB
		:H=14:V=3:A=12:A1=3
BS	110	GOSUB1070:H=H+6:V=V+6:A
		1=1:GOSUB1070:H=H-6:V=V
		+6:A1=4:GOSUB10/0:H=H-6
MH	120	V=V-6:A1=2:GOSUB1070:H=
		-0
GY	130	GETAS. TEAS=""THEN 30
DD	140	TEDOCITHEN1 320
HP	150	HA = HA + 1 : POKE 53272, 21
GA	160	AMS="": PRINT"{CLR}{BLK}
	~~~	YOU WILL START HAND"HA"
		{LEFT}.":SYS49158,0,6
SG	170	PRINT" RETURN ALONE WILL
-		DISPLAY PREVIOUS HAND"
		:PRINT" {DOWN} - Q - TO Q
		UIT"

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мо	180	PRINT" [DOWN] - R - TO RE
	200	START GAME": PRINT"
		{DOWN}PLACE BET"DO;: INP
		UT"DOLLARS LEFT "; AM\$
PR	190	IFAMS=""ANDPR=1THEN250
MA	200	IFAMS= ANDER=OTHEN240
FA	220	IFAMS="R"THENRUN
CC	230	GOTO260
DB	240	GOSUB1050: PRINTTAB(6)"
		{RVS} {RED} NO PREVIOUS H
		AND WAS PLAYED" : GOSUB11
-	250	20: GOTO160
BA	250	PORE 53272, 29: SIS 49155, 3
		KE53272 21 COTO160
FE	260	AM=VAL(AMS): AM=INT(100*
-		(AM+.005))/100
MS	27Ø	IFAM . Ø1THENGOSUB1050:P
		RINT"YOU CANNOT BET ZER
		O DOLLARS": GOSUB1120:GO
VM	200	TO160
KM	200	INT VOIL DO NOT HAVE THA
		T MUCH MONEY": GOSUB1120
PD	290	IFAM>DOTHEN160
SK	300	Z2=0:Z1=0:DE=0:D1=0:D2=
		0:P=0:D3=0:CL=0:JK=0:HI
		=Ø:BU=Ø:SD=Ø:DD=Ø:SP=Ø:
		QQ=Ø
DE	310	S1=0:QP=0:SP=0:B1=0:01=
		$PI_{(2)} = 0 \cdot PI_{(3)} = 0 \cdot PI_{(1)} = 0$
		Ø
AK	320	PG(Ø)=AM:D=Ø:PR=Ø:01=D0
		-AM:02=01:PRINT"{CLR}":
		POKE53272,29:V=0:H=0:Z2
	220	=DE:Z1=D
MC	330	GOSUB960: DE=Z2: D=Z1: GOS
		-0.COSUB1030.D1-A.D2-A1
FD	340	H=6:V=0:GOSUB1040:D3=A:
-		H=6:V=7:GOSUB1030:P3=A
BP	35Ø	IFP1=12ANDP3<12ANDP3>70
		RP3=12ANDP1<12ANDP1>7TH
		EN131Ø
JM	360	GOSUB1150: IF IN>0THENIN=
KF	370	COSUB1050 . DPINT" { DVC }
RI	510	{RED}HOFF}
		[RVS] [RED] S [OFF] [BLK] TA
		ND S{RVS}{RED}P{OFF}
		[BLK]LIT [RVS] [RED]D
		[OFF] [BLK] OUBLE DOWN SU
		RR(RVS)[RED]E[OFF][BLK]
FC	300	GETOPS. IFOPS- ""MUDW200
SK	390	IFOPS="P"THEN.TK=3. COTOA
Sit		10
GK	400	JK=ABS(ASC(OP\$)-77)-4:I
		FJK <ØORJK > 5THEN 38Ø
XX	410	ONJKGOTO420, 530, 540, 640
		,690
QA	420	HI=1:GOSUB51Ø
HJ	430	IFDD=1THENH=12:GOSUB103
JO	440	IFSD=1THENSD=0.H=6.V-V+
24	110	3:HI=0:GOTO470
BX	45Ø	IFB1=1THENB1=0:GOTO370
KQ	460	H=H+6:GOSUB1030:GOSUB51
		Ø:B1=1:GOTO43Ø
JD	47Ø	IFSP>ØTHENSP=SP-1:S1=S1
DC	100	+1:QP=QP-1:P=Ø:GOTO49Ø
DC BY	480	IFI(SI)=ITUENI(CI)-C.D.
DA	490	1 0 (01/-11 HENO (01/=0:P=
PP	500	GOSUB1030:B1=1:GOT0430
QE	510	IFBU=1THENSYS49158,35,V
		+1: PRINT" {RVS } {RED } BUST
-	-	":SD=1:DD=2:BU=0:HI=0
EG	520	RETURN
Gl	530	SYS49158, 35, V+1: PRINT"

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		An and an an an all the second second	1		
		{RVS}{RED}STAND":SD=1:G OTO44Ø	KM	86Ø	IFDE>21THENSYS49158,35, V+3:PRINT"{RVS}{RED}BUS
FG	540	IFHI=1THENGOSUB1050:GOS		-	Т"
-		UB620: GOSUB1120: GOTO370	FG	87Ø	V=7:FORI=ØTOS1
FK	550	IFA <> P1THENGOSUB1050: PR	GR	880	IFDE>21ANDPL(I)<220RDE<
		INT"YOU CANNOT SPLIT SI			22ANDDE <pl(i)andpl(i)<2< td=""></pl(i)andpl(i)<2<>
DV	560	NCE NOT OF SAME"	GE	890	IFDE <224 NDDE >PL (I)OPDE <
PR	500	SPACE OF DENOMINATION"	UL	0.00	22ANDPL(T)>210RDE>21AND
		: GOSUB1120: GOTO370			PL(I)>22THENGOSUB94Ø
JM	570	IFO1-AM<ØTHENGOSUB1050:	KH	900	IFDE <22ANDDE=PL(I)THENS
		GOSUB630:GOSUB1120:GOTO			YS49158, 35, V+2: PRINT"
		37Ø			{RVS}{RED}PUSH":PG(I)=Ø
RM	580	Ol=Ol-AM:SP=SP+1:QQ=QQ+	QJ	91Ø	DO=DO+PG(I):V=V+3:NEXT:
		1:QP=QP+1:PL(S1+QP)=B:P			DO=INT(100*(DO+.005))/1
ED	500	G(SI+QP)=AM:PL(SI)=B	ME	020	COSUPI 050 - COSUPI 120 - FOR
CR	600	IFPSØTHEND=1.I(SILOP)-1	ent	520	I=1TO13:FORJ=1TO4:CH(I
PC	610	H=0:V=7+00*3:GOSUB1070:			J)=0:NEXTJ, I:SYS49155,1
		V=QV:H=6:GOSUB1030:GOTO			:PR=1
		370	FQ	93Ø	GOTO14Ø
GS	62Ø	PRINT YOU CAN SPLIT ON	AJ	94Ø	SYS49158, 35, V+2: PRINT"
		[SPACE] THE FIRST TWO CA			<pre>{RVS}{RED}LOSE": PG(I)=-</pre>
		RDS [4 SPACES ] ONLY":RETU	ME	050	PG(1):RETURN
FC	630	RN BRINT NOT ENGLICH MONEY	PIL	950	(PVC) (PFD)WIN" · PFTIIPN
re	050	SPACE FOR THE SPLIT" .P	HB	960	$T = FRE(\emptyset) : A = INT(13 * RND(1))$
		ETURN			)):A1=INT(4*RND(1)+1):I
FH	640	IFHI=1THENGOSUB1050:GOS			FCH(A,A1)=1THEN960
		UB670:GOSUB1120:GOTO370	CX	97Ø	CH(A, A1)=1:B=A+2:IFA+2>
EA	650	IFDD=1THENGOSUB1050:GOS			9THENB=10
		UB680: GOSUB1120: GOTO370	SH	980	IFA+2=14THENB=11
DA	000	PG(S1)=AM/2:PL(S1)=0:SD	GU	1000	TEBELITHENZIEZIHI
		· PRINT" (RVS) (RED) SUPPEN	GI	1000	THENZ2=Z2-10:Z1=Z1-1
		DER": GOTO430	JX	1010	IFZ2>21THENBU=1
BM	67Ø	PRINT"YOU CANNOT SURREN	SS	1020	RETURN
		DER SINCE YOU ALREADY	BK	1030	Z2=PL(S1):Z1=P:GOSUB96
		{2 SPACES}HIT ON THIS H			Ø: PL(S1)=Z2:P=Z1:GOSUB
VD	600	AND": RETURN	VD	1	1070:RETURN
AF	000	DER SINCE VOU DOUBLED	AB	1040	=72.D=71.COSUB1070.DE
		{2 SPACES DOWN ON THIS			URN
		{SPACE} HAND"	KE	1050	CL=22:FORZZ=CLT024:SYS
SK	69Ø	IFHI=1THENGOSUB1050:GOS			49158,0,ZZ
		UB770:GOSUB1120:GOTO370	HC	1060	PRINT" [39 SPACES] [UP]"
RX	100	IF P>0THENAZ=PL(S1)-10:G			:NEXT:SYS49158,0,22:RE
FH	710	AZ=PL(S1)	DF	1070	TEA1-20PA1-ATTHENDOVECA
HJ	720	IFAZ <>1ØANDAZ <>11THENGO	22	1010	6. Ø: GOTO 1 Ø 90
		SUB1050:GOSUB780:GOSUB1	CP	1080	POKE646,2
		120:GOTO370	MX	1090	SYS49158, H, V: PRINT"
MC	73Ø	IFO1-AM<ØTHENGOSUB1050:			[RVS](){DOWN}
		GOSUB/90: GOSUB1120: GOTO			{6 LEFT}, "CHR\$(A+50)"
MA	740	IFP>ØTHENDI.(S1)=PL(S1)-			(3 SPACES) - (DOWN)
		10	RA	1100	PRINT" (RVS) (UP) -
PR	75Ø	PG(S1)=PG(S1)+AM:SYS491			[DOWN] [6 LEFT] .
		58,29,V+1:PRINT" [RVS]			{2 RIGHT} - {DOWN}
		[RED]DOUBLE DOWN":DD=1:			[6 LEFT], [3 SPACES] "CH
	760	01=01-AM: GOTO43Ø			$R$(A+50) = \{DOWN\}$
SC	770	PRINT"SOPRY YOU ALPEADY	va	1110	16 LEFT]*///+":RETURN
		HIT ON THIS HAND" : RETU	NG	1110	TORZZ=0105:51549158,H,
		RN			111": NEXTZZ: RETURN
SD	78Ø	PRINT"YOU CAN ONLY DOUB	FB	1120	SYS49158, 13, 24: PRINT"
		LE DOWN ON A 10 OR 11":			[RVS] [RED] PRESS ANY KE
		RETURN			Y{BLK}{4 UP}"
JH	190	SPACE TO DOUBLE DOWN	AM	1130	GETY\$: IFY\$=""THEN1130
		RETURN	KG	1140	TED2 (N) 200 HENDEMUNY
OJ	800	A=D1:A1=D2:V=Ø:H=Ø:GOSU	FA	1160	COSUB1050. DDINT" DIVIN
		B1070:H=6:IFBJ=1THENBJ=	LA	~100	ANT INSURANCE (RVS)
		Ø:GOT087Ø			[RED]Y N[OFF] "
AJ	810	IFDE=21THENFORI=ØTO3:PL	DR	1170	GETY\$: IFY\$=""THEN1170
DC	020	(SG)=Ø:NEXT:GOTO87Ø	HF	1180	IFY\$="Y"THEN1210
BS	820	G CIANDPL (0)>21THEN87	DC	1190	IFYS="N"THENRETURN
EC	830	IFSI (IANDSE=ITHENSE=0.C	SO	1210	IFO2-IM/2 COMPENSION CONTENT
		ОТО870	24		50: GOSUB1280: GOSUB1120
PX	84Ø	IFDE>16THEN860			:RETURN
QM	85Ø	H=H+6: GOSUB1040: GOT0840	GS	1220	IN=AM/2:02=02-AM/2:DO=

	DO-TN: TN=Ø
PM 1230	IFDE <> 21THENGOSUB1290:
VE 1040	IN=0:GOTO1270
AE 1240	UB1070: GOSUB1050
PX 1250	PRINT" {BLK } DEALER HAS
	OSE YOUR [6 SPACES] INSU
	RANCE MONEY AND SAVE "
PP 1260	; PRINT"BET.":GOSUB1120:
	IN=1
XB 1270 JH 1280	PRINT" [BLK]YOU DO NOT
	[SPACE] HAVE ENOUGH MON
	YOUR BET": RETURN
AK 1290	GOSUB1050:PRINT" {BLK}D
	EALER DID NOT GET BLAC KJACK YOU LOSE
	{3 SPACES}INSURANCE ";
QG 1300	PRINT MONEY AND HAND C
	TURN
PX 1310	SYS49158, 31, V+1: PRINT"
	G(S1)=1.5*AM:BJ=1:GOTO
	800
EX 1320	{RVS} {RED YOU ARE OUT
	SPACE OF MONEY"
CG 133Ø	WISH TO PLAY AGAIN
	{BLK}Y N{RED}?"
XF 1340	GETYS: IFYS=""THEN1340
GM 1360	IFY\$="N"THENEND
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CØØØ:4C CØØ8:C1 CØ10:5E CØ18:85	Ø9 CØ 4C AE CØ 4C ØE E5 A9 3Ø 85 34 85 38 2Ø 7B A6 AØ ØØ 98 AA A9 ØE 4F 19 A9 DC 85 1A A9 ØØ 8D
CØØØ:4C CØØ8:C1 CØ1Ø:5E CØ18:85 CØ2Ø:85 CØ28:85	Ø9 CØ 4C AE CØ 4C ØE E5           A9 3Ø 85 34 85 38 20 7B           A6 AØ ØØ 98 AA A9 ØE 4F           19 A9 DC 85 1A A9 ØØ 85           BA 3Ø 85 1C A9 ØØ 53           1D A9 DØ 85 1E A9 FE EC
CØØØ:4C CØØ8:C1 CØ10:5E CØ18:85 CØ20:85 CØ28:85 CØ28:85 CØ30:31	Ø9 CØ 4C AE CØ 4C ØE E5           A9 3Ø 85 34 85 38 2Ø 7B           A6 AØ ØØ 98 AA A9 ØE 4F           19 A9 DC 85 1A A9 ØØ 8D           1B A9 3Ø 85 1C A9 ØØ 53           1D A9 DØ 85 1E A9 FE EC           19 91 19 A9 FB 25 Ø1 DC           11 DC
CØØØ:4C CØØ8:C1 CØ10:5E CØ18:85 CØ20:85 CØ28:85 CØ30:31 CØ38:85 CØ40:C8	Ø9 CØ 4C AE CØ 4C ØE E5           A9 3Ø 85 34 85 38 2Ø 7B           A6 AØ ØØ 98 AA A9 ØE 4F           19 A9 DC 85 1A A9 ØØ 8D           1B A9 3Ø 85 1C A9 ØØ 53           1D A9 DØ 85 1E A9 FE EC           19 91 19 A9 FB 25 Ø1 DC           Ø1 AØ ØØ DØ F7 18 E6 1C 6D
CØØØ:4C CØØ8:Cl CØ10:5E CØ18:85 CØ20:85 CØ28:85 CØ28:85 CØ30:31 CØ38:85 CØ40:C8 CØ40:C8	Ø9 CØ 4C AE CØ 4C ØE E5           A9 3Ø 85 34 85 38 2Ø 7B           A6 AØ ØØ 98 AA A9 ØE 4F           19 A9 DC 85 1A A9 ØØ 8D           1B A9 3Ø 85 1C A9 ØØ 53           D A9 DØ 85 1E A9 FE EC           19 91 19 A9 FB 25 Ø1 DC           Ø1 AØ ØØ B1 1D 91 1B 11           CØ ØØ DØ F7 18 E6 1C 6D           1E E8 EØ Ø9 DØ EB AØ F3           A9 ØØ 53
CØØØ:4C CØØØ:Cl CØ10:5E CØ18:85 CØ20:85 CØ20:85 CØ30:31 CØ38:85 CØ40:C8 CØ40:C8 CØ40:C8 CØ50:ØØ CØ58:Ø1	Ø9 CØ 4C AE CØ 4C ØE E5           A9 3Ø 85 34 85 38 20 7B           A6 AØ ØØ 98 AA A9 ØE 4F           19 A9 DC 85 IA A9 ØØ 80           BA A9 ØØ 98 AA A9 ØE 4F           19 A9 DC 85 IA A9 ØØ 85           ID A9 DØ 85 IE A9 ØØ 53           ID A9 DØ 85 IE A9 FE EC           19 91 19 A9 FB 25 ØI DC           Ø1 AØ ØØ B1 1D 91 1B 11           CØ ØØ DØ F7 18 E6 IC 6D           IE E8 EØ Ø9 DØ EB AØ F3           A9 Ø4 Ø5 ØI 85 ØI A9 D6           11 19 91 19 A9 ID 8D 12
CØØØ:4C CØØØ:4C CØØ8:C1 CØ10:5E CØ20:85 CØ20:85 CØ20:85 CØ30:31 CØ38:85 CØ40:C8 CØ48:E6 CØ50:ØØ CØ58:Ø1 CØ58:01	Ø9 CØ 4C AE CØ 4C ØE E5           A9 3Ø 85 34 85 38 2Ø 7B           A6 AØ ØØ 98 AA A9 ØE 4F           19 A9 DC 85 1A A9 ØØ 8D           1B A9 3Ø 85 1C A9 ØØ 53           1D A9 DØ 85 1E A9 FE EC           19 91 19 A9 FB 25 Ø1 DC           Ø1 AØ ØØ 81 1D 91 1B 11           CØ ØØ DØ F7 18 E6 1C 6D           1E E8 EØ Ø9 DØ EB AØ F3           A9 Ø4 Ø5 Ø1 85 Ø1 A9 D6           11 19 91 19 A9 1D 8D 12           DØ A9 DØ 85 19 A9 3Ø 78
CØØØ:4C CØØØ:4C CØØ8:C1 CØ10:5E CØ18:85 CØ20:85 CØ20:85 CØ20:85 CØ20:85 CØ20:85 CØ30:31 CØ38:85 CØ40:C8 CØ48:E6 CØ50:0Ø CØ58:01 CØ58:01 CØ60:18 CØ68:85 CØ70:C1	Ø9         CØ         4C         AE         CØ         4C         ØE         E5           A9         3Ø         85         34         85         38         20         7B           A6         AØ         ØØ         98         AA         A9         ØE         4F           19         A9         DC         85         1A         A9         ØØ         8D           1B         A9         DC         85         1A         A9         ØØ         8D           1B         A9         DØ         85         1C         A9         ØØ         8D           1B         A9         DØ         85         1C         A9         ØØ         8D           1D         A9         DØ         85         1E         A9         FE         EC           19         91         A9         AF         1B         11         1D         11         1D         11         11         11         11         11         11         11         12         10         A9         14         45         04         A7         12         10         A9         10         85         19         A9
CØØØ:4C CØØØ:4C CØØ8:C1 CØ10:5E CØ18:85 CØ20:85 CØ20:85 CØ20:85 CØ20:85 CØ20:85 CØ40:C8 CØ40:C8 CØ40:C8 CØ40:C8 CØ48:E6 CØ50:ØØ CØ58:Ø1 CØ60:18 CØ68:85 CØ70:C1 CØ78:4C	Ø9 CØ 4C AE CØ 4C ØE E5           A9 3Ø 85 34 85 38 2Ø 78           A6 AØ ØØ 98 AA A9 ØE 4F           19 A9 DC 85 1A A9 ØØ 8D           1B A9 3Ø 85 1C A9 ØØ 53           1D A9 DØ 85 1E A9 FE EC           19 91 19 A9 FB 25 Ø1 DC           Ø1 AØ ØØ 8B 1 1D 91 1B 11           CØ ØØ DØ F7 18 E6 1C 6D           1E E8 EØ Ø9 DØ EB AØ F3           A9 ØØ 4Ø 5Ø1 85 Ø1 A9 D6           11 19 91 19 A9 1D 8D 12           DØ A9 DØ 85 19 A9 3Ø 78           IA A9 ØØ AA A8 B9 2A FD           91 19 CØ 2F FØ Ø4 C8 74           6E CØ A9 18 85 19 A9 21
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CØØØ: 4C CØØØ: 4C CØØØ: C1 CØ10: 5E CØ20: 85 CØ20: 85 CØ20: 85 CØ30: 31 CØ38: 85 CØ48: 85 CØ48: 86 CØ50: ØØ CØ58: Ø1 CØ58: 91 CØ60: 18 CØ60: 18 CØ60: 18 CØ60: 18 CØ70: C1 CØ78: 4C CØ80: 31 CØ88: 5A CØ90: C2	Ø9         CØ         4C         AE         CØ         4C         ØE         E5           A9         3Ø         85         34         85         38         20         7B           A6         AØ         ØØ         98         AA         A9         ØE         4F           19         A9         DC         85         1A         A9         ØØ         8D           1B         A9         DØ         85         1C         A9         ØØ         53           1D         A9         DØ         85         1E         A9         ØØ         53           1D         A9         DØ         85         1E         A9         ØØ         53           1D         A9         DØ         85         1E         A9         FE         EC           19         91         PA         PB         25         Ø1         DC         Ø1         A0         ØØ         B1         1D           10         ØØ         ØØ         PB         A9         DØ         B2         A2         FD           11         19         91         19         CØ         2F         FØ
CØØØ:4C CØØØ:4C CØØ8:Cl CØ10:5E CØ18:85 CØ20:85 CØ28:85 CØ28:85 CØ30:31 CØ38:85 CØ48:66 CØ50:00 CØ58:01 CØ60:18 CØ60:18 CØ60:85 CØ70:Cl CØ78:4C CØ80:31 CØ78:4C CØ80:31 CØ88:5A CØ90:CB CØ98:A9 CØA0:B9	Ø9         CØ         4C         AE         CØ         4C         ØE         E5           A9         3Ø         85         34         85         38         20         7B           A6         AØ         ØØ         98         AA         A9         ØE         4F           19         A9         DC         85         1A         A9         ØØ         8D           1B         A9         DC         85         1A         A9         ØØ         8D           1B         A9         DØ         85         1C         A9         ØØ         53           1D         A9         DØ         85         1E         A9         ØØ         53           1D         A9         DØ         85         1E         A9         ØØ         53           1D         A9         DØ         B1         1D         91         1B         11           CØ         ØØ         ØØ         A8         A9         A6         F3           A9         ØØ         A5         19         A9         3Ø         78           1A         A9         ØØ         A8         A9
CØØØ:4C CØØØ:4C CØØ8:Cl CØ10:5E CØ18:85 CØ20:85 CØ20:85 CØ20:85 CØ20:85 CØ20:85 CØ20:85 CØ40:C8 CØ40:C8 CØ40:C8 CØ48:E6 CØ50:0Ø CØ58:01 CØ58:01 CØ78:4C CØ80:31 CØ88:5A CØ90:C8 CØ98:A9 CØA8:04	Ø9         CØ         4C         AE         CØ         4C         ØE         E5           A9         3Ø         85         34         85         38         20         7B           A6         AØ         ØØ         98         AA         A9         ØE         4F           19         A9         DC         85         1A         A9         ØØ         8D           1B         A9         DC         85         1A         A9         ØØ         8D           1B         A9         DØ         85         1C         A9         ØØ         8D           1B         A9         DØ         85         1C         A9         ØØ         8D           1D         A9         DØ         85         1E         A9         FE         EC           19         91         19         A9         DØ         EB         AØ         F3           A9         ØØ         A5         19         A9         D6         11         19         91         D8         12           DØ         A9         ØØ         A8         A8         B9         2A         FD
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CØØØ:4C CØØØ:4C CØØ8:C1 CØ10:5E CØ20:85 CØ20:85 CØ20:85 CØ20:85 CØ20:85 CØ40:C8 CØ48:E6 CØ50:ØØ CØ58:01 CØ60:18 CØ68:85 CØ70:C1 CØ78:4C CØ78:4C CØ78:4C CØ88:5A CØ90:C8 CØ98:A9 CØA8:04 CØ88:5A CØ90:C8 CØ98:A9 CØA8:04 CØ80:2C CØ88:5A	Ø9 CØ 4C AE CØ 4C ØE E5         A9 3Ø 85 34 85 38 2Ø 7B         A6 AØ ØØ 98 AA A9 ØE 4F         19 A9 DC 85 1A A9 ØØ 8D         1B A9 3Ø 85 1C A9 ØØ 53         1D A9 DØ 85 1E A9 FE EC         19 91 19 A9 FB 25 Ø1 DC         Ø1 AØ ØØ 18 1D 91 1B 11         CØ ØØ DØ F7 18 E6 1C 6D         1E E8 EØ Ø9 DØ EB AØ F3         A9 ØØ AA A8 B9 2A FD         91 19 CØ 2F FØ Ø4 C8 74         6E CØ A9 18 85 19 A9 3Ø 78         1A A9 ØØ AA A8 B9 2A FD         91 19 CØ 2F FØ Ø4 C8 74         6E CØ A9 18 85 19 A9 21         85 1A A9 ØØ A8 AA B9 8B         C1 91 19 CØ DF FØ Ø4 A8 AA D6         31 85 1A A9 ØØ A8 AA D6         33 85 1A A9 ØØ A8 AA D6         34 C2 91 19 CØ 67 FØ C9         C8 4C AØ CØ 60 2Ø 67 D F7         C9 E AD 8D ØD C1 2Ø 84         CØ E8 C8 AD ØD C1 29 F6         DØ B B1 9 91 1B B1 AA
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CØØØ: 4C CØØØ: 4C CØØØ: 4C CØØ8: Cl CØ10: 5E CØ18: 85 CØ20: 85 CØ20: 85 CØ20: 85 CØ20: 85 CØ20: 85 CØ20: 85 CØ40: Cl CØ40: Cl CØ40: Cl CØ40: Cl CØ58: 90 CØ58: 91 CØ78: 4C CØ80: 31 CØ78: 4C CØ80: 31 CØ78: 4C CØ80: 31 CØ88: 5A CØ90: Cl CØ80: A9 CØA8: 64 CØ80: A9 CØA8: 64 CØ80: A9 CØA8: 64 CØ80: A9 CØA8: 64 CØ80: A9 CØ20: B1 CØC0: B1 CØC0: B1 CØC0: B1 CØC0: B1 CØC0: B1 CØ00: A9 CØ70: A9 CØ70: A9 CO00: A9 CO0	Ø9 CØ 4C AE CØ AC ØE E5           A9 3Ø 85 34 85 38 20 7B           A6 AØ ØØ 98 AA A9 ØE 4F           19 A9 DC 85 1A A9 ØØ 8D           18 A9 3Ø 85 1C A9 ØØ 53           1D A9 DØ 85 1E A9 FE EC           19 91 19 A9 FB 25 Ø1 DC           Ø1 AØ ØØ 18 ID 91 18 11           CØ ØØ 00 F7 18 E6 1C 6D           1E E8 EØ Ø9 DØ EB AØ F3           A9 ØØ 85 1P A9 3Ø 78           19 91 19 A9 FB 25 Ø1 DC           ØØ DØ F7 18 E6 1C 6D           1E E8 EØ Ø9 DØ EB AØ F3           A9 ØØ A85 19 A9 3Ø 78           19 19 CØ 2F FØ Ø4 C8 74           6E CØ A9 18 85 19 A9 21           85 1A A9 ØØ A8 AA B9 8B           C1 91 19 CØ DF FØ Ø4 D6           31 85 1A A9 ØØ A8 AA B9           31 85 1A A9 ØØ A8 AA D6           3A C2 91 19 CØ ØF FØ C9           C8 4C AØ CØ 6Ø 2Ø FD B7           2Ø 9E AD 8D ØD C1 2Ø 84           CØ BB 19 91 1B B1 AA           91 1F 4C D6 CØ B1 1B 1E           19 B1 1F 91 1D CØ FF ØC           E1 E6 1A E6 1C E6 1E 4D           2Ø ØA DØ ØD 46 ØØ 25 19 9A           ØØ A85 1A A9 43 85 1B 1B           12 C 85 1C A9 ØØ 85 1D 267           28 5 1C A9 ØØ 85 1D 27           28 5 1A A9 43 85 1B 1B           20 2 20 C1 2Ø 2Ø C1 98 76
CØØØ: 4C CØØØ: 4C CØØØ: 4C CØØ8: Cl CØ18: 55 CØ28: 85 CØ28: 85 CØ28: 85 CØ40: C8 CØ40: C8 CØ40: C8 CØ40: C8 CØ40: C8 CØ40: C8 CØ40: C8 CØ40: C8 CØ70: Cl CØ78: 4C CØ78: 4C CØ78: 4C CØ78: 4C CØ78: 4C CØ80: S1 CØ78: 4C CØ80: S1 CØ80: C8 CØ90: C8 CØ90: C8 CØ90: C8 CØ90: C8 CØ80: C8 CØ80: C8 CØ80: C8 CØ80: C8 CØ80: C8 CØ70: C1 CØ00: C9 CØ00: C8 CØ70: C1 CØ00: C9 CØ00: C8 CØ70: C1 CØ00: C8 CØ00: C8 C000: C8 C00	Ø9 CØ 4C AE CØ AC ØE E5         A9 3Ø 85 34 85 38 20 7B         A6 AØ ØØ 98 AA A9 ØE 4F         19 A9 DC 85 1A A9 ØØ 8D         18 A9 3Ø 85 1C A9 ØØ 53         1D A9 DØ 85 1E A9 FE EC         19 91 19 A9 FB 25 Ø1 DC         Ø1 AØ ØØ 18 ID 91 1B 11         CØ ØØ DØ F7 18 E6 1C 6D         1E E8 EØ Ø9 DØ EB AØ F3         A9 ØØ AA A8 B9 2A FD         91 19 A9 IØ 85 19 A9 3Ø 78         1A A9 ØØ AA A8 B9 2A FD         91 19 CØ 2F FØ Ø4 C8 74         6E CØ A9 18 85 19 A9 21         85 1A A9 ØØ A8 AA B9 8B         C1 91 19 CØ 2F FØ Ø4 C8 74         6E CØ A9 18 85 19 A9 21         85 1A A9 ØØ A8 AA B9 8B         C1 91 19 CØ 2F FØ Ø4 C8 74         6E CØ A9 18 85 19 A9 21         85 1A A9 ØØ A8 AA B9         81 85 1A A9 ØØ A8 AA B9         82 19 19 CØ DF FØ Ø4 D6         31 85 1A A9 ØØ A8 AA D6         3A C2 91 19 CØ Ø7 FØ C9         C8 8C 8A DØD C1 2Ø 84         ØØ B1 19 91 1B B1 AA         91 1F 4C D6 CØ B1 1B 1E         19 B1 1F 91 1D CØ FF ØC         E1 A6 A A9 ØØ 85 19 9A         ØØ 40 D4 46Ø A9 7E         AØ FF A9 ØØ 85 19 9A         ØØ 40 D4 60 Ø2 20 20         B5 1E A9 43 85 1E 1B         C
CØØØ: 4C CØØØ: 4C CØØØ: 4C CØØ8: Cl CØ18: 55 CØ20: 85 CØ20: 85 CØ20: 85 CØ20: 85 CØ20: 85 CØ20: 85 CØ20: 85 CØ20: 85 CØ20: 81 CØ30: 80 CØ58: 91 CØ78: 4C CØ78: 4C CØ78: 4C CØ80: 31 CØ88: 5A CØ90: C8 CØ98: A9 CØA0: 89 CØA0: 89 CØA0: 89 CØA0: 89 CØA0: 89 CØA0: 89 CØA0: 80 CØE0: 66 CØE8: 90 CØE0: 66 CØE8: 90 CØE8: 90 CØE	Ø9 CØ 4C AE CØ AC ØE E5         A9 3Ø 85 34 85 38 20 7B         A6 AØ ØØ 98 AA A9 ØE 4F         19 A9 DC 85 1A A9 ØØ 8D         1B A9 3Ø 85 1C A9 ØØ 53         1D A9 DØ 85 1E A9 FE EC         19 91 19 A9 FB 25 Ø1 DC         Ø1 AØ ØØ 8B 1D 91 1B 11         CØ ØØ DØ F7 18 E6 1C 6D         1E E8 EØ Ø9 DØ EB AØ F3         A9 ØØ AA A8 B9 2A FD         91 19 A9 IØ 85 19 A9 3Ø 78         1A 9 ØØ AA A8 B9 2A FD         91 19 CØ 2F FØ Ø4 C8 74         6E CØ A9 18 85 19 A9 21         85 1A A9 ØØ A8 AA B9 8B         C1 91 19 CØ 2F FØ Ø4 C8 74         6E CØ A9 18 85 19 A9         85 1A A9 ØØ A8 AA B9 8B         C1 91 19 CØ 2F FØ Ø4 C8         91 19 CØ 2F FØ Ø4 C8         85 1A A9 ØØ A8 AA B9 8B         C1 91 19 CØ 0F FØ Ø7 FØ C9         C8 4C AØ CØ 6Ø 2Ø FD B7         2Ø 9E AD BD ØD C1 2Ø 84         CØ E8 C8 AD ØD C1 C9 F6         DØ ØB B1 19 91 1B B1 AA         91 1F 4C D6 CØ B1 1B 1E         19 B1 1F 91 1D CØ FF ØC         20 EØ Ø4 DØ D4 6Ø A9 7E         AA ØFF A9 ØØ 85 1D F7         D8 51 E A9 43 85 1E A5         P1 18 4C FØ FF 31         P2 E5 1C A9 ØE AD 4C AA F9         ØØ 13 Ø7 ØF 1F 3F C6

C150:FF FF FF 7F 3D 19 01 03 1F	4
C160:E0 F0 03 07 0F 0F 07 3B 5F	FF
C168:7D FF CØ EØ FØ FØ EØ DC BA C170:BE FF FF FF FF 7D 39 Ø3 BE	
C178:07 ØF FF FF FF BE 9C CØ 38	BI
C188:80 80 FF 01 01 01 01 01 8B	R
C190:01 01 80 80 80 80 80 80 74 C198:80 FF 01 01 01 01 01 01 9B	
C1A0:01 FF 80 80 80 80 80 80 44	9
C1B0:01 01 FF 00 00 00 00 00 F4	4
C1B8:00 00 00 00 00 00 00 00 3C C1C0:00 FF 00 7E 42 42 42 42 0E	
C1C8:42 7E ØØ 78 Ø8 Ø8 Ø8 Ø8 ØD	2
C1D8:40 7E 00 7E 02 02 1E 02 5A	5
C1EØ:02 7E 00 40 40 44 44 7E 23 C1E8:04 04 00 7E 40 40 7E 02 59	
C1F0:02 7E 00 7E 40 40 7E 42 3F	8
C200:02 02 00 7E 42 42 7E 42 49	1
C208:42 7E 00 7E 42 42 7E 02 50 C210:02 7E 00 CE 4A 4A 4A 4A 7D	A
C218:4A EE ØØ 7E Ø8 Ø8 Ø8 48 1F	9
C220:48 78 00 7E 42 42 42 4A B9 C228:44 7A 00 42 42 44 78 44 EA	
C230:42 42 00 7E 42 42 7E 42 A9	4
C240:33 33 00 00 00 00 00 00 2C	
Program 3: Apple II Casino	5
Blackjack-BASIC	
Version by William Chin, Editorial	
Programmer	
ET 10 REM COPYRIGHT 1988 COMPUTE	
RIGHTS RESERVED	
VRIGHT 1988 COMPUTE! PUBL.	8
, INC. "	
RESERVED"	E
NY KEY TO START"	
CC 32 POKE 49168,0	,
2) = 13 THEN 33	
C8 35 POKE 40196,189: POKE 40197	
C5 40 PRINT CHR\$ (4); "BLOAD CANF	1
IF 50 POKE 6,168: POKE 7,131: IF	
PEEK $(48896) = 76$ THEN PR	
PRINT : GOTO 136	1
14 60 POKE 54,64: POKE 55,131: C ALL 1002	
20 136 DIM CH(13,4),C(255): HGR2	1
:DL9 - "	
7E 137 ACE = 12:DD = 100:HA = 0: RESTORE	
59 138 FOR I = 1 TO 5: READ A\$, A	
Ms:C(ASC(As)) = I:C(ASC(As)) = C(ASC(ASC)) = I: NEXT I	4
F8 139 DATA "H", "h", "S", "S", "P",	
4A 14Ø IF DO < 1 THEN 132Ø	ľ
10 150 HA = HA + 1 18 160 IF PF = 1 THEN HGR2	
88 168 AM\$ = "": VTAB 12: PRINT	
"YOU WILL START HAND "HA"	
JE 170 PRINT "Q - TO QUIT"	
E": PRINT DO; " DOLLARS LE	1
FT": PRINT "PLACE BET ":: HTAB 11	
J7 182 T = Ø: GET A\$: IF A\$ = CH	
DE (17) TUEN 104	1

4	184	< > CHR\$ (127) THEN 186 IF LEN (AM\$) < 2 THEN AM\$
	195	= "": GOTO 189
	100	\$) - 1): GOTO 189
8	186	R A = "q" OR A = "r" TH
	107	EN AM\$ = A\$: GOTO 190 A = ASC (A\$) = IE (A > 57
1	187	DR A < 48) AND A < > 46 T
9	188	HEN 182 AM\$ = AM\$ + A\$:AM\$ = LEFT
2	100	\$ (AM\$,10)
4	107	";: HTAB 11: PRINT AMS;
6	190	IF AM\$ = "" THEN PRINT CH
a	210	R\$ (7);: GOTO 182 TF AM\$ = "D" OR AM\$ = "d"
2	220	THEN TEXT : HOME : END
4	220	THEN HOME : HGR2 : GOTO
9	230	137
A	250	GOSUB 1050: GOSUB 1120: G
F	260	AM = VAL (AM\$):AM = INT (
		100 * (AM + .005)) / 100
F	27Ø	IF AM < .01 THEN GUSUB 10
		ZERO DOLLARS": GOSUB 112
		Ø: GOTO 160
8	280	IF AM > DO THEN GUSUB 105
		THAT MUCH MONEY": GOSUB
		1120: GOTO 160
)2	300	$Z_2 = 0:Z_1 = 0:D_2 = 0:D_1 = 0:D_2 = 0:P_2 = 0:D_3 = 0:C_1$
		= Ø:JK = Ø:HI = Ø:BU = Ø
		$:SD = \emptyset:DD = \emptyset:SP = \emptyset:QQ$
77	310	= 0:SE = 0 S1 = 0:DP = 0:SP = 0:B1 =
1	510	Ø:01 = Ø:02 = Ø:PL(Ø) =
		$\emptyset: PL(1) = \emptyset: PL(2) = \emptyset: PL(2)$
R	320	PF(0) = AM:D = 0:PR = 0:D
		1 = DO - AM: 02 = 01: HGR2
		$:V = \emptyset:H = \emptyset:Z2 = DE:Z1$
6C	330	GOSUB 960:DE = Z2:D = Z1:
		D1 = A:D2 = A1:V = 7:H =
		A1
3A	332	HCOLOR= 3:V = Ø:TX = H *
		6 + 1:TY = V * 8: HPLOT T
		+ 16. TY + 23 TO TX, TY + 2
		3 TO TX, TY
69	334	FOR I = 4 TO 12 STEP 4: H
		,TY + I + 8: NEXT
75	34Ø	$H = 6:V = \emptyset$ : GOSUB 1040:D
		3 = A:H = 6:V = 7:00000000000000000000000000000000000
21	350	IF P1 = ACE AND P3 < ACE
		AND P3 > 7 OR P3 = ACE AN
		N 1310
45	360	GOSUB 1150: IF IN > Ø THE
-		N IN = Ø: GOTO 140
ZA	370	S STAND P SPLIT": PRINT
		"D DOUBLE E SURRENDER"
09	380	GET OP\$: JK = C(ASC (OP\$))
65	390	IF JK = Ø THEN 380
A9	410	ON JK GOTO 420, 530, 540, 64
45	420	U,690
FB	430	IF DD = 1 THEN H = 12: GO
Î		SUB 1030:DD = 2:SD = 1: G
47	440	USUB 510 IF SD = 1 THEN SD = 0:H =
11	440	6:V = V + 4:HI = Ø: GOTO
		470

03 450 IF B1 = 1 THEN B1 = 0: GO TO 37Ø FA 460 H = H + 6: GOSUB 1030: GO SUB 510:B1 = 1: GOTO 430 30 470 IF SP > 0 THEN SP = SP -1:S1 = S1 + 1:QP = QP - 1:P = Ø: GOTO 490 21 480 6010 800 CJ 490 IF J(S1) = 1 THEN J(S1) = Ø:P = 1 E# 500 GOSUB 1030:B1 = 1: GOTO 4 30 A7 510 IF BU = 1 THEN HTAB 36: \ TAB V + 2: PRINT "BUST":S D = 1:DD = 2:BU = 0:HI =19 52Ø RETURN E8 530 HTAB 36: VTAB V + 2: PRIN T "STAND":SD = 1: GOTO 44 Ø 65 54Ø IF HI = 1 THEN GOSUB 1050 : GOSUB 620: GOSUB 1120: GOTO 37Ø 80 550 IF A < > P1 THEN GOSUB 10 50: PRINT "CARDS MUST BE THE SAME TO SPLIT. ": GOSU B 1120: GOTO 370 IC 570 IF 01 - AM < Ø THEN GOSUB 1050: GOSUB 630: GOSUB 1 120: GOTO 370 66 580 01 = 01 - AM: SP = SP + 1: QQ = QQ + 1:QP = QP + 1:PL(S1 + QP) = B:PG(S1 + QP ) = AM:PL(S1) = B 95 590 QV = V:PF = 1 52 600 IF P > 0 THEN P = 1: J (S1 + QP) = 189 610 H = 0:V = 7 + QQ * 4: 605 UB 1070:V = QV:H = 6: GOS UB 1030: GOTO 370 82 620 PRINT "MAY ONLY SPLIT ON THE FIRST TWO CARDS. ": RE TURN AB 630 PRINT "DO NOT HAVE ENDUGH MONEY FOR SPLIT. ": RETUR N 07 640 IF HI = 1 THEN GOSUB 1050 : GOSUB 670: GOSUB 1120: GOTO 37Ø 09 660 PG(S1) = AM / 2:PL(S1) = Ø:SD = 1:SE = 1: HTAB 32: VTAB V + 2: PRINT "SURRE NDER": GOTO 430 F5 670 PRINT "YOU CAN NOT SURREN DER BECAUSE YOU": PRINT ALREADY HIT ON THIS HAND. ": RETURN 21 690 IF HI = 1 THEN GOSUB 1050 : GOSUB 770: GOSUB 1120: GOTO 37Ø 75 700 IF P > 0 THEN AZ = PL(S1) - 10: GOTO 730 50 710 AZ = PL(S1) 90 730 IF 01 - AM < Ø THEN GOSUB 1050: GOSUB 790: GOSUB 1 120: GOTO 370 F2 74Ø IF P > Ø THEN PL(S1) = PL (S1) - 1Ø C4 750 PG(S1) = PG(S1) + AM: HTA B 29: VTAB V + 2: PRINT " DOUBLE DOWN":DD = 1:01 = 01 - AM: GOTO 430 FØ 77Ø PRINT "SORRY YOU ALREADY HIT ON THIS HAND. ": RETUR 06 790 PRINT "YOU DO NOT ENOUGH MONEY TO DOUBLE DOWN. ": R ETURN 6A 800 A = D1:A1 = D2:V = 0:H = Ø: GOSUB 1070:H = 6: IF B J = 1 THEN BJ = Ø: GOTO 8 70 BA 81Ø IF DE = 21 THEN FOR I = Ø TO 3:PL(I) = Ø: NEXT : G **DTD 870** 

THEN 87Ø F3 830 IF S1 < 1 AND SE = 1 THEN SE = Ø: GOTO 87Ø 32 840 IF DE > 16 THEN 860 48 850 H = H + 6: GOSUB 1040: GO TO 84Ø B 860 IF DE > 21 THEN HTAB 36: VTAB V + 3: PRINT "BUST" 46 870 V = 7: FOR I = 0 TO S1 AF 880 IF DE > 21 AND PL(I) < 22 OR DE < 22 AND DE < PL(I ) AND PL(I) < 22 THEN GOS UB 95Ø 70 890 IF DE < 22 AND DE > PL(I) OR DE < 22 AND PL(I) > 2 1 OR DE > 21 AND PL(I) > 22 THEN GOSUB 94Ø 43 900 IF DE < 22 AND DE = PL(I) THEN HTAB 36: VTAB V + 3 : PRINT "PUSH":PG(I) = Ø CA 910 DD = DD + PG(I): V = V + 4: NEXT : DO = INT (100 * ( DO + .005)) / 100 CF 920 GOSUB 1050: FOR I = 1 TO 13: FOR J = 1 TO 4:CH(I,J  $= \emptyset: NEXT J, I:PR = 1$ 9C 93Ø GOTO 14Ø 30 940 HTAB 35: VTAB V + 3: PRIN T " LOSE": PG(I) = - PG(I): RETURN 8F 95Ø HTAB 35: VTAB V + 3: PRIN T " WIN": RETURN 02 960 T = FRE (0):A = INT ( RND (1) * 13):A1 = INT (4 * RND (1) + 1): IF CH(A, A1) = 1 THEN 960 1E 970 CH(A,A1) = 1:B = A + 2: I F A > 7 THEN B = 10 F4 980 IF A = ACE THEN B = 11 66 990 IF B = 11 THEN Z1 = Z1 + EA 1000 Z2 = Z2 + B: IF Z2 > 21 AND Z1 > Ø THEN Z2 = Z2 -10:Z1 = Z1 - 1E8 1010 IF Z2 > 21 THEN BU = 1 D9 1020 RETURN 3F 1030 Z2 = PL(S1):Z1 = P: GOSU B 960:PL(S1) = Z2:P = Z1 : GOSUB 1070: RETURN 03 1040 Z2 = DE:Z1 = D: GOSUB 96 Ø:DE = Z2:D = Z1: GOSUB 1070: RETURN 63 1050 CL = 22: FOR ZZ = CL TO 24: HTAB 1: VTAB ZZ 9E 1060 PRINT BLS: NEXT : HTAB 1 : VTAB 22: RETURN 37 1070 IF A1 = 2 DR A1 = 4 THEN 1090 41 1090 T = A1 # 13 + A - 11:TX = H * 6 + 1:TY = V * 8 A4 1092 IF A = ACE THEN T = A1 # 13 - 1285 1094 CALL 32768, T, TX, TY 03 1100 RETURN BF 1120 HTAB 13: VTAB 24: PRINT "PRESS ANY KEY" 98 1130 GET Y\$: GOTO 1050 C6 114Ø REM 2F 115Ø IF D3 < > 12 THEN RETURN 30 1160 GOSUB 1050: PRINT "WANT INSURANCE Y N" F4 1170 GET Y\$: IF Y\$ = "" THEN 1170 FD 1180 IF Y\$ = "Y" OR Y\$ = "y" **THEN 1210** AD 1190 IF Y\$ = "N" OR Y\$ = "n" THEN RETURN 6C 1200 GOTO 1170 24 1210 IF 02 - AM / 2 < Ø THEN GOSUB 1050: GOSUB 1280: GOSUB 1120: RETURN 72 1220 IN = AM / 2:02 = 02 - AM / 2:D0 = D0 - IN:IN = Ø F4 1230 IF DE < > 21 THEN GOSUB

4A 82Ø IF S1 < 1 AND PL(Ø) > 21

E7 1240 A = D1:A1 = D2:V = 0:H = Ø: GOSUB 1070: GOSUB 10 50 # 1250 PRINT "DEALER HAS BLACKJ ACK YOU LOSE YOUR": PRIN T "INSURANCE MONEY AND S AVE YOUR BET." AD 1260 GOSUB 1120: IN = 1 FI 127Ø RETURN 22 1280 PRINT "YOU DO NOT HAVE E NOUGH MONEY TO INSURE ": PRINT "YOUR BET. ": RETUR N AF 1290 GOSUB 1050: PRINT "DEALE R DID NOT GET BLACKJACK. YOU LOSE": PRINT "INSUR ANCE MONEY AND HAND CONT INUES." 76 1300 GOSUB 1120: RETURN E7 1310 HTAB 31: VTAB V + 2: PRI NT "BLACKJACK": PG(S1) = 1.5 * AM:BJ = 1: GOTO 80 Ø 68 1320 HGR2 : VTAB 15: PRINT "Y OU ARE OUT OF MONEY" FC 1330 PRINT "WISH TO PLAY AGAI N (Y/N)?" 60 1340 GET Y\$ 8E 1350 IF Y\$ = "Y" OR Y\$ = "y" THEN HGR2 : GOTO 137 50 1360 IF Y\$ = "N" OR Y\$ = "n" THEN TEXT : HOME : END 82 137Ø GOTO 134Ø Program 4: Apple II Casino Blackjack-ML 8000: 20 EC 80 B0 72 20 00 82 FD 8008: BØ 6D 20 5B 82 BØ 68 AD CB 8010: 26 83 FØ ØF A9 7F BD 2C A6 8018: 83 8D 2D 83 A9 07 8D 2E CE 8020: 83 DØ ØF A9 2A 8D 2C 83 F6 8028: A9 55 8D 2D 83 A9 02 8D 2C 8030: 2E 83 A9 03 8D 1A 83 A9 14 8038: 02 8D 22 83 20 09 81 A9 EB 8040: 18 BD 18 83 20 98 81 20 D2 8048: 5C 81 EE 1E 83 CE 1B 83 A8 8050: DØ F2 AD 26 83 FØ 20 40 4F 8058: 00 AD 27 83 20 88 80 AØ A6 8060: 04 AD 27 83 20 88 80 A0 BØ 8068: 08 AD 26 83 20 88 80 AØ 9A 8070: 0C AD 26 83 20 88 80 60 64 8Ø78: 72 82 Ø3 Ø8 92 82 ØA Ø8 EE 8080: AA 82 01 01 AA 82 0A 0F 2A 8Ø88: ØA ØA ØA 8D 2B 83 B9 78 7E 8090: 80 85 FC C8 B9 78 80 85 95 8098: FD C8 AD 28 83 8D 20 83 19 80A0: B9 78 80 C8 18 6D 29 83 85 8ØA8: C9 Ø7 9Ø Ø7 E9 Ø7 EE 2Ø 3C 8080: 83 B0 F5 8D 21 83 89 78 3A 8088: 80 18 6D 2A 83 8D 1E 83 62 8ØCØ: A9 Ø1 8D 1A 83 A9 Ø7 8D 88 80C8: 22 83 A9 08 8D 1B 83 AC FD SØDØ: 28 83 B1 FC 8D 20 83 20 92 80D8: 07 81 20 78 81 20 5C 81 13 BØEØ: EE 1E 83 EE 2B 83 CE 1B 60 8ØE8: 83 DØ E4 6Ø 2Ø 67 82 C9 EF 80F0: 35 90 01 60 A2 00 8E 27 30 80F8: 83 C9 0E 90 07 E9 0D FF F1 8100: 27 83 BØ F5 8D 26 83 18 11 8108: 60 AD 1A 83 8D 1C 83 A8 AE 8110: A9 00 99 2C 83 AD 21 83 76 8118: 18 6D 22 83 C9 07 90 05 8F 8120: E9 Ø7 EE 1C 83 8D 23 83 95 8128: AD 2C 83 Ø9 7F 8D 1D 83 FD 8130: AC 21 83 FØ 15 A2 00 0F 92 8138: 2C 83 BD 2C 83 ØA 3E 2D 9A 8140: 83 E8 EC 1C 83 DØ F3 88 6E 8148: DØ EB AC 1C 83 B9 2C 83 E4 8150: 09 80 2D 1D 83 99 20 83 CD 8158: 88 10 F2 60 AC 23 83 B9 BA 8160: 8A 81 AC 1C 83 88 31 FE FF 8168: 19 2C 83 91 FE 88 30 0A 11 8170: FØ Ø8 B9 2C 83 91 FE 88 DØ 8178: DØ F8 AC 21 83 B9 91 81 71 8180: AØ ØØ 31 FE ØD 2C 83 91 98

1290: IN = Ø: GOTO 1270

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1 9199. EE 40 7E 7E 7C 79 70 40 02	8448: 10 18 14 12 SE 10 10 00 55	757 1. DOVE 87 1
	PA50. 35 02 15 20 20 22 10 00 80	TOZ, I. FURE OZ, I
8170: 40 00 01 03 07 0F IF SF F5		EL 30 PRINT CHR\$(125):PRINT
8198: AD 1E 83 29 3F A8 89 CØ CD	8458: 38 94 92 IE 22 22 IC 99 72	" COPYRIGHT 1988 COMP
81AØ: 81 Ø5 E6 85 FF AD 1E 83 51	8469: 3E 20 10 08 04 04 04 00 48	UTE! PUBL., INC."
81A8: 29 Ø8 FØ Ø2 A9 8Ø 18 2C 2C	8468: 1C 22 22 1C 22 22 1C ØØ DF	WAG POSITION 10.2: PRINT "A
8180: 1F 83 70 04 10 04 69 28 7D	8470: 1C 22 22 3C 20 10 0E 00 75	IL PICUTE PESEDUED"
0100. 40 30 40 36 07 05 EE 46 PA	8478. 00 00 08 00 08 00 00 00 02	LL RIGHTS RESERVED
8188: 67 28 6D 20 83 85 FE 60 BH		AC 50 POSITION 15, 12:? "BLAC
81CØ: ØØ Ø4 Ø8 ØC 10 14 18 1C A3	8489: 99 99 98 99 98 98 98 98 98 72	KJACK"
81C8: ØØ Ø4 Ø8 ØC 1Ø 14 18 1C AB	8488: 10 08 04 02 04 08 10 00 90	WAG BOSHE 1150
81D0: 01 05 09 0D 11 15 19 1D B3	8490: 00 00 JE 00 JE 00 00 00 53	H TO DIN CULLT AL ACLIN VEL
0100, 01 05 00 00 11 15 10 10 PP	8498. 04 08 10 20 10 08 04 00 52	11 /0 DIM CH(13,47,H#(17,T#)
		1), OP\$(1), AM\$(10), C(25
81EØ: Ø2 Ø6 ØA ØE 12 16 1A 1E C3	8449: 10 22 10 08 08 00 08 00 13	5), PL(4), PG(4), J(4), R\$
81E8: Ø2 Ø6 ØA ØE 12 16 1A 1E CB	84A8: 1C 22 2A 3A 1A Ø2 3C ØØ 82	(13) 5\$(4)
81F0: 03 07 08 0F 13 17 18 1F D3	8480: Ø8 14 22 22 3E 22 22 ØØ E7	
0150. 07 07 00 05 13 17 18 15 DB	8488: 1E 22 22 1E 22 22 1E 00 55	DA 80 C(72)=1:C(83)=2:C(80)=
BIFB: 03 07 08 0F 13 17 18 1F 08		3:C(69)=4:C(68)=5:C(89
8200: A9 00 8D 20 83 8D 21 83 A5	8409: 10 22 92 92 92 22 10 99 71	) = A : C (7B) = 7
8208: 20 67 82 8D 1F 83 CØ Ø1 A9	84C8: 1E 22 22 22 22 22 1E ØØ A5	# 04 D(D1) -D. D(D2) -D. D(124)
8210: 90 12 F0 01 60 C9 18 90 FA	84DØ: 3E Ø2 Ø2 1E Ø2 Ø2 3E ØØ 3Ø	HL 90 L(81)=8:L(82)=8:L(128)
0210. 01 40 00 24 00 20 07 00 00	DADD. 35 02 02 15 02 02 02 00 PE	=9:C(3Ø)=9:C(46)=1Ø:FO
8218: 01 60 H7 24 80 20 83 H7 CH	8408: SE 02 02 IE 02 02 02 00 BF	R 1=48 TO 57:C(I)=10:N
8220: 04 8D 21 83 A9 00 8D 25 74	84EØ: 3C Ø2 Ø2 Ø2 32 22 3C ØØ 7B	
8228: 83 A9 EØ 8D 24 83 AD 1F F7	84E8: 22 22 22 3E 22 22 22 ØØ 91	EXII
8230: 83 CD 24 83 90 04 ED 24 BB	84FØ: 1C Ø8 Ø8 Ø8 Ø8 Ø8 1C ØØ 24	LL 100 FOR I=65 TO 90:C(I+32
0770. 07 30 25 25 07 AF 24 93 44	DAED. 26 26 26 26 26 27 10 66 E1	)=C(I):NEXT I:REM LOW
8238: 83 38 22 23 83 42 24 83 48	04F0: 20 20 20 20 20 22 10 00 C1	EP CASE
8240: 90 EF 18 6D 21 83 8D 21 86	8500: 22 12 0A 06 0A 12 22 00 1F	
8248: 83 8D 29 83 18 AD 25 83 15	8508: 02 02 02 02 02 02 3F 00 89	CC 110 R\$="23456/891JUKA":5\$
8250: 6D 20 83 8D 20 83 8D 28 AF	8510: 22 36 2A 2A 22 22 22 00 7F	(1)=CHR\$(251):S\$(2)=C
8258 83 18 44 24 47 92 90 15 P1	8518: 22 22 24 24 32 22 22 88 82	HR\$ (128): 5\$ (3) = CHR\$ (1
0200, 03 10 00 20 07 02 00 1E BI	0510. 10 00 00 00 00 10 40 50	AA) . CE (A) - CHDE (22A)
8269: 83 80 2A 83 LY CØ 60 20 3A	6520: 10 22 22 22 22 22 10 00 F9	44/:37(4/-0887(224)
8268: B1 ØØ 2Ø Ø5 E1 A5 A1 A4 28	8528: 1E 22 22 1E Ø2 Ø2 Ø2 ØØ ØD	LL 120 FOR I=1 TO 13:R\$(I,I)
8270: AØ 60 7F 7F 5F 07 01 01 DF	8530: 1C 22 22 22 2A 12 2C ØØ 2A	=CHR\$ (ASC(R\$(I,I))+12
0070. GE 7E 7E 7E 77 55 55 57 DE	9579. 15 22 22 15 60 12 22 66 DD	DI NEVT T
62/8: 0F /F /F /F // 33 33 3/ DF	8338: 12 22 22 12 0A 12 22 00 00	DIINEAT 1
8280: 5F 7F 7F 7F 47 47 01 01 57	8540: 1C 22 02 1C 20 22 1C 00 A5	EP 130 PRINT CHR\$ (125): V=0:H
8288: 47 7F 7F 7F 5F 57 55 57 53	8548: 3E Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 ØØ 66	=Ø:TY=4
8290 5E 7E 7E 7E 7E 7E 7E 78 78 6C	8550: 22 22 22 22 22 22 1C ØØ 2D	CE 1 4 0 DD-100+HA=0
	OFFO: 00 00 00 00 14 00 00 DA	10 140 DU-100:HH-0
8298: /F /F /F /F /E /A /A /E /6	8338: 22 22 22 22 22 22 14 08 00 04	BN 150 IF DOK1 THEN 1350
82AØ: 7F 7F 7F 7F 7F 7F 7E 7E A2	8560: 22 22 22 2A 2A 36 22 00 5A	EC 160 HA=HA+1
8248: 7F 7F 7F 7F 7F 7F 7A 7E 9E	8568: 22 22 14 Ø8 14 22 22 ØØ 7D	ALLTA TE PE-1 THEN GOSIIR 11
0000 75 75 43 10 10 10 00 10 F0	8570 22 22 14 08 08 08 08 08 00 88	
	0570. ZE 22 14 00 00 00 00 00 00	50: ? LHR\$(125)
8288: 10 10 63 10 1F 1F 63 70 89	83/8: SE 20 10 08 04 02 SE 00 D1	JE 180 AM\$="": POSITION 1, 11:
82CØ: 7C ØØ 63 1C 1F 63 1F 1F 16	8580: 3E Ø6 Ø6 Ø6 Ø6 Ø6 3E ØØ 12	PRINT "YOU WILL START
82C8: 1C 63 4F 47 43 49 4C 00 EA	8588: 00 02 04 08 10 20 00 00 16	HAND "+ HA+ " "
10000 AF AF 44 70 70 44 15 15 DB	8590 . 3F 30 30 30 30 30 3F 00 BE	HHND JOHJ .
		MP 190 PRINT "Q - TO QUII"
8208: 1C 63 43 79 7C 60 1C 1C 7E	8398: 00 00 14 22 00 00 FO	NJ 200 PRINT "R - TO RESTART
82EØ: 1C 63 ØØ 1C 1F 4F 67 73 Ø7	85AØ: ØØ ØØ ØØ ØØ ØØ ØØ ØØ 7F 2B	BAME" . PRINT DO: " DOL
8268: 73 73 63 10 10 63 10 10 75	85A8: Ø4 Ø8 1Ø ØØ ØØ ØØ ØØ ØØ B9	BANE FRINT DO, DOL
		LARS LEFT"
	0504. 44 44 10 24 30 20 30 44 24	
82FØ: 10 63 63 10 10 10 93 1F 81	8580: 00 00 1C 20 3C 22 3C 00 24	E 210 PRINT "PLACE BET
82F8: 1C 63 63 1C 1C 1C 93 1F 81 82F8: 1C 63 Ø1 67 67 67 67 67 8A	85BØ:         ØØ         ØØ         IC         2Ø         3C         22         3C         ØØ         24           85B8:         Ø2         Ø2         1E         22         22         22         1E         ØØ         Ø1	EL 210 PRINT "PLACE BET
82FØ: 1C 63 63 1C 1C 1C 03 1F 81 82F8: 1C 63 01 67 67 67 67 67 8A 8300: 67 67 1F 1F 1F 1F 1F 1F 3D	8580:         00         00         1C         20         3C         22         3C         00         24           8588:         02         02         1E         22         22         22         1E         00         01           85C0:         00         00         3C         02         02         02         3C         00         04	EL 210 PRINT "PLACE BET (14 SPACES)": POSITION
82F0: 1C 63 63 1C 1C 1C 03 1F 81 82F8: 1C 63 01 67 67 67 67 67 67 8300: 67 67 1F 1F 1F 1F 1F 1F 3D	8580:         00         00         1C         20         3C         22         3C         00         24           8588:         02         02         1E         22         22         22         1E         00         01           85C0:         00         00         3C         02         02         02         02         00         04           85C0:         20         00         3C         22         22         3C         00         04	EL 210 PRINT "PLACE BET (14 SPACES)": POSITION 15,15
82F0:         1C         63         63         1C         1C         93         1F         81           82F8:         1C         63         01         67         67         67         67         84           83Ø0:         67         67         1F         1F         1F         1F         3D           83Ø8:         1C         63         63         1C         1C         1C         1Ø         BD	8580:         00         00         1C         20         3C         22         3C         00         24           8588:         02         02         1E         22         22         22         1E         00         01           85C0:         00         00         3C         02         02         02         3C         00         04           85C8:         20         20         3C         22         22         3C         00         A7	EL 210 PRINT "PLACE BET (14 SPACES)": POSITION 15,15 A 220 GET #1.A: IF C(A)=8 TH
82F0:         1C         63         63         1C         1C         03         1F         81           82F0:         1C         63         01         67         67         67         67         84           8300:         67         67         1F         1F         1F         1F         1F         3D           8300:         67         67         63         63         1C         1C         1C         1B           8300:         67         67         63         63         1C         1C         1C         1B           8300:         44         13         1C         1C         60         1C         1C         F9	85BØ:       ØØ       ØØ       1C       2Ø       3C       22       3C       ØØ       24         85B8:       Ø2       Ø2       1E       22       22       21       E       ØØ       Ø1         85C0:       ØØ       ØØ       3C       22       22       22       3C       ØØ       Ø1         85C8:       2Ø       2Ø       3C       2Ø       Ø2       3C       ØØ       Ø4         85D9:       ØØ       ØØ       3C       22       22       3C       ØØ       A7         85D9:       ØØ       ØØ       1C       22       3E       Ø2       3C       ØØ       A7	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AM 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):SOTO 3
82F0:         1C         63         63         1C         1C         03         1F         81           82F0:         1C         63         01         67         67         67         67         67         83           83Ø0:         67         67         1F         1F         1F         1F         1F         3D           83Ø0:         67         67         67         1C         1C         1F         3D           83Ø0:         67         63         63         1C         1C         1C         1Ø         BD           8310:         1C         63         63         1C         1C         10         BD           8318:         1C         1C         00         02         7F         1F         85         26	65BØ:       ØØ       ØØ       1C       2Ø       3C       22       3C       ØØ       24         85B8:       Ø2       Ø2       1E       22       22       22       1E       ØØ       ØI         85CØ:       ØØ       ØØ       3C       Ø2       Ø2       Ø2       3C       ØØ       Ø4         85C8:       2Ø       ØØ       3C       22       22       3C       ØØ       A7         85D8:       18       24       Ø4       1E       Ø4       Ø4       ØØ       F3	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3
B2F0:       1C       53       63       1C       1C       93       1F       81         B2F0:       1C       63       01       67       67       67       67       8A         B300:       67       67       1F       1F       1F       1F       1F       1F       31         B300:       1C       63       63       1C       1C       1C       10       BD         B310:       1C       1C       1C       1C       1C       10       BD         B310:       1C       1C       1C       1C       60       1C       1C       F9         B318:       1C       1C       00       02       7F       1F       85       26         B320:       14       03       07       03       03       13       04       02       71	85BØ:       00       00       1C       20       3C       22       3C       00       24         85B8:       02       02       1E       22       22       22       1E       00       01         85D8:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       02       3C       00       04         85C0:       20       20       3C       22       22       3C       00       04         85D9:       00       00       1C       22       3E       02       3C       00       F3         85D8:       18       24       04       1E       04       04       04       97         85E0:       00       00       1C       22       22       3C       20       1C       EF	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10
82F0:         1C         83         83         1C         1C         93         1F         81           82F0:         1C         63         64         67         67         67         67         84           8300:         67         67         67         67         67         67         84           8300:         67         67         1F         1F         1F         1F         1F         31         7           8300:         67         67         63         63         1C         1C         1C         10         80           8300:         44         13         1C         1C         1C         60         1C         1C         F9           8318:         1C         1C         00         02         7F         1F         85         26           8320:         14         03         07         03         03         13         04         02         71           03700:         13         64         67         16         16         16	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       02       3C       00       04         85C8:       20       20       3C       22       22       3C       00       04         85D8:       18       24       04       1E       04       04       04       73         85D8:       18       24       04       1E       04       04       04       07         85E8:       00       00       1C       22       3C       20       1C       EF         85E9:       00       00       1C       22       22       3C       20       1C       EF         85E9:       00       01       12       22       22       20       37       37	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340
82F0:       1C       63       63       1C       1C       03       1F       81         82F8:       1C       63       01       67       67       67       67       67       84         83Ø0:       67       67       1F       1F       1F       1F       1F       1F       30         83Ø0:       67       63       63       63       1C       1C       1C       10       BD         83Ø8:       1C       63       63       1C       1C       1C       10       BD         8318:       1C       1C       01       00       02       7F       1F       85       26         8320:       14       03       07       93       03       13       04       02       71         8328:       13       00       08       28       78       04       00       00       10	65BØ:       00       00       1C       20       3C       22       3C       00       24         85B8:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       02       3C       00       04         85C8:       20       00       3C       22       22       3C       00       04         85D8:       18       20       3C       22       3Z       00       04         85D8:       18       24       04       1E       04       04       00       93         85D8:       18       24       04       1E       04       04       00       93         85E0:       00       00       1C       22       22       3C       00       73         85E8:       02       02       1E       22       22       22       00       39         9556:       02       02       1E       22       22       22       00       39	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>9 THEN 270
B2FØ:       1C       53       63       1C       1C       93       1F       81         B2FØ:       1C       63       Ø1       67       67       67       67       8A         B3Ø0:       67       67       1F       1F       1F       1F       1F       1F       31       1C       1C       1C       10       8D         B3Ø0:       1C       63       63       1C       1C       1C       1C       10       8D         B3Ø0:       1C       67       67       67       67       67       67       8A         B3Ø0:       1C       63       63       1C       1C       1C       10       8D         B310:       44       13       1C       1C       1C       60       92       7F       1F       85       26         B320:       14       93       97       93       93       13       94       92       71         B330:       10       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       21       60       04         85C8:       00       00       3C       22       22       22       3C       00       04         85C9:       00       00       3C       22       22       22       3C       00       04         85C9:       00       00       3C       22       22       22       3C       00       04         85D9:       00       00       1C       22       3E       02       3C       00       67         85E9:       02       02       1C       22       3C       00       67         85E9:       02       02       1E       22       22       22       00       37         85F9:       08       00       0C       08       08       08       1C       00       9A	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270
82FØ:       1C       83       83       1C       1C       93       1F       81         82FØ:       1C       63       91       67       67       67       67       84         83ØØ:       67       67       1F       1F       1F       1F       1F       1F       35       16       10       83       83       10       1C       1C       10       83       83       16       1C       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       11       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10 <td>65BØ:       00       00       1C       20       3C       22       3C       00       24         85B8:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       02       3C       00       04         85C8:       20       20       3C       22       22       3C       00       04         85D9:       00       00       1C       22       3E       02       3C       00       A7         85D9:       00       00       1C       22       3E       02       3C       00       A7         85D8:       18       24       04       1E       04       04       04       97         85D8:       18       24       04       1E       22       22       20       07         85E0:       00       00       1C       22       22       22       00       37         85F8:       08       06       02       02       04       08       08       10       10       12       0C       01    </td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;9 THEN 270 DG 250 IF LEN(AM\$)&lt;2 THEN AM</td>	65BØ:       00       00       1C       20       3C       22       3C       00       24         85B8:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       02       3C       00       04         85C8:       20       20       3C       22       22       3C       00       04         85D9:       00       00       1C       22       3E       02       3C       00       A7         85D9:       00       00       1C       22       3E       02       3C       00       A7         85D8:       18       24       04       1E       04       04       04       97         85D8:       18       24       04       1E       22       22       20       07         85E0:       00       00       1C       22       22       22       00       37         85F8:       08       06       02       02       04       08       08       10       10       12       0C       01	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>9 THEN 270 DG 250 IF LEN(AM\$)<2 THEN AM
B2FØ:       1C       53       63       1C       1C       93       1F       81         B2FØ:       1C       63       Ø1       67       67       67       67       8A         B3Ø0:       67       67       1F       1F       1F       1F       1F       1F       1F       3D         B3Ø0:       1C       63       63       1C       1C       1C       1Ø       BD         B310:       1C       63       63       1C       1C       1C       1Ø       BD         B310:       1C       1C       1C       1C       1C       1C       1Ø       BD         B310:       1C       1C       1C       1C       1C       1C       1Ø       BD         B318:       1C       1C       10       00       27       7F       1F       85       26         B320:       14       03       07       03       31       30       400       00       10         B330:       00       00       00       00       00       00       00       00       37         B330:       00       00       00       00	65BØ:       00       00       1C       20       3C       22       3C       00       24         85B8:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       02       3C       00       04         85C8:       02       00       3C       22       22       3C       00       04         85D8:       18       20       3C       22       22       3C       00       04         85D8:       00       00       1C       22       3E       02       3C       00       04         85D8:       18       24       04       1E       04       04       04       93         85E0:       00       00       1C       22       22       3C       20       1C       EF         85E8:       02       02       1E       22       22       22       20       37         85F9:       08       06       07       18       10       10       12       07       01         8600:       02       02       12	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>9 THEN 270 DG 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290
B2FØ:       1C       63       63       1C       1C       93       1F       81         B2FØ:       1C       63       91       67       67       67       67       8A         B3ØØ:       67       67       1F       1D       300:       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10 </td <td>8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       02       3C       00       04         85C0:       00       00       3C       02       02       02       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85D0:       00       00       1C       22       3E       02       3C       00       A7         85E0:       00       00       1C       22       3E       02       3C       00       F3         85E0:       00       00       1C       22       22       22       00       37         85F0:       00       00       18       10       10       10       12       0C       01         8400:       02       02       22       12       20       00       F0         85F8:       10       00</td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;9 THEN 270 OG 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1)</td>	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       02       3C       00       04         85C0:       00       00       3C       02       02       02       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85D0:       00       00       1C       22       3E       02       3C       00       A7         85E0:       00       00       1C       22       3E       02       3C       00       F3         85E0:       00       00       1C       22       22       22       00       37         85F0:       00       00       18       10       10       10       12       0C       01         8400:       02       02       22       12       20       00       F0         85F8:       10       00	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>9 THEN 270 OG 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1)
82FØ:       1C       63       63       1C       1C       93       1F       81         82FØ:       1C       63       01       67       67       67       67       84         83ØØ:       67       67       1F       1D       1C       1C <td>65BØ:       00       00       1C       20       3C       22       3C       00       24         85BB:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       3C       02       02       3C       00       04         85C0:       20       00       3C       02       02       3C       00       04         85C0:       20       20       3C       22       22       3C       00       A7         85D0:       00       00       1C       22       3E       02       3C       00       A7         85D0:       00       00       1C       22       3E       02       3C       00       F3         85D8:       18       24       04       1E       04       04       04       93         85E0:       00       00       1C       22       22       20       03       94         85F8:       08       00       18       10       10       10       12       0C       01         86/08:       02</td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AM 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;9 THEN 270 OG 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) .GOTO 290</td>	65BØ:       00       00       1C       20       3C       22       3C       00       24         85BB:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       3C       02       02       3C       00       04         85C0:       20       00       3C       02       02       3C       00       04         85C0:       20       20       3C       22       22       3C       00       A7         85D0:       00       00       1C       22       3E       02       3C       00       A7         85D0:       00       00       1C       22       3E       02       3C       00       F3         85D8:       18       24       04       1E       04       04       04       93         85E0:       00       00       1C       22       22       20       03       94         85F8:       08       00       18       10       10       10       12       0C       01         86/08:       02	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AM 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>9 THEN 270 OG 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) .GOTO 290
B2FØ:       1C       63       63       1C       1C       93       1F       81         B2FØ:       1C       63       Ø1       67       67       67       67       8A         B3Ø0:       67       67       1F       1D       308:       1C       1C       1C       1C       10       BD       8308:       1C       1C       1C       1C       1C       10       BD       8310:       10       10       10       10       10       10       10       10       10       10       10       10       11       10       11       10       10       10       10       10       10       10       11       10       11       10       10       10       10       10       11       10       10       10	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         8500:       00       00       3C       22       22       22       3C       00       04         8500:       00       00       3C       22       22       22       3C       00       04         8500:       00       00       3C       22       22       22       3C       00       04         8500:       00       00       1C       22       3E       02       02       3C       00       07         8500:       00       00       1C       22       3E       02       01       E       E         85E0:       02       02       1E       22       22       22       00       37         85F8:       10       00       18       10       10       10       10       10       07         86409:       02       02       12       06       80       08       08       10       00       37 <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;9 THEN 270 OG 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290</td>	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>9 THEN 270 OG 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290
B2FØ:       1C       63       63       1C       1C       93       1F       B1         B2FØ:       1C       63       91       67       67       67       67       84         B3Ø0:       67       67       1F       1       1D       12       10       10       10       10       10       10       1C       1C       1C       1C       1C       10       1D       10       11       10       10       10       10       1C	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       02       3C       00       04         85C8:       00       00       3C       02       22       22       3C       00       04         85C9:       00       00       1C       22       3E       02       3C       00       A7         85D8:       18       24       04       1E       04       04       04       04       97         85E9:       00       00       1C       22       22       22       20       37         85E9:       00       00       18       10       10       10       12       00       11         85F8:       10       00       18       10       10       10       12       00       11         86409:       02       02       22       12       06       03       37         86409:       06       36	EL 21Ø PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 22Ø GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 23Ø IF A=155 THEN 34Ø HF 24Ø IF C(A)<>9 THEN 27Ø OG 25Ø IF LEN(AM\$)<2 THEN AM \$="":GOTO 29Ø DF 26Ø AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 29Ø JL 27Ø IF C(A)<>1Ø THEN 22Ø
B2FØ:       1C       63       63       1C       1C       93       1F       B1         B2FØ:       1C       63       64       67       67       67       67       67       84         B3Ø0:       67       67       1F       1D       12       10       10       10       10       1C       1C       10       1D       1C       1C       10       10       1C       1F       1F       1F       1S       1S <td>65BØ:       00       00       1C       20       3C       22       3C       00       24         85BB:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       3C       02       02       3C       00       04         85C8:       00       00       3C       02       22       22       3C       00       04         85D0:       00       00       1C       22       3E       02       3C       00       73         85D8:       18       24       04       1E       04       04       04       00       73         85D8:       18       24       04       1E       04       04       04       09       73         85E0:       00       00       1C       22       22       20       03       78         85E6:       02       02       1E       22       22       20       03       74         85F8:       10       06       18       10       10       10       12       0C       01</td> <td>EL 21Ø PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 22Ø GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 23Ø IF A=155 THEN 34Ø HF 24Ø IF C(A)&lt;&gt;9 THEN 27Ø OG 25Ø IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 29Ø DF 26Ø AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 29Ø JL 27Ø IF C(A)&lt;&gt;1Ø THEN 22Ø MA 28Ø IF LEN(AM\$)&lt;9 THEN AM</td>	65BØ:       00       00       1C       20       3C       22       3C       00       24         85BB:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       3C       02       02       3C       00       04         85C8:       00       00       3C       02       22       22       3C       00       04         85D0:       00       00       1C       22       3E       02       3C       00       73         85D8:       18       24       04       1E       04       04       04       00       73         85D8:       18       24       04       1E       04       04       04       09       73         85E0:       00       00       1C       22       22       20       03       78         85E6:       02       02       1E       22       22       20       03       74         85F8:       10       06       18       10       10       10       12       0C       01	EL 21Ø PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 22Ø GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 23Ø IF A=155 THEN 34Ø HF 24Ø IF C(A)<>9 THEN 27Ø OG 25Ø IF LEN(AM\$)<2 THEN AM \$="":GOTO 29Ø DF 26Ø AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 29Ø JL 27Ø IF C(A)<>1Ø THEN 22Ø MA 28Ø IF LEN(AM\$)<9 THEN AM
B2FØ:       1C       63       63       1C       1C       93       1F       81         B2FØ:       1C       63       01       67       67       67       67       8A         B3Ø0:       67       67       1F       3D         B3Ø0:       1C       63       63       1C       1C       1C       10       BD       B3       83       1C       1C       1C       10       BD       B310:       44       13       1C       1C       1C       1C       10       BD       B310:       1C       1C       1C       10       BD       B310:       1C       1C       1C       1C       10       BD       B310:       10       10       1C       1C       1F       B5       26       63       271       B320:       14       03       07       03       31       30       40       271       B320:       10       90       90       90       90       90       90       90       90       90       90       90       90	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         85C0:       00       03       C       22       22       22       3C       00       04         85C0:       00       04       02       02       22       3C       00       04         85C0:       00       00       01       C       22       3C       00       04         85D0:       00       00       1C       22       3C       00       673         85E0:       00       01       12       22       3C       20       1C       EF         85E0:       02       02       1E       22       22       22       00       37         85F8:       10       00       18       10       10       10       12       20       67         86490:       02       02       12       02       08       08       08       1C       03       37         86490:       06       08       08       08	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A)
B2FØ:       1C       63       63       1C       1C       10       93       1F       B1         B2FØ:       1C       63       64       67       67       67       67       67       84         B3Ø0:       67       67       1F       1C       1C       10       9D       93       93       13       04       02       71       83       83       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90 <td>8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       02       3C       00       04         85C8:       20       20       3C       22       22       3C       00       04         85C8:       20       20       3C       22       22       3C       00       A7         85D8:       18       24       04       12       22       3C       00       F3         85E9:       00       00       1C       22       22       22       20       07       73         85E9:       00       00       1C       22       22       22       20       07       74         85F8:       10       00       18       10       10       10       12       0C       01         86409:       0C       08       08       08       08       1C       00       37         86409:       0C       08       08</td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;9 THEN 270 OG 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MD 290 POSITION 13 15:2"</td>	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       02       3C       00       04         85C8:       20       20       3C       22       22       3C       00       04         85C8:       20       20       3C       22       22       3C       00       A7         85D8:       18       24       04       12       22       3C       00       F3         85E9:       00       00       1C       22       22       22       20       07       73         85E9:       00       00       1C       22       22       22       20       07       74         85F8:       10       00       18       10       10       10       12       0C       01         86409:       0C       08       08       08       08       1C       00       37         86409:       0C       08       08	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>9 THEN 270 OG 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MD 290 POSITION 13 15:2"
B2FØ:       1C       63       63       1C       1C       10       93       1F       81         B2FØ:       1C       63       01       67       67       67       67       8A         B3Ø0:       67       67       1F       1C       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10 <td>65BØ:       00       00       1C       20       3C       22       3C       00       24         85BB:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       3C       02       02       3C       00       04         85C8:       20       20       3C       22       22       3C       00       04         85D9:       00       00       1C       22       3E       02       3C       00       73         85D8:       18       24       04       1E       04       04       04       09       73         85E0:       00       00       1C       22       22       22       00       37         85F8:       02       02       12       12       22       00       74         8609:       02       02       22       12       06       18       07       10       10       12       00       91         8649:       02       02       22       12       06       18       08       08       10</td> <td>EL 21Ø PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 22Ø GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 23Ø IF A=155 THEN 34Ø HF 24Ø IF C(A)&lt;&gt;9 THEN 27Ø OG 25Ø IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 29Ø DF 26Ø AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 29Ø JL 27Ø IF C(A)&lt;&gt;10 THEN 22Ø MA 28Ø IF LEN(AM\$)&lt;9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 29Ø POSITION 13,15:7"</td>	65BØ:       00       00       1C       20       3C       22       3C       00       24         85BB:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       3C       02       02       3C       00       04         85C8:       20       20       3C       22       22       3C       00       04         85D9:       00       00       1C       22       3E       02       3C       00       73         85D8:       18       24       04       1E       04       04       04       09       73         85E0:       00       00       1C       22       22       22       00       37         85F8:       02       02       12       12       22       00       74         8609:       02       02       22       12       06       18       07       10       10       12       00       91         8649:       02       02       22       12       06       18       08       08       10	EL 21Ø PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 22Ø GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 23Ø IF A=155 THEN 34Ø HF 24Ø IF C(A)<>9 THEN 27Ø OG 25Ø IF LEN(AM\$)<2 THEN AM \$="":GOTO 29Ø DF 26Ø AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 29Ø JL 27Ø IF C(A)<>10 THEN 22Ø MA 28Ø IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 29Ø POSITION 13,15:7"
B2FØ:       1C       63       63       1C       1C       93       1F       B1         B2FØ:       1C       63       Ø1       67       67       67       67       8A         B3Ø0:       67       67       1F       1C       1C       10       9D       93       91       10       12       1C       1C       1C       1C       1C       10       9D       93       93       13       04       02       71       83       83       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90 <td>8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         85C0:       00       03       C       22       22       22       3C       00       04         85C0:       00       03       C       22       22       22       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85D0:       00       00       1C       22       3E       02       3C       00       73         85E0:       02       02       1E       22       22       22       20       00       73         85F0:       00       00       1C       22       22       22       00       74         85F8:       10       00       18       10       10       10       12       00       91         86498:       00       03       24       24       24       24       24       26       90       74</td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;7 THEN 270 06 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 290 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) NO 290 POSITION 13,15:7 " (9 SPACES)";:POSITION</td>	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         85C0:       00       03       C       22       22       22       3C       00       04         85C0:       00       03       C       22       22       22       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85D0:       00       00       1C       22       3E       02       3C       00       73         85E0:       02       02       1E       22       22       22       20       00       73         85F0:       00       00       1C       22       22       22       00       74         85F8:       10       00       18       10       10       10       12       00       91         86498:       00       03       24       24       24       24       24       26       90       74	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) NO 290 POSITION 13,15:7 " (9 SPACES)";:POSITION
B2F0:       1C $A3$ $A5$ $A7$ $A7$ $A7$ $A7$ $A7$ $B30$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$	65BØ:       00       00       1C       20       3C       22       3C       00       24         85BB:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       22       22       22       00       04         85C8:       20       20       3C       22       22       22       3C       00       04         85C8:       20       20       3C       22       22       22       3C       00       73         85D8:       18       24       04       1E       04       04       04       90       73         85E9:       00       00       1C       22       22       22       20       37         85E9:       02       02       1E       22       22       22       00       37         85F8:       10       06       18       10       10       10       12       00       37         86498:       90       36       88       98       98       98       98       98       98       98       98	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>9 THEN 270 OG 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (9 SPACES)";:POSITION 13,15:? AM\$
B2FØ:       1C       63       63       1C       1C       93       1F       B1         B2FØ:       1C       63       01       67       67       67       67       8A         B3Ø0:       67       67       1F       1C       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10 <td>65BØ:       00       00       1C       20       3C       22       3C       00       24         85BB:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       3C       02       02       3C       00       04         85C8:       20       20       3C       22       22       3C       00       04         85D9:       00       00       1C       22       3E       02       3C       00       73         85D8:       18       24       04       1E       04       04       04       00       73         85D8:       18       24       04       1E       04       04       04       09       73         85E9:       00       00       1C       22       22       20       03       74         85F8:       10       00       18       10       10       10       12       0C       01         86498:       02       02       22       22       22       20       06       76         86498:</td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;7 THEN 270 06 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 270 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 270 POSITION 13,15:7 " (7 SPACES)";:POSITION 13,15:7 AM\$ 6A 300 GOTO 220</td>	65BØ:       00       00       1C       20       3C       22       3C       00       24         85BB:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       3C       02       02       3C       00       04         85C8:       20       20       3C       22       22       3C       00       04         85D9:       00       00       1C       22       3E       02       3C       00       73         85D8:       18       24       04       1E       04       04       04       00       73         85D8:       18       24       04       1E       04       04       04       09       73         85E9:       00       00       1C       22       22       20       03       74         85F8:       10       00       18       10       10       10       12       0C       01         86498:       02       02       22       22       22       20       06       76         86498:	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 270 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 270 POSITION 13,15:7 " (7 SPACES)";:POSITION 13,15:7 AM\$ 6A 300 GOTO 220
B2F0:       1C $A3$ $A5$ $A7$ $A7$ $A7$ $A7$ $A7$ $B3$ $B3g0:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B3$ $B3g0:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B3$ $B3g0:$ $1C$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B3$ $B3$ $B3$ $B1$ $1C$ $1C$ $1C$ $1C$ $1D$ $BD$ $B310:$ $44$ $13$ $1C$ $1C$ $1C$ $1C$ $1C$ $1D$ $BD$ $B310:$ $44$ $13$ $1C$ $1C$ $1C$ $1C$ $1D$ $BD$ $B312:$ $14$ $93$ $97$ $93$ $313$ $94$ $92$ $71$ $B320:$ $14$ $93$ $97$ $93$ $93$ $13$ $94$ $92$ $71$ $B3320:$ $D9$ $90$ $90$ $90$	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       22       22       22       3C       00       04         85C8:       20       20       3C       22       22       3C       00       04         85D9:       00       00       1C       22       3E       02       3C       00       64         85D8:       18       24       04       1E       04       04       00       73         85E9:       00       00       1C       22       22       22       20       00       37         85E9:       02       02       12       22       22       22       00       94         85F8:       10       00       18       10       10       10       12       20       01         86498:       0C       08       08       08       1C       00       37         86498:       00       06       3C       22	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:7" (9 SPACES)";:POSITION 13,15:7 AM\$ GA 300 GOTO 220 DA 10 IF AM\$="C" THEN POVE
B2F0:       1C $A3$ $A5$ $A6$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $B7$	65B0:       00       00       1C       20       3C       22       3C       00       24         85B0:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       22       22       22       00       04         85C0:       00       00       3C       02       02       3C       00       04         85C0:       00       00       1C       22       3E       02       3C       00       A7         85D8:       18       24       04       1E       04       04       04       09       73         85E0:       00       00       1C       22       3C       20       1C       EF         85E8:       02       02       12       22       22       20       00       37         85F8:       10       00       18       10       10       10       12       0C       01         86408:       02       02       22       22       22       20       60       37         86409:       00       03	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>9 THEN 270 OG 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 JF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (9 SPACES)";:POSITION 13,15:? AM\$ SA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE
B2F0:       1C $A3$ $A5$ $A6$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B3$ $B2F0:$ 1C $A3$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B3$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B3$ $B300:$ $1C$ $G3$ $A3$ $1C$ $1C$ $1C$ $1C$ $1D$ $BD$ $B310:$ $44$ $13$ $1C$ $1C$ $1C$ $1C$ $1F$ $B7$ $B310:$ $1C$ $1C$ $1C$ $1C$ $1C$ $1F$ $B7$ $B310:$ $14$ $33$ $1C$ $1C$ $1C$ $1C$ $1F$ $B7$ $B320:$ $14$ $03$ $07$ $03$ $31$ $30$ $402$ $71$ $B320:$ $14$ $03$ $07$ $03$ $03$ $00$ $00$ $00$ $00$ $00$ $00$ $00$ $00$ <t< td=""><td>8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85D0:       00       00       1C       22       3C       00       67         85E0:       02       02       1E       22       22       22       20       00       74         85F0:       00       00       1C       22       22       22       00       74         85F8:       10       00       18       10       10       10       12       0C       91         86498:       00       03       34       24       24       24       20       90       74         86498:       00       03</td><td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;7 THEN 270 06 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:? " (9 SPACES)";:POSITION 13,15:? AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END</td></t<>	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85D0:       00       00       1C       22       3C       00       67         85E0:       02       02       1E       22       22       22       20       00       74         85F0:       00       00       1C       22       22       22       00       74         85F8:       10       00       18       10       10       10       12       0C       91         86498:       00       03       34       24       24       24       20       90       74         86498:       00       03	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:? " (9 SPACES)";:POSITION 13,15:? AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END
B2F0:       1C $B3$ $B3$ $B1$ $B7$	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       A7         85D0:       00       00       1C       22       3E       02       3C       00       F3         85E0:       00       00       1C       22       3C       20       1C       EF         85E0:       00       00       1C       22       22       22       20       00       37         85F8:       10       00       18       10       10       10       12       00       37         86498:       0C       08       08       08       08       10       00       37         86499:       00	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 OG 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 270 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<1)=CHR\$(A) %(LEN(AM\$)<7 THEN AM \$(LEN(AM\$)<7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 270 POSITION 13,15:7" (7 SPACES)";:POSITION 13,15:7 AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END MN 320 IF AM\$="R" THEN RUN
B2F0:       1C $A3$ $A5$ $A7$ $A7$ $A7$ $A7$ $A7$ $B30:$ $B30:$ $A7$ $A7$ $A7$ $A7$ $B7$ $B30:$ $B30:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B30:$ $B30:$ $A7$ $A7$ $A7$ $A7$ $B7$ $B30:$ $B30:$ $A7$ $A7$ $A7$ $A7$ $B7$ $B7$ $B30:$ $B1:$ $A7$ $A7$ $A7$ $B7$	65B0:       00       00       1C       20       3C       22       3C       00       24         85B0:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       3C       02       02       3C       00       04         85C0:       00       00       3C       02       22       22       3C       00       04         85C0:       00       00       1C       22       3E       02       3C       00       73         85D8:       18       24       04       1E       04       04       04       04       97         85E0:       00       00       1C       22       22       22       00       37         85F8:       10       00       18       10       10       10       12       0C       01         86409:       02       02       22       12       02       04       70       70         86409:       00       01       12       22       22       00       70       70         86409:	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>9 THEN 270 OG 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 JF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (9 SPACES)";:POSITION 13,15:? AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="R" THEN RUN SA 300 GOTO 340
B2FØ:       1C       63       63       1C       1C       10       93       1F       B1         B2FØ:       1C       63       Ø1       67       67       67       67       84         B3Ø0:       67       67       1F       1C       1C       10       10       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90 <td>8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       04         8508:       02       02       1E       22       22       22       1E       00       04         8508:       02       02       3C       22       22       3C       00       04         8509:       00       00       1C       22       3E       02       3C       00       73         8509:       00       00       1C       22       3E       02       3C       00       73         8558:       18       02       02       12       22       22       22       00       74         8568:       02       02       12       22       22       20       00       74         8578:       10       00       18       10       10       10       12       20       01         86498:       00       36       24       24       24       26       07       84         86498:       00       36</td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;7 THEN 270 06 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 290 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:? " (9 SPACES)";:POSITION 13,15:? AM\$ 6A 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END MN 320 IF AM\$="R" THEN RUN 66 330 GOTO 340</td>	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       04         8508:       02       02       1E       22       22       22       1E       00       04         8508:       02       02       3C       22       22       3C       00       04         8509:       00       00       1C       22       3E       02       3C       00       73         8509:       00       00       1C       22       3E       02       3C       00       73         8558:       18       02       02       12       22       22       22       00       74         8568:       02       02       12       22       22       20       00       74         8578:       10       00       18       10       10       10       12       20       01         86498:       00       36       24       24       24       26       07       84         86498:       00       36	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:? " (9 SPACES)";:POSITION 13,15:? AM\$ 6A 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END MN 320 IF AM\$="R" THEN RUN 66 330 GOTO 340
$B \ge P = 0$ 1C $A = 0$	65BØ:       00       00       1C       20       3C       22       3C       00       24         85BB:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       3C       02       02       3C       00       04         85C8:       20       20       3C       22       22       22       3C       00       04         85C8:       20       20       3C       22       22       3C       00       64         85D8:       18       24       04       1E       04       04       04       09       73         85E9:       00       00       1C       22       22       22       20       00       37         85F8:       10       00       18       10       10       10       12       0C       01         86498:       9C       08       98       98       98       1C       00       37         86498:       90       90       1C       22       22       22       20       02       04	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>9 THEN 270 OG 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<1)=CHR\$(A) 0290 POSITION 13,15:?" (9 SPACES)";:POSITION 13,15:? AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="R" THEN RUN 86 340 AM=VAL(AM\$):AM=INT(10
$B \ge P = 1C$ $B \le 5$ $B \le 5$ $C = 1C$ $B \le 5$ $B \le 5$ $B \ge P = 1C$ $C \le 3$ $B \le 7$ $C = 1C$ $B \le 7$ $B \le 7$ $B \le 7$ $B \le 2B \le 1C$ $C \le 3$ $B \le 7$ $E = 1C$ $E \le 7$ $E = 1C$ $B \le 7$ $B \le 7$ $B = 1C$ $B \ge 3D \le 1C$ $E \ge 7B$ $B \ge 7B$ $B \ge 7F$ $B \ge 7F$ $B \ge 7F$ $B \ge 27F$ $B = 2FF$ $B = 2FF$ $B = 2FF$ $B = 2FF$ $E = 2FF$	65B0:       00       00       1C       20       3C       22       3C       00       24         85B0:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       3C       02       02       3C       00       04         85C0:       00       00       3C       02       22       22       3C       00       04         85C0:       00       00       1C       22       3E       02       3C       00       73         85D8:       18       24       04       1E       04       04       04       00       73         85E0:       00       00       1C       22       22       22       00       74         85F8:       10       00       18       10       10       10       12       0C       01         86409:       02       02       22       12       22       00       74         86409:       00       03       12       02       22       00       70         85F8:       10       00	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<9 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (9 SPACES)";:POSITION 13,15:? AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="R" THEN RUN GG 330 GOTO 340 HE 340 AM=VAL(AM\$):AM=INT(10 0*(AM+5.0E-03))/100
B2F0:       1C $A3$ $A5$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B30$ $B2F0:$ 1C $A3$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B7$ $B30$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B30$ $B1$ $B2$ $A0$ $B0$ $A1$ $B2$ $A1$ $B1$ $B2$ $A1$ $B2$ $A1$ $B2$ $A1$ $B2$ $A1$ $B2$ $A1$ $B2$ $A1$ $A2$ $A1$ $B2$ $A1$ $A2$ $A1$ $B2$ $A1$ $A2$ $A1$ <td>85B0:       00       00       1C       20       3C       22       3C       00       24         85B0:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       1C       22       3E       02       3C       00       73         85D8:       18       24       04       1E       04       04       04       09       73         85E9:       00       00       1C       22       3C       20       1C       EF         85E9:       02       02       1E       22       22       22       20       00       37         85F8:       10       00       18       10       10       10       12       20       01         86408:       0C       08       08       08       1C       00       37         86409:       00       3C</td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;7 THEN 270 06 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 290 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:7" (9 SPACES)";:POSITION 13,15:7 AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="R" THEN RUN GG 330 GOTO 340 H6 340 AM=VAL(AM\$):AM=INT(10 0*(AM+5.0E-03))/100 YL 350 IF AM\$=0 THEN GOTOBUB</td>	85B0:       00       00       1C       20       3C       22       3C       00       24         85B0:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       1C       22       3E       02       3C       00       73         85D8:       18       24       04       1E       04       04       04       09       73         85E9:       00       00       1C       22       3C       20       1C       EF         85E9:       02       02       1E       22       22       22       20       00       37         85F8:       10       00       18       10       10       10       12       20       01         86408:       0C       08       08       08       1C       00       37         86409:       00       3C	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:7" (9 SPACES)";:POSITION 13,15:7 AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="R" THEN RUN GG 330 GOTO 340 H6 340 AM=VAL(AM\$):AM=INT(10 0*(AM+5.0E-03))/100 YL 350 IF AM\$=0 THEN GOTOBUB
B2F0:       1C $A3$ $A5$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B30$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B30$ $B300:$ $1C$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B1$ $B7$	65BØ:       00       00       1C       20       3C       22       3C       00       24         85BB:       02       02       1E       22       22       22       1E       00       01         85C0:       00       00       3C       02       02       02       3C       00       04         85C8:       20       20       3C       22       22       22       3C       00       04         85C8:       20       20       3C       22       22       3C       00       73         85D8:       18       24       04       12       22       3C       00       73         85E9:       00       00       1C       22       22       22       20       37         85E9:       00       00       1E       22       22       22       20       00       37         85F8:       10       00       18       10       10       10       12       00       37         86498:       9C       08       98       98       98       12       20       00       37         86498:       90       90	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=B TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>9 THEN 270 OG 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 JF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (9 SPACES)";:POSITION 13,15:? AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END MN 320 IF AM\$="R" THEN RUN BG 330 GOTO 340 HG 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM<0.01 THEN GOSUB 100 AM\$
$B \ge P = 1C$ $B \le 5$ $B \le 5$ $B \le 7$ $B \ge 7$ $B \le 5$ $B \ge 5$ $B \le 5$ $B > 5$ $B < 5$ $B = 5$ <	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       01         85C0:       00       03       C       22       22       22       3C       00       04         85C0:       00       00       3C       22       22       3C       00       04         85C0:       00       00       1C       22       3C       00       04         85D0:       18       20       20       3C       22       22       3C       00       04         85E0:       00       00       1C       22       3C       20       1C       EF         85E0:       02       02       1E       22       22       22       20       07         85F8:       10       00       18       10       10       10       12       20       07         86498:       00       02       02       22       12       02       00       37         86498:       00       06       1E       22       22	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A) ? THEN 270<br 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A) 10 THEN 220<br MA 280 IF LEN(AM\$) THEN AM<br \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (? SPACES)";:POSITION 13,15:? AM\$ GA 300 GOTO 340 BA 310 IF AM\$="R" THEN RUN G6 330 GOTO 340 H6 340 AM=VAL(AM\$):AM=INT(100 0\$(AM+5.0E-03))/100 KL 350 IF AM\$(
B2F0:       1C $A3$ $A5$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B30$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B7$ $B30$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A7$ $A7$ $A7$ $A7$ $B7$ $B300:$ $A4$ $13$ $1C$ $1C$ $1C$ $1C$ $107$ $B7$ $B310:$ $A4$ $13$ $1C$ $1C$ $1C$ $107$ $B7$ $B320:$ $117$ $B7$ <td>8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       04         85C0:       00       03       C       22       22       22       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       1C       22       3E       02       3C       00       73         85D8:       18       24       04       1E       04       04       04       09       73         85E9:       00       00       1C       22       22       22       22       20       03       74         85F8:       10       00       18       10       10       10       12       20       01         8409:       02       02       22       12       22       00       74         8458:       00       06       12       22       22       00       74         8468:       00       06</td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;7 THEN 270 06 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 270 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 270 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;9 THEN AM \$(LEN(AM\$)&lt;9 THEN AM \$(LEN(AM\$)&lt;7) THEN AM \$(LEN(AM\$)&lt;7) THEN AM \$(LEN(AM\$)&lt;7) THEN AM \$(LEN(AM\$)&lt;7) THEN AM \$(A) 0 POSITION 13,15:7" (9 SPACES)";:POSITION 13,15:7 AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="R" THEN RUN GB 330 GOTO 340 HE 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM&lt;0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DOLLARS":</td>	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       04         85C0:       00       03       C       22       22       22       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       1C       22       3E       02       3C       00       73         85D8:       18       24       04       1E       04       04       04       09       73         85E9:       00       00       1C       22       22       22       22       20       03       74         85F8:       10       00       18       10       10       10       12       20       01         8409:       02       02       22       12       22       00       74         8458:       00       06       12       22       22       00       74         8468:       00       06	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 270 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 270 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)<9 THEN AM \$(LEN(AM\$)<7) THEN AM \$(LEN(AM\$)<7) THEN AM \$(LEN(AM\$)<7) THEN AM \$(LEN(AM\$)<7) THEN AM \$(A) 0 POSITION 13,15:7" (9 SPACES)";:POSITION 13,15:7 AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="R" THEN RUN GB 330 GOTO 340 HE 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM<0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DOLLARS":
$B \ge P = 1C$ $B \le 5$ $B \le 5$ $B \le 7$ $B \ge 78$ $B \ge 78$ $B \ge 77$ $B < 77$	65B0:       00       00       1C       20       3C       22       3C       00       24         85B1:       02       02       1E       22       22       22       1E       00       04         85C0:       00       00       3C       02       02       3C       02       02       3C       00       04         85C1:       00       00       3C       02       22       22       3C       00       04         85C2:       00       00       1C       22       3E       02       3C       00       73         85E0:       00       00       1C       22       3C       20       1C       E7         85E8:       02       02       1E       22       22       22       00       74         85F8:       10       00       18       10       10       10       12       0C       01         86408:       02       02       22       12       02       04       74         86409:       00       03       52       04       24       24       00       74         86409:       00       05	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<9 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 270 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 270 POSITION 13,15:?" (7 SPACES)";:POSITION 13,15:? AM\$ CAN\$="Compare: Compare: Com
B2F0:       1C $A3$ $A5$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B3$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B3$ $B300:$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $A7$ $B7$ $B3$ $B300:$ $1C$ $G3$ $G3$ $1C$ $1C$ $1C$ $1C$ $1D$ $BD$ $B310:$ $44$ $13$ $1C$ $1C$ $1C$ $1C$ $1F$ $B7$ $B310:$ $14$ $33$ $07$ $03$ $31$ $30$ $402$ $71$ $B320:$ $14$ $30$ $07$ $03$ $31$ $30$ $402$ $71$ $B3230:$ $14$ $30$ $09$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$	8580:       00       00       1C       20       3C       22       3C       00       24         8580:       02       02       1E       22       22       22       1E       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       1C       22       3E       02       3C       00       73         85D8:       18       24       04       1E       04       04       04       09       73         85E9:       00       00       1C       22       3C       20       1C       EF         85E9:       02       02       12       22       22       20       00       74         85F8:       10       00       18       10       10       10       12       20       01         86409:       00       3C       22       22       22       00       F4         86409:       00       3C       22	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (9 SPACES)";:POSITION 13,15:? AM\$ 6A 300 GOTO 220 BA 310 IF AM\$="C" THEN POKE 752,0:END MN 320 IF AM\$="C" THEN RUN 86 330 GOTO 340 HG 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM<0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DOLLARS": GOSUB 1150:GOTO 170
B2FØ:       1C       63       64       67       67       67       67       67       81         B2FØ:       1C       63       64       67       67       67       67       67       67       81         B3Ø0:       67       67       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11 <td>65BØ:       00       00       1C       20       3C       22       3C       00       24         85BB:       02       02       1E       22       22       22       1E       00       04         85C0:       00       00       3C       02       02       3C       02       02       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       1C       22       3E       02       3C       00       F3         85D8:       18       24       04       1E       04       04       04       09       73         85E0:       00       00       1C       22       22       22       20       00       37         85F8:       10       00       18       10       10       10       12       0C       01         86498:       9C       08       08       08       1C       00       37         86498:       9C       08       98       08       88       10       03       37         86498:</td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;7 THEN 270 06 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 270 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;1) :GOTO 270 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;7 THEN AM \$(LEN(AM\$)&lt;7 THEN AM \$(LEN(AM\$)&lt;7) THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 270 POSITION 13,15:7" (7 SPACES)";:POSITION 13,15:7 AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END MN 320 IF AM\$="R" THEN RUN GG 330 GOTO 340 HE 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM&lt;0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DOLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM&gt;D THEN GOSUB 1</td>	65BØ:       00       00       1C       20       3C       22       3C       00       24         85BB:       02       02       1E       22       22       22       1E       00       04         85C0:       00       00       3C       02       02       3C       02       02       3C       00       04         85C0:       00       00       3C       22       22       22       3C       00       04         85C0:       00       00       1C       22       3E       02       3C       00       F3         85D8:       18       24       04       1E       04       04       04       09       73         85E0:       00       00       1C       22       22       22       20       00       37         85F8:       10       00       18       10       10       10       12       0C       01         86498:       9C       08       08       08       1C       00       37         86498:       9C       08       98       08       88       10       03       37         86498:	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 270 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<1) :GOTO 270 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<7 THEN AM \$(LEN(AM\$)<7 THEN AM \$(LEN(AM\$)<7) THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 270 POSITION 13,15:7" (7 SPACES)";:POSITION 13,15:7 AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END MN 320 IF AM\$="R" THEN RUN GG 330 GOTO 340 HE 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM<0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DOLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM>D THEN GOSUB 1
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B2FØ:       1C       63       64       67       67       67       67       81         B2FØ:       1C       63       01       67       67       67       67       81         B3Ø8:       1C       63       63       1C       1C       1C       16       17       17       18       15       16       17       17       18       17       17       17       17       17       17       17       17       17       18       17       17       17       18       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       13       10       00       00       00       00       00       00       00       00       00       10       18       17       18       13       14       14       14       14       14       14       14       14       14       14       14 <td>65BØ: ØØ ØØ 1C 2Ø 3C 22 3C ØØ 24         85BB: Ø2 Ø2 1E 22 22 22 1E ØØ Ø1         85CØ: ØØ ØØ 3C Ø2 Ø2 Ø2 3C ØØ A7         85CØ: ØØ ØØ 1C 22 3E Ø2 3C ØØ F3         85D8: Ø2 Ø2 1E 22 22 22 3C ØØ A7         85D9: ØØ ØØ 1C 22 3E Ø2 3C ØØ F3         85D8: ØØ ØØ 1C 22 22 22 22 Ø0 F3         85EØ: ØØ ØØ 1C 22 22 3C 2Ø 1C EF         85EØ: ØØ ØØ 1C 22 22 22 20 Ø 37         85FØ: Ø8 ØØ ØC Ø8 Ø8 Ø8 1C ØØ 7A         85FØ: Ø8 ØØ ØC Ø8 Ø8 Ø8 1C ØØ 7A         85F8: 10 ØØ 18 1Ø 1Ø 1Ø 10 12 ØC Ø1         864Ø8: ØC Ø8 Ø8 Ø8 Ø8 1C ØØ 37         864Ø8: ØC Ø8 Ø8 Ø8 Ø8 1C ØØ 37         864Ø8: ØC Ø8 Ø8 Ø8 Ø8 1C ØØ 37         864Ø8: ØØ ØØ 1E 22 22 22 20 Ø E8         86428: ØØ ØØ 1E 22 22 22 20 Ø E8         86428: ØØ ØØ 3C 22 22 3C 20 Ø Ø7         8648: ØØ ØØ 3C 22 22 3C 20 Ø Ø7         8648: ØØ ØØ 3C 22 22 22 1E Ø0 20 Ø Ø7         8648: ØØ ØØ 3C 22 22 22 14 Ø8 Ø9 3D         8659: ØØ ØØ 22 22 22 14 Ø8 Ø9 3D         8658: ØØ ØØ 22 22 24 14 Ø8 Ø4 3E ØØ 1B         8648: ØØ ØØ 3E 1Ø Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8         8648: Ø8         8648: Ø8         8648: Ø8         8648: Ø8         8648: Ø8         8648: Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8</td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;7 THEN 270 OG 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 270 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;1) :GOTO 270 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 270 POSITION 13,15:7" (7 SPACES)";:POSITION 13,15:7 AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="R" THEN RUN 86 330 GOTO 340 H6 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM&lt;0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DDLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM&gt;DO THEN GOSUB 1 080:PRINT "YOU DNOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170</td>	65BØ: ØØ ØØ 1C 2Ø 3C 22 3C ØØ 24         85BB: Ø2 Ø2 1E 22 22 22 1E ØØ Ø1         85CØ: ØØ ØØ 3C Ø2 Ø2 Ø2 3C ØØ A7         85CØ: ØØ ØØ 1C 22 3E Ø2 3C ØØ F3         85D8: Ø2 Ø2 1E 22 22 22 3C ØØ A7         85D9: ØØ ØØ 1C 22 3E Ø2 3C ØØ F3         85D8: ØØ ØØ 1C 22 22 22 22 Ø0 F3         85EØ: ØØ ØØ 1C 22 22 3C 2Ø 1C EF         85EØ: ØØ ØØ 1C 22 22 22 20 Ø 37         85FØ: Ø8 ØØ ØC Ø8 Ø8 Ø8 1C ØØ 7A         85FØ: Ø8 ØØ ØC Ø8 Ø8 Ø8 1C ØØ 7A         85F8: 10 ØØ 18 1Ø 1Ø 1Ø 10 12 ØC Ø1         864Ø8: ØC Ø8 Ø8 Ø8 Ø8 1C ØØ 37         864Ø8: ØC Ø8 Ø8 Ø8 Ø8 1C ØØ 37         864Ø8: ØC Ø8 Ø8 Ø8 Ø8 1C ØØ 37         864Ø8: ØØ ØØ 1E 22 22 22 20 Ø E8         86428: ØØ ØØ 1E 22 22 22 20 Ø E8         86428: ØØ ØØ 3C 22 22 3C 20 Ø Ø7         8648: ØØ ØØ 3C 22 22 3C 20 Ø Ø7         8648: ØØ ØØ 3C 22 22 22 1E Ø0 20 Ø Ø7         8648: ØØ ØØ 3C 22 22 22 14 Ø8 Ø9 3D         8659: ØØ ØØ 22 22 22 14 Ø8 Ø9 3D         8658: ØØ ØØ 22 22 24 14 Ø8 Ø4 3E ØØ 1B         8648: ØØ ØØ 3E 1Ø Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8         8648: Ø8         8648: Ø8         8648: Ø8         8648: Ø8         8648: Ø8         8648: Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 OG 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 270 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<1) :GOTO 270 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 270 POSITION 13,15:7" (7 SPACES)";:POSITION 13,15:7 AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="R" THEN RUN 86 330 GOTO 340 H6 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM<0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DDLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM>DO THEN GOSUB 1 080:PRINT "YOU DNOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170
B2F0:       1C $A3$ $A5$ $A7$ $B308:$ $1C$ $1C$ $1C$ $1C$ $1C$ $1C$ $1C$ $1C$ $1D$ $B308:$ $1C$ <td>8580: 00 00 1C 20 3C 22 3C 00 24         8580: 02 02 1E 22 22 22 1E 00 01         85C0: 00 00 3C 02 02 02 3C 00 04         85C0: 00 00 00 1C 22 3E 02 3C 00 64         85D8: 02 02 1E 22 22 22 3C 00 673         85D8: 00 00 1C 22 3E 02 3C 00 73         85D8: 02 02 1E 22 22 22 22 00 1C EF         85E0: 00 00 1C 22 3C 20 1C EF         85E0: 00 00 1C 22 3C 22 22 20 00 79         85F0: 08 00 0C 08 08 08 08 1C 00 74         8640: 02 02 1E 22 22 22 20 00 60         85F8: 10 00 18 10 10 10 12 20 01         8640: 02 02 22 12 0E 12 22 00 F0         8640: 00 00 1E 22 22 22 20 00 F1         8640: 00 00 1E 22 22 22 12 00 E8         8640: 00 00 1E 22 22 22 12 00 A4         86430: 00 00 3A 06 02 02 02 00 07         8648: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 22 22 22 32 C0 00 75         8648: 00 00 22 22 22 32 C0 00 75         8648: 00 00 22 22 22 32 C0 01 C 42         8648: 00 00 22 22 22 32 C0 01 C 42         8648: 00 00 22 22 22 33 C 20 1C 42         8648: 00 00 22 22 22 33 C 20 1C 42         8648: 00 00 22 22 22 33 C 20 1C 42         8648: 00 00 22 22 22 30 C 20 1C 42         86478: 00 00 32 14 08 04 3E 00 18</td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<?? THEN 270 06 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)<?10 THEN 220 MA 280 IF LEN(AM\$)<? THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (? SPACES)";:POSITION 13,15:? AM\$ GA 300 GOTO 340 BA 310 IF AM\$="R" THEN RUN 86 330 GOTO 340 H6 340 AM=VAL(AM\$):AM=INT(10 0\$ (AM+5.0E-03))/100 KL 350 IF AM\$(0.01 THEN GOSUB 1080:PRINT "YOU CANN 0T BET ZERO DOLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM&gt;D THEN GOSUB 1 080:PRINT "YOU DO NOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170</td>	8580: 00 00 1C 20 3C 22 3C 00 24         8580: 02 02 1E 22 22 22 1E 00 01         85C0: 00 00 3C 02 02 02 3C 00 04         85C0: 00 00 00 1C 22 3E 02 3C 00 64         85D8: 02 02 1E 22 22 22 3C 00 673         85D8: 00 00 1C 22 3E 02 3C 00 73         85D8: 02 02 1E 22 22 22 22 00 1C EF         85E0: 00 00 1C 22 3C 20 1C EF         85E0: 00 00 1C 22 3C 22 22 20 00 79         85F0: 08 00 0C 08 08 08 08 1C 00 74         8640: 02 02 1E 22 22 22 20 00 60         85F8: 10 00 18 10 10 10 12 20 01         8640: 02 02 22 12 0E 12 22 00 F0         8640: 00 00 1E 22 22 22 20 00 F1         8640: 00 00 1E 22 22 22 12 00 E8         8640: 00 00 1E 22 22 22 12 00 A4         86430: 00 00 3A 06 02 02 02 00 07         8648: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 22 22 22 32 C0 00 75         8648: 00 00 22 22 22 32 C0 00 75         8648: 00 00 22 22 22 32 C0 01 C 42         8648: 00 00 22 22 22 32 C0 01 C 42         8648: 00 00 22 22 22 33 C 20 1C 42         8648: 00 00 22 22 22 33 C 20 1C 42         8648: 00 00 22 22 22 33 C 20 1C 42         8648: 00 00 22 22 22 30 C 20 1C 42         86478: 00 00 32 14 08 04 3E 00 18	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A) ? THEN 270<br 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A) 10 THEN 220<br MA 280 IF LEN(AM\$) THEN AM<br \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (? SPACES)";:POSITION 13,15:? AM\$ GA 300 GOTO 340 BA 310 IF AM\$="R" THEN RUN 86 330 GOTO 340 H6 340 AM=VAL(AM\$):AM=INT(10 0\$ (AM+5.0E-03))/100 KL 350 IF AM\$(0.01 THEN GOSUB 1080:PRINT "YOU CANN 0T BET ZERO DOLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM>D THEN GOSUB 1 080:PRINT "YOU DO NOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170
B2FØ:       1C       63       64       67       67       67       67       67       81         B2FØ:       1C       63       01       67       67       67       67       67       81         B3Ø8:       1C       63       63       1C       1C       1C       1C       10       90         B3Ø8:       1C       1C       1C       1C       1C       1C       10       90         B310:       44       13       1C       1C       1C       16       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90 <t< td=""><td>8580: 00 00 1C 20 3C 22 3C 00 24         8580: 02 02 1E 22 22 22 1E 00 01         85C0: 00 00 3C 02 02 02 3C 00 04         85C0: 00 00 1C 22 3E 02 3C 00 F3         85D8: 02 02 1E 22 22 22 3C 00 F3         85D8: 00 00 1C 22 3E 02 3C 00 F3         85D8: 00 00 1C 22 22 3C 20 1C EF         85E0: 00 00 1C 22 22 3C 20 1C EF         85E0: 00 00 1C 22 22 3C 20 1C EF         85E0: 00 00 1C 22 22 22 20 037         85F0: 08 00 0C 08 08 08 08 1C 00 37         85F8: 10 00 18 10 10 10 12 2C 01         8400: 02 02 22 12 0E 12 22 00 F0         8401: 00 00 16 22 22 22 22 00 F0         8401: 00 00 1C 22 22 22 20 00 F1         8400: 00 3C 22 22 12 0E 12 22 00 F4         8418: 00 00 1C 22 22 22 00 F4         8458: 00 00 1C 22 22 22 1C 00 A4         8458: 00 00 3C 02 1C 20 1E 00 72         8448: 00 00 3C 02 1C 20 1E 00 72         8449: 00 00 3C 02 1C 20 1E 00 72         8458: 00 00 22 22 22 32 2C 00 F5         8459: 00 00 22 14 08 14 22 00 F5         8459: 00 00 22 14 08 14 22 00 CF         8468: 00 00 22 14 08 14 22 00 CF         8468: 00 00 3E 10 08 04 08 08 08 08 75         8459: 08 08 88 08 08 08 08 98 75         8459: 08 08 88 08 08 08 08 98 75         8459: 08 08 2A 14 2A 14 2A 00 00 A2         8468: 00 2A 14 2A 14 2A 00 00 A2</td><td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;7 THEN 270 06 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 290 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:7" (9 SPACES)";:POSITION 13,15:7 AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="R" THEN RUN 86 330 GOTO 340 H6 340 AM=VAL(AM\$):AM=INT(10 0\$(AM\$-\$0E-03))/100 KL 350 IF AM\$="R" THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DOLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM&gt;DO THEN GOSUB 1 080:PRINT "YOU DO NOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170 GI 370 Z2=0:Z1=0:DE=0:D1=0:D</td></t<>	8580: 00 00 1C 20 3C 22 3C 00 24         8580: 02 02 1E 22 22 22 1E 00 01         85C0: 00 00 3C 02 02 02 3C 00 04         85C0: 00 00 1C 22 3E 02 3C 00 F3         85D8: 02 02 1E 22 22 22 3C 00 F3         85D8: 00 00 1C 22 3E 02 3C 00 F3         85D8: 00 00 1C 22 22 3C 20 1C EF         85E0: 00 00 1C 22 22 3C 20 1C EF         85E0: 00 00 1C 22 22 3C 20 1C EF         85E0: 00 00 1C 22 22 22 20 037         85F0: 08 00 0C 08 08 08 08 1C 00 37         85F8: 10 00 18 10 10 10 12 2C 01         8400: 02 02 22 12 0E 12 22 00 F0         8401: 00 00 16 22 22 22 22 00 F0         8401: 00 00 1C 22 22 22 20 00 F1         8400: 00 3C 22 22 12 0E 12 22 00 F4         8418: 00 00 1C 22 22 22 00 F4         8458: 00 00 1C 22 22 22 1C 00 A4         8458: 00 00 3C 02 1C 20 1E 00 72         8448: 00 00 3C 02 1C 20 1E 00 72         8449: 00 00 3C 02 1C 20 1E 00 72         8458: 00 00 22 22 22 32 2C 00 F5         8459: 00 00 22 14 08 14 22 00 F5         8459: 00 00 22 14 08 14 22 00 CF         8468: 00 00 22 14 08 14 22 00 CF         8468: 00 00 3E 10 08 04 08 08 08 08 75         8459: 08 08 88 08 08 08 08 98 75         8459: 08 08 88 08 08 08 08 98 75         8459: 08 08 2A 14 2A 14 2A 00 00 A2         8468: 00 2A 14 2A 14 2A 00 00 A2	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:7" (9 SPACES)";:POSITION 13,15:7 AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="R" THEN RUN 86 330 GOTO 340 H6 340 AM=VAL(AM\$):AM=INT(10 0\$(AM\$-\$0E-03))/100 KL 350 IF AM\$="R" THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DOLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM>DO THEN GOSUB 1 080:PRINT "YOU DO NOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170 GI 370 Z2=0:Z1=0:DE=0:D1=0:D
B2FØ:       1C       63       64       67       67       67       67       67         B3ØB:       1C       63       64       67       67       67       67       67       67         B3ØB:       1C       63       63       1C       1C       1C       10       90         B3ØB:       1C       63       63       1C       1C       1C       10       90         B308:       1C       1C       1C       1C       60       1C       1C       190         B310:       44       13       1C       1C       1C       60       12       17       90         B318:       1C       1C       10       00       02       77       17       85       22         B328:       13       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00<	65BØ: ØØ ØØ 1C 2Ø 3C 22 3C ØØ 24         85BB: Ø2 Ø2 1E 22 22 22 1E ØØ Ø1         85CØ: ØØ ØØ 3C Ø2 Ø2 Ø2 3C ØØ A7         85CØ: ØØ ØØ 1C 22 3E Ø2 3C ØØ F3         85D8: 18 24 Ø4 1E Ø4 Ø4 Ø4 ØØ 93         85EØ: ØØ ØØ 1C 22 22 3C 2Ø 1C EF         85EØ: ØØ ØØ 1C 22 22 22 20 00 F3         85EØ: ØØ ØØ 1C 22 22 22 20 01 C EF         85EØ: ØØ ØØ 1C 22 22 22 20 01 C EF         85EØ: ØØ ØØ 1C 22 22 22 20 00 FØ         85FØ: Ø8 ØØ ØC Ø8 Ø8 Ø8 1C ØØ 7A         85F8: 10 ØØ 18 1Ø 1Ø 1Ø 10 12 ØC Ø1         864Ø8: ØC Ø8 Ø8 Ø8 Ø8 1C ØØ 37         864Ø8: ØC Ø8 Ø8 Ø8 Ø8 1C ØØ 37         864Ø8: ØC Ø8 Ø8 Ø8 Ø8 1C ØØ 37         864Ø8: ØØ ØØ 1E 22 22 22 20 Ø E8         862Ø: ØØ ØØ 1E 22 22 22 20 Ø E8         86428: ØØ ØØ 3C 22 22 3C 20 Ø 49         863Ø: ØØ ØØ 3C Ø2 1C 20 1E ØØ 92         864Ø: ØØ ØØ 3C Ø2 1C 2Ø 1E ØØ 92         864Ø: ØØ ØØ 3C 22 22 22 32 2C ØØ F5         8648: ØØ ØØ 3C 22 22 22 32 2C ØØ F5         8658: ØØ ØØ 22 22 24 14 Ø8 Ø3 3D         8658: ØØ ØØ 22 22 24 14 Ø8 Ø3 3D         8658: ØØ ØØ 22 22 24 14 Ø8 14 22 ØØ CF         8678: ØØ ØØ 3E 19 Ø8 Ø8 Ø8 Ø8 Ø8 95         8648: Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8         868 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8         868 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8         86498: Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8         86	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<9 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:? " (9 SPACES)";:POSITION 13,15:? AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="R" THEN RUN BG 330 GOTO 340 HG 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM<0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DOLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM>DO THEN GOSUB 1 080:PRINT "YOU DO NOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170 GI 370 Z2=0:Z1=0:DE=0:D1=0:D 2=0:P=0:D3=0:CL=0:JK=
B2F0:       1C       63       64       67       67       67       67       67         B2F0:       1C       63       01       67       67       67       67       67       81         B300:       67       67       1F       1C       1C       10       00       02       7F       1F       85       26         8318:       1C       1C       1C       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00	85B0: 00 00 1C 20 3C 22 3C 00 24         85B1: 02 02 1E 22 22 22 1E 00 01         85C0: 00 00 3C 02 02 02 3C 00 04         85C0: 00 00 00 1C 22 3E 02 3C 00 64         85D0: 1B 24 04 1E 04 04 04 00 93         85E0: 02 02 1E 22 22 22 00 37         85E0: 00 00 1C 22 3E 02 3C 00 74         85E0: 00 00 1C 22 3C 20 1C EF         85E0: 00 00 1C 22 3C 20 1C EF         85E0: 00 00 1C 22 3C 20 1C EF         85E0: 00 00 1C 22 3C 20 00 74         85F8: 10 00 18 10 10 10 12 0C 01         8640: 00 00 1E 22 22 22 00 F0         8400: 00 00 1E 22 22 22 00 F0         8410: 00 00 1E 22 22 22 1C 00 A4         8428: 00 00 1E 22 22 22 1C 00 A4         8438: 00 00 3C 02 1C 20 1E 00 72         8448: 00 00 3C 02 1C 20 1E 00 72         8448: 00 00 3C 02 1C 20 1E 00 72         8448: 00 00 3C 02 1C 20 1E 00 72         8458: 00 00 3C 02 1C 20 1E 00 72         8458: 00 00 3C 02 1C 20 1E 00 72         8458: 00 00 3C 02 1C 20 1E 00 72         8458: 00 00 22 22 22 3C 20 00 75         8458: 00 00 3C 02 1C 20 1E 00 72         8458: 00 00 3E 10 08 84 80 80 81         8459: 00 00 22 22 22 3C 20 00 75         8458: 00 00 3E 10 08 84 3E 00 1B         8468: 00 00 3E 10 08 84 3E 00 1B         8468: 00 00 3E 10 08 84 3E 00 1B         8468: 00 00 3E 10 08 84	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (7 SPACES)";:POSITION 13,15:? AM\$ 6A 300 GOTO 220 BA 310 IF AM\$="C" THEN POKE 752,0:END MN 320 IF AM\$="C" THEN RUN 86 330 GOTO 340 HG 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM<0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DOLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM>DO THEN GOSUB 1 080:PRINT "YOU DO NOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170 EI 370 Z2=0:Z1=0:DE=0:D1=0:D 2=0:P=0:D3=0:CL=0:JK= 0:HI=0:BU=0:SD=0:DD=0
B2FØ:       1C       63       64       67       67       67       67       67       67       68         B3Ø0:       67       67       67       67       67       67       67       67       68         B3Ø0:       1C       63       63       1C       1C       1C       1C       10       BD         B3Ø0:       1C       1C       1C       1C       1C       1C       10       BD         B310:       44       13       1C       1C       1C       10       90       92       7F       1F       85       24         B310:       14       93       97       93       93       13       94       92       71         B328:       14       93       97       93       93       13       94       92       71         B338:       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90 </td <td>B5B0: 00 00 1C 20 3C 22 3C 00 24         B5B1: 02 02 1E 22 22 22 1E 00 01         B5C0: 00 00 3C 02 02 02 3C 00 04         B5C0: 00 00 3C 02 02 3C 00 04         B5C0: 00 00 3C 02 02 3C 00 04         B5D8: 1B 24 04 1E 04 04 04 00 93         B5E0: 00 00 1C 22 3E 02 3C 00 F3         B5E0: 00 00 1C 22 22 3C 20 1C EF         B5E0: 00 00 1C 22 22 22 22 00 37         B5F0: 08 00 C 08 08 08 08 1C 00 37         B5F8: 10 00 18 10 10 10 12 0C 01         B400: 02 02 22 12 06 12 22 00 60         B408: 0C 08 08 08 08 08 1C 00 37         B618: 00 00 1E 22 22 22 22 00 E8         B620: 00 00 1C 22 22 22 22 00 E8         B620: 00 00 1C 22 22 22 1C 00 A4         B618: 00 00 1E 22 22 22 22 00 E8         B620: 00 00 3C 02 1C 20 1E 00 92         B648: 00 00 3C 02 1C 20 1E 00 92         B648: 00 00 3C 02 1C 20 1E 00 92         B648: 00 00 3C 02 1C 20 1E 00 92         B648: 00 00 22 22 22 32 2C 00 F5         B658: 00 00 22 22 22 32 2C 00 F5         B658: 00 00 22 14 08 14 22 00 CF         B649: 00 00 3E 10 08 04 3E 00 3D         B640: 00 00 22 14 08 14 22 00 CF         B640: 00 00 22 14 08 04 3E 09 3B         B640: 00 00 22 14 08 04 3E 00 3D         B640: 00 00 22 14 08 04 3E 08 08 89         B640: 00 00 22 14 08 04 89         B640: 00 00</td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;7 THEN 270 06 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 270 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;7 THEN AM \$(LEN(AM\$)&lt;7 THEN 220 MA 280 IF LEN(AM\$)&lt;7 THEN AM \$(LEN(AM\$)&lt;7) THEN 220 MA 280 IF LEN(AM\$)&lt;7 THEN AM \$(LEN(AM\$)&lt;7) THEN AM \$(LEN(AM\$)&lt;7) THEN AM \$(LEN(AM\$)&lt;7) THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 270 POSITION 13,15:7" (7 SPACES)";:POSITION 13,15:7 AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="R" THEN RUN GG 330 GOTO 340 HE 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM&lt;0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DOLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM&gt;D THEN GOSUB 1 080:PRINT "YOU DO NOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170 BI 370 Z2=0:Z1=0:DE=0:D1=0:D 2=0:P=0:D3=0:CL=0:JK= 0:HI=0:BU=0:SD=0:D=0</td>	B5B0: 00 00 1C 20 3C 22 3C 00 24         B5B1: 02 02 1E 22 22 22 1E 00 01         B5C0: 00 00 3C 02 02 02 3C 00 04         B5C0: 00 00 3C 02 02 3C 00 04         B5C0: 00 00 3C 02 02 3C 00 04         B5D8: 1B 24 04 1E 04 04 04 00 93         B5E0: 00 00 1C 22 3E 02 3C 00 F3         B5E0: 00 00 1C 22 22 3C 20 1C EF         B5E0: 00 00 1C 22 22 22 22 00 37         B5F0: 08 00 C 08 08 08 08 1C 00 37         B5F8: 10 00 18 10 10 10 12 0C 01         B400: 02 02 22 12 06 12 22 00 60         B408: 0C 08 08 08 08 08 1C 00 37         B618: 00 00 1E 22 22 22 22 00 E8         B620: 00 00 1C 22 22 22 22 00 E8         B620: 00 00 1C 22 22 22 1C 00 A4         B618: 00 00 1E 22 22 22 22 00 E8         B620: 00 00 3C 02 1C 20 1E 00 92         B648: 00 00 3C 02 1C 20 1E 00 92         B648: 00 00 3C 02 1C 20 1E 00 92         B648: 00 00 3C 02 1C 20 1E 00 92         B648: 00 00 22 22 22 32 2C 00 F5         B658: 00 00 22 22 22 32 2C 00 F5         B658: 00 00 22 14 08 14 22 00 CF         B649: 00 00 3E 10 08 04 3E 00 3D         B640: 00 00 22 14 08 14 22 00 CF         B640: 00 00 22 14 08 04 3E 09 3B         B640: 00 00 22 14 08 04 3E 00 3D         B640: 00 00 22 14 08 04 3E 08 08 89         B640: 00 00 22 14 08 04 89         B640: 00 00	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 270 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<7 THEN AM \$(LEN(AM\$)<7 THEN 220 MA 280 IF LEN(AM\$)<7 THEN AM \$(LEN(AM\$)<7) THEN 220 MA 280 IF LEN(AM\$)<7 THEN AM \$(LEN(AM\$)<7) THEN AM \$(LEN(AM\$)<7) THEN AM \$(LEN(AM\$)<7) THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 270 POSITION 13,15:7" (7 SPACES)";:POSITION 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B2FØ:       1C       63       64       67       67       67       67       67       67       68         B3ØB:       1C       63       63       1C       1C       1C       16       7       67       67       67       68         B3ØB:       1C       63       63       1C       1C       1C       10       10       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90	B5BØ: ØØ ØØ 1C 2Ø 3C 22 3C ØØ 24         B5BB: Ø2 Ø2 1E 22 22 22 1E ØØ Ø1         B5CØ: ØØ ØØ 3C 02 Ø2 Ø2 3C ØØ A7         B5DØ: ØØ ØØ 1C 22 3E Ø2 3C ØØ A7         B5DØ: ØØ ØØ 1C 22 3E Ø2 3C ØØ A7         B5DØ: ØØ ØØ 1C 22 3E Ø2 3C ØØ A7         B5DØ: ØØ ØØ 1C 22 3E Ø2 3C ØØ A7         B5DØ: ØØ ØØ 1C 22 3E Ø2 3C ØØ F3         B5EØ: ØØ ØØ 1C 22 22 22 20 00 39         B5FØ: ØB ØØ ØC ØB ØB ØB 08 1C ØØ 7A         B69Ø: Ø2 Ø2 22 12 ØE 12 22 ØØ FØ         B64ØE: ØC ØB ØB ØB ØB 08 1C ØØ 37         B64ØE: ØC ØB ØB ØB ØB ØB 1C ØØ 37         B64ØE: ØØ ØØ 1E 22 22 22 20 Ø E8         B64ØE: ØØ ØØ 1E 22 22 22 20 Ø E8         B64ØE: ØØ ØØ 1C 22 22 22 1C ØØ A4         B648: ØØ ØØ 3C 02 1C 20 1E ØØ 72         B648: ØØ ØØ 3C 02 1C 20 1E ØØ 72         B648: ØØ ØØ 3C 02 1C 20 1E ØØ 72         B648: ØØ ØØ 3C 22 22 22 32 CØ ØF5         B648: ØØ ØØ 3C 22 22 22 32 CØ ØF5         B648: ØØ ØØ 3C 22 22 22 32 CØ ØF5         B648: ØØ ØØ 32 22 22 22 32 CØ F5         B648: ØØ ØØ 32 22 22 22 32 CØ F5         B648: ØØ ØØ 32 22 22 22 36 CØ 1C 42         B6478: ØØ ØØ 32 1Ø ØB Ø4 3E ØØ 1B         B6488: ØØ ØØ 32 19 ØB Ø4 3E ØØ 1B         B6489: ØØ ØØ 3E 1Ø ØB ØB ØB ØB ØB ØB ØB         B6489: ØØ ØA 2A 14 2A 14 2A ØØ ØØ A4         B6499: ØE 2A 14 2A 14 2A 14 2A ØØ ØØ A4	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<9 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (9 SPACES)";:POSITION 13,15:? AM\$ GA 300 GOTO 220 BA 310 IF AM\$="C" THEN POKE 752,0:END MN 320 IF AM\$="C" THEN RUN G6 330 GOTO 340 H6 340 AM=VAL(AM\$):AM=INT(10 Ø\$(AM+5.ØE-Ø3))/100 KL 350 IF AM\$
B2FØ:       1C       63       64       67       67       67       67       67       68         B3ØB:       1C       63       64       67       67       67       67       67       68         B3ØB:       1C       63       63       1C       1C       1C       1C       10       10         B3ØB:       1C       63       63       1C       1C       1C       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10	85B0: 00 00 1C 20 3C 22 3C 00 24         85B1: 02 02 1E 22 22 22 1E 00 01         85C0: 00 00 3C 02 02 02 3C 00 04         85C0: 00 00 1C 22 3E 02 3C 00 64         85C0: 00 00 1C 22 3E 02 3C 00 F3         85D0: 18 24 04 1E 04 04 04 00 93         85E0: 00 00 1C 22 22 22 22 00 37         85E0: 00 00 1C 22 22 3C 00 F3         85E0: 00 00 1C 22 22 3C 00 F3         85E0: 02 02 1E 22 22 22 20 037         85F0: 08 00 0C 08 08 08 08 1C 00 37         85F8: 10 00 18 10 10 10 12 0C 01         8640: 00 00 1E 22 22 22 22 00 F0         8410: 00 00 1E 22 22 22 22 00 E8         8640: 00 00 1E 22 22 3C 00 P7         8640: 00 00 1C 22 22 3C 00 P7         8640: 00 00 1E 22 22 3C 00 P7         8640: 00 00 3C 02 1C 20 1E 00 72         8640: 00 00 3C 02 1C 20 1E 00 72         8640: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 22 22 22 32 C 00 F5         8658: 00 00 22 14 08 14 22 00 CF         8648: 00 00 3E 10 08 04 3E 00 1B         8648: 00 00 3E 10 08 04 3E 00 1B         8648: 00 00 3E 10 08 04 3E 00 1B         8648: 00 00 3E 10 08 04 3E 00 1B         8648: 00 00 3E 10 08 04 3E 00 1B         8648: 00 00 3E 10 08 04 08 08 89 95         8649: 00 3A 14 2A 14 2A 00 00 44         8649: 00 2A 14 2A	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (9 SPACES)";:POSITION 13,15:? AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END MN 320 IF AM\$="R" THEN RUN 86 330 GOTO 340 HG 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM\$0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DOLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM>DO THEN GOSUB 1 080:PRINT "YOU DO NOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170 GI 370 Z2=0:Z1=0:DE=0:D1=0:D 2=0:P=0:D3=0:CL=0:JK= 0:SP=0:QQ=0:PF=0 KE 380 S1=0:QP=0:SP=0:B1=0:D
B2FØ:       1C       63       64       67       67       67       67       67       68         B3ØB:       1C       63       61       67       67       67       67       67       68         B3ØB:       1C       63       63       1C       1C       1C       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10 <td>65BØ: ØØ ØØ 1C 2Ø 3C 22 3C ØØ 24         85DB: Ø2 Ø2 1E 22 22 22 1E ØØ Ø1         85CØ: ØØ ØØ 3C Ø2 Ø2 Ø2 3C ØØ Ø4         85CØ: ØØ ØØ 1C 22 3E Ø2 3C ØØ F3         85DØ: ØØ ØØ 1C 22 3E Ø2 3C ØØ F3         85D8: 18 24 Ø4 1E Ø4 Ø4 Ø4 ØØ 93         85EØ: ØØ ØØ 1C 22 22 3C 2Ø 1C EF         85EØ: ØØ ØØ 1C 22 22 3C 2Ø 1C EF         85EØ: ØØ ØØ 1C 22 22 22 20 Ø 37         85FØ: Ø8 ØØ ØC Ø8 Ø8 Ø8 1C ØØ 7A         85FØ: Ø8 ØØ ØC Ø8 Ø8 Ø8 1C ØØ 7A         85F8: 10 ØØ 18 1Ø 1Ø 1Ø 10 12 ØC Ø1         864Ø: ØC Ø8 Ø8 Ø8 Ø8 1C ØØ 37         864Ø: ØC Ø8 Ø8 Ø8 Ø8 1C ØØ 37         864Ø: ØØ ØØ 1E 22 22 22 20 Ø E8         862Ø: ØØ ØØ 1C 22 22 22 1C ØØ F4         8618: ØØ ØØ 1E 22 22 1E Ø2 Ø2 A4         863Ø: ØØ ØØ 3C Ø2 1C 2Ø 1E ØØ 92         8648: ØØ ØØ 3C Ø2 1C 2Ø 1E ØØ 92         8648: ØØ ØØ 3C Ø2 22 22 32 2C ØØ F5         8658: ØØ ØØ 22 22 22 32 2C ØØ F5         8658: ØØ ØØ 22 22 22 32 2C ØØ F5         8658: ØØ ØØ 22 22 22 14 Ø8 Ø4 3D         8648: ØØ ØØ 22 22 22 14 Ø8 Ø4 3D         8648: ØØ ØØ 22 22 22 14 Ø8 Ø8 3D         8648: ØØ ØØ 22 22 22 22 14 Ø8 Ø4 3E         8648: ØØ ØØ 22 22 22 22 14 Ø8 Ø4 3E         8648: ØØ ØØ 22 22 22 3C 20 1C 42         8648: Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8         8648: Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8 Ø8         8</td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;9 THEN 270 06 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 270 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:? 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B2FØ:       1C       63       64       67       67       67       67       67       67       67       67       68         B3ØB:       1C       63       63       1C       1C       1C       1F       1C       10       10       00       02       7F       1F       85       26         8318:       1C       1C       1C       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00 <td>8580: 00 00 1C 20 3C 22 3C 00 24         8580: 02 02 1E 22 22 22 1E 00 01         85C0: 00 00 3C 02 02 02 3C 00 04         85C0: 00 00 00 1C 22 3E 02 3C 00 04         85D0: 18 24 04 1E 04 04 04 00 93         85E0: 02 02 1E 22 22 22 00 1C EF         85E0: 00 00 1C 22 3E 02 3C 00 9A         85E0: 00 00 1C 22 3C 20 1C EF         85E0: 00 00 1C 22 3C 20 1C EF         85E0: 02 02 1E 22 22 22 20 00 9A         85F0: 08 00 0C 08 08 08 01 10 12 0C 01         8600: 02 02 22 12 06 12 22 00 F0         8400: 00 00 1E 22 22 22 00 F0         8410: 00 00 1E 22 22 21 00 24 AA         8420: 00 00 1E 22 22 22 1C 00 8P         8430: 00 00 3C 02 1C 20 1E 00 92         8448: 04 04 1E 04 04 44 80 3D         8458: 00 00 3C 02 1C 20 1E 00 92         8448: 04 04 1E 04 04 24 18 00 3D         8458: 00 00 3C 02 1C 20 1E 00 92         8448: 04 04 1E 04 04 24 18 00 3D         8458: 00 00 22 22 22 3C 20 00 97         8448: 04 00 22 22 22 3C 20 1C 42         8458: 00 00 3E 10 08 04 3C 02 40 00 3D         8468: 00 00 22 22 22 22 3C 20 1C 42         8478: 00 00 3E 10 08 04 3E 00 1B         8468: 00 00 22 14 08 14 22 00 F5         8479: 00 03 E 10 08 04 3E 00 1B         8480: 38 0C 0C 64 0C 0C 38 00 8F         8498: 08 08 08 08 08 08 95         8498:</td> <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;&gt;7 THEN 270 06 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 290 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (7 SPACES)";:POSITION 13,15:? AM\$ 6A 300 GOTO 220 BA 310 IF AM\$="R" THEN POKE 752,0:END MN 320 IF AM\$="R" THEN RUN 86 330 GOTO 340 H6 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM&lt;0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DDLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM&lt;0.01 THEN GOSUB 1 080:PRINT "YOU DO NOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170 EI 370 Z2=0:Z1=0:DE=0:D1=0:D 2=0:P=0:D3=0:CL=0:JK= 0:HI=0:BU=0:SD=0:D1=0:D 2=0:P=0:D3=0:CL=0:JK= 0:HI=0:Q=0:PL(0)=0:PL(1)=0:PL(1) =0:PL(2)=0:PL(3)=0:PL</td>	8580: 00 00 1C 20 3C 22 3C 00 24         8580: 02 02 1E 22 22 22 1E 00 01         85C0: 00 00 3C 02 02 02 3C 00 04         85C0: 00 00 00 1C 22 3E 02 3C 00 04         85D0: 18 24 04 1E 04 04 04 00 93         85E0: 02 02 1E 22 22 22 00 1C EF         85E0: 00 00 1C 22 3E 02 3C 00 9A         85E0: 00 00 1C 22 3C 20 1C EF         85E0: 00 00 1C 22 3C 20 1C EF         85E0: 02 02 1E 22 22 22 20 00 9A         85F0: 08 00 0C 08 08 08 01 10 12 0C 01         8600: 02 02 22 12 06 12 22 00 F0         8400: 00 00 1E 22 22 22 00 F0         8410: 00 00 1E 22 22 21 00 24 AA         8420: 00 00 1E 22 22 22 1C 00 8P         8430: 00 00 3C 02 1C 20 1E 00 92         8448: 04 04 1E 04 04 44 80 3D         8458: 00 00 3C 02 1C 20 1E 00 92         8448: 04 04 1E 04 04 24 18 00 3D         8458: 00 00 3C 02 1C 20 1E 00 92         8448: 04 04 1E 04 04 24 18 00 3D         8458: 00 00 22 22 22 3C 20 00 97         8448: 04 00 22 22 22 3C 20 1C 42         8458: 00 00 3E 10 08 04 3C 02 40 00 3D         8468: 00 00 22 22 22 22 3C 20 1C 42         8478: 00 00 3E 10 08 04 3E 00 1B         8468: 00 00 22 14 08 14 22 00 F5         8479: 00 03 E 10 08 04 3E 00 1B         8480: 38 0C 0C 64 0C 0C 38 00 8F         8498: 08 08 08 08 08 08 95         8498:	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (7 SPACES)";:POSITION 13,15:? AM\$ 6A 300 GOTO 220 BA 310 IF AM\$="R" THEN POKE 752,0:END MN 320 IF AM\$="R" THEN RUN 86 330 GOTO 340 H6 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM<0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DDLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM<0.01 THEN GOSUB 1 080:PRINT "YOU DO NOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170 EI 370 Z2=0:Z1=0:DE=0:D1=0:D 2=0:P=0:D3=0:CL=0:JK= 0:HI=0:BU=0:SD=0:D1=0:D 2=0:P=0:D3=0:CL=0:JK= 0:HI=0:Q=0:PL(0)=0:PL(1)=0:PL(1) =0:PL(2)=0:PL(3)=0:PL
B2FØ:       1C       63       64       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67       67	8580: 00 00 1C 20 3C 22 3C 00 24         8580: 02 02 1E 22 22 22 1E 00 01         85C0: 00 00 3C 02 02 02 3C 00 04         85C0: 00 00 1C 22 3E 02 3C 00 64         85C0: 00 00 1C 22 3E 02 3C 00 673         85D8: 18 24 04 1E 04 04 04 00 93         85E0: 00 00 1C 22 22 3C 20 1C EF         85E0: 00 00 1C 22 22 3C 20 1C EF         85E0: 00 00 1C 22 22 22 20 039         85F0: 08 00 0C 08 08 08 08 1C 00 37         85F8: 10 00 18 10 10 10 12 0C 01         86408: 0C 08 08 08 08 08 1C 00 37         86408: 0C 08 08 08 08 08 1C 00 37         86408: 00 00 1C 22 22 22 22 00 C4         86418: 00 00 12 22 22 12 02 02 00 09         86428: 00 00 12 22 22 12 02 02 00 09         86438: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 22 22 22 32 2C 00 F5         8659: 00 00 22 14 08 14 22 00 CF         8649: 00 03 22 02 22 22 23 20 1C 42         8648: 00 00 3E 10 08 44 3E 00 1B         8648: 08 08 08 08 08 08 08 95         8648: 08 08 08 08 08 08 08 95         8649: 00 03 21 4 20 08 04 3E 00 1B         86480: 08 08 08 08 08 08 98         <	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<>7 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<7 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:7" (9 SPACES)";:POSITION 13,15:7 AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END NN 320 IF AM\$="R" THEN RUN 86 330 GOTO 340 H6 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM\$0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DOLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM>DO THEN GOSUB 1 080:PRINT "YOU DO NOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170 GI 370 Z2=0:Z1=0:DE=0:D1=0:D 2=0:P=0:D3=0:CL=0:JK= 0:SP=0:QQ=0:PF=0 KE 380 S1=0:QP=0:SP=0:B1=0:O 1=0:O2=0:PL(0)=0:PL(1) =0:PL(2)=0:PL(3)=0:P
B2FØ:       1C       63       64       67       67       67       67       67         B3ØB:       1C       63       61       67       67       67       67       67       68         B3ØB:       1C       63       63       1C       1C       1C       1C       10       90         B3ØB:       1C       63       63       1C       1C       10       10       90         B310:       44       13       1C       1C       1C       60       1C       1C       F7         B318:       1C       1C       10       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90       90	85B0: 00 00 1C 20 3C 22 3C 00 04         85D8: 02 02 1E 22 22 22 1E 00 01         85C0: 00 00 3C 02 02 02 3C 00 04         85C0: 00 00 00 1C 22 3E 02 3C 00 04         85D0: 00 00 01 C 22 3E 02 3C 00 07         85D0: 00 00 1C 22 3E 02 3C 00 73         85E0: 00 00 1C 22 3E 02 3C 00 74         85E0: 02 02 1E 22 22 22 3C 00 74         85E0: 00 00 1C 22 3E 02 3C 00 74         85E0: 02 02 1E 22 22 3C 00 74         85E0: 02 02 1E 22 22 3C 00 74         8600: 02 02 22 12 0E 12 22 00 70         8640: 00 00 1E 22 22 22 00 74         8640: 00 00 1E 22 22 22 00 64         86410: 00 00 1E 22 22 22 1C 00 A4         8628: 00 00 1E 22 22 22 3C 00 07         8648: 00 00 1E 22 22 22 3C 00 07         8648: 00 00 3C 02 1C 20 1E 00 22 AA         8638: 00 00 3A 06 02 02 02 00 07         8649: 00 00 3C 02 1C 20 1E 00 72         8648: 00 00 22 22 22 3C 20 00 75         8648: 00 00 22 22 22 3C 20 00 75         8648: 00 00 22 22 22 3C 20 00 75         8648: 00 00 22 22 22 3C 20 00 75         8648: 00 00 22 22 22 3C 20 1C 42         8648: 00 00 22 14 48 04 31         8648: 00 00 22 12 22 22 3C 20 1C 42         8648: 00 00 3E 10 08 04 3E 00 1B         8648: 00 00 3E 10 08 04 3E 00 1B         8648: 08 08 88 08 95         8648: 08 08 88 08 95 <td>EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)&lt;9 THEN 270 06 250 IF LEN(AM\$)&lt;2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)&lt;&gt;10 THEN 220 MA 280 IF LEN(AM\$)&lt;9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (9 SPACES)";:POSITION 13,15:? AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END MN 320 IF AM\$="Q" THEN POKE 752,0:END MN 320 IF AM\$="R" THEN RUN GG 330 GOTO 340 HG 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM&lt;0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DOLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM&gt;DO THEN GOSUB 1 080:PRINT "YOU DO NOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170 GI 370 Z2=0:Z1=0:DE=0:D1=0:D 2=0:P=0:D3=0:CL=0:JK= 0:HI=0:BU=0:SD=0:DD=0 :SP=0:QP=0:SP=0:B1=0:O 1=0:D2=0:PL(0)=0:PL(1) =0:PL(2)=0:PL(3)=0:P L(4)=0:SE=0</td>	EL 210 PRINT "PLACE BET (14 SPACES)":POSITION 15,15 AA 220 GET #1,A:IF C(A)=8 TH EN AM\$=CHR\$(A):GOTO 3 10 AD 230 IF A=155 THEN 340 HF 240 IF C(A)<9 THEN 270 06 250 IF LEN(AM\$)<2 THEN AM \$="":GOTO 290 DF 260 AM\$=AM\$(1,LEN(AM\$)-1) :GOTO 290 JL 270 IF C(A)<>10 THEN 220 MA 280 IF LEN(AM\$)<9 THEN AM \$(LEN(AM\$)+1)=CHR\$(A) MO 290 POSITION 13,15:?" (9 SPACES)";:POSITION 13,15:? AM\$ GA 300 GOTO 220 BA 310 IF AM\$="Q" THEN POKE 752,0:END MN 320 IF AM\$="Q" THEN POKE 752,0:END MN 320 IF AM\$="R" THEN RUN GG 330 GOTO 340 HG 340 AM=VAL(AM\$):AM=INT(10 0\$(AM+5.0E-03))/100 KL 350 IF AM<0.01 THEN GOSUB 1080:PRINT "YOU CANN OT BET ZERO DOLLARS": GOSUB 1150:GOTO 170 CB 360 IF AM>DO THEN GOSUB 1 080:PRINT "YOU DO NOT HAVE THAT MUCH MONEY ":GOSUB 1150:GOTO 170 GI 370 Z2=0:Z1=0:DE=0:D1=0:D 2=0:P=0:D3=0:CL=0:JK= 0:HI=0:BU=0:SD=0:DD=0 :SP=0:QP=0:SP=0:B1=0:O 1=0:D2=0:PL(0)=0:PL(1) =0:PL(2)=0:PL(3)=0:P L(4)=0:SE=0

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00 390	PG(Ø)=AM:D=Ø:PR=Ø:D1= DD-AM:O2=O1:PRINT CHR \$(125):V=1:H=2:Z2=DE:
11 4 9 9	Z1=D 60511B 990: DE=72: D=71:
	D1=A:D2=A1:V=7:H=2:G0
LE 410	H=6:V=1:GOSUB 1070:D3
	=A:H=6:V=7:GOSUB 1060 :P3=A
HH 42Ø	FOR I=1 TO 3: POSITION
	(16Ø); CHR\$(16Ø): NEXT
H0 43Ø	IF P1=12 AND P3<12 AN
	D P3>7 OR P3=12 AND P 1<12 AND P1>7 THEN 13
	4Ø
UN 4410	EN IN=0:GOTO 150
H0 45Ø	GOSUB 1080: PRINT " H HIT S STAND P SPLIT
	":? "D DOUBLE E SURR
NI 460	GET #1, OP: JK=C(OP)
JU 476	460
LE 48Ø	ON JK GOTO 490,600,61 0,700,750
PD 490	HI=1: GOSUB 580
	UB 1060:DD=2:SD=1:GOS
BH 51Ø	IF SD=1 THEN SD=0:H=6
CC 52Ø	:V=V+3:HI=0:GOTO 540 IF B1=1 THEN B1=0:GOT
12 530	0 450 H=H+4.605UB 1060.605U
CA E A G	B 580:B1=1:GOTO 500
ER 3410	S1=S1+1:QP=QP-1:P=Ø:G
60 55Ø	OTO 560 GOTO 830
6K 56Ø	IF J(S1)=1 THEN J(S1) =0:P=1
A6 57Ø	GOSUB 1060:B1=1:GOTO
ON 58Ø	IF BU=1 THEN POSITION
	=1:DD=2:BU=Ø:HI=Ø
HO 590 MA 600	RETURN POSITION 33, V: PRINT "
10 610	STAND": SD=1: GOTO 510
	80:GOSUB 680:GOSUB 11
EH 62Ø	IF A<>P1 THEN GOSUB 1
	080: PRINT "CARDS MUST BE SAME DENOMINATION
	":? "TO SPLIT":GOSUB 1150:GOTO 450
CN 63Ø	IF D1-AMKØ THEN GOSUB
	1150:GOTO 450
UE 6410	Q+1:QP=QP+1:PL(S1+QP)
	=B:PG(S1+QP)=AM:PL(S1)=B
80 65Ø	QV=V:PF=1 IF P>0 THEN P=1:J(S1+
N 1 7 4	QP)=1
11 6710	#=2:V=7+QQ#3:GDSUB 11 ØØ:V=QV:H=6:GDSUB 106
IA 68Ø	Ø:GOTO 450 PRINT "YOU MAY SPLIT
	WHEN FIRST TWO CARDS"
	YOU HAVE NOT HIT":RET
BN 69Ø	PRINT "NOT ENOUGH MON
	EY FOR THE SPLIT": RET URN
H0 700	IF HI=1 THEN GOSUB 10 80:GOSUB 730:GOSUB 11

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HH	7	1 9	3	518	ØFØ				) T ) =	1	B	4	5 H 7	ØE4	10	1	G		S	U	BB		11	Ø		BI		1
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AC	7:	32	9	,GPR	VOREN	TIN	POND	ITE	R	NØ -	TØYS		UN N	S		A	RNY	ENO	N	D T	A	RSL	UR	RE		AL		1
DJ	7.	40	9	APR	DNREL	DIND	" ND	I ITE	RR	E	TYS	HUOII	RUN	N	CEN	A	N N N	NO		тт	D	S SOT	UUU	RB		66	1	1
IC	7:	50	3	HIB	AFØ	N :	HG	1	-	1	B	Т	H	E 1	NØ		G	0	SS	U U	BB	1	1 1	Ø 1		H	1	1
AC	70	50	5	51-0	Ø F 1 7	: 0	GP :		Ø	T	TO	4 1	5 E 7	ØN8	ø	A	z	-	P	L	(	s	1	)		Lr		-
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PH	81	e	,	MPA	RDD	GIYC	ON T	THH	I	" T	55	Ø	ØRN	R	Y	н	YI	os	U	н	AA	LN	RD	E "		KB		1
FK	82	20	,	PE	RRY	I	NT	TO	R	D N	NO	D	ТВ	L	E	N		U	GW	HN		M	0 R	NE		5A JL		1
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PC	84	ø	,	I	FTC	0	D	E 3	= :	2 P 0	1	( 7	TS	HG	E)	- N =	ø	F		RE	x	I	=	ØI		KA		11
HG	85	īØ	,	I	FH	E	SN	1	< 9	10	ø	A	N	D		P	L	(	ø	)	>	2	1			HC		1 :
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CM GA	87	g g g		H	F	н	D + 7	E 4	>:	1	6	s	TU	HB	E	N 1	ø	87	9 Ø	ø:	G	0	т	0		MA		1 :
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BB 1020 IF B=11 THEN Z1=Z1+1 Ø3Ø Z2=Z2+B: IF Z2>21 AND Z1>Ø THEN Z2=Z2-1Ø: Z1 = Z1 - 1040 IF Z2>21 THEN BU=1 Ø5Ø RETURN 060 Z2=PL(S1):Z1=P:GOSUB 990:PL(S1)=Z2:P=Z1: GOSUB 1100: RETURN 070 Z2=DE:Z1=D:GOSUB 990 :DE=Z2:D=Z1:GOSUB 11 ØØ: RETURN Ø8Ø CL=19:FOR ZZ=CL TO 2 2:POSITION Ø,ZZ Ø9Ø PRINT "{39 SPACES}":N EXT ZZ: POSITION Ø, CL : RETURN 100 POSITION H, V:? " ": POSITION H, V+1:? " ":POSITION H, V:? R\$( A+1, A+1); CHR\$ (160); C HR\$(16Ø) 110 POSITION H, V+1:? CHR \$(160); S\$(A1, A1); CHR \$ (160) 120 POSITION H, V+2:? CHR \$(16Ø);CHR\$(16Ø);R\$( A+1, A+1) 130 REM PLACE CARD IN SP OT 14Ø RETURN 150 POSITION 13,22:PRINT "PRESS ANY KEY"; 160 POKE 764,255 170 A=RND(1): IF PEEK(764 )<>255 THEN 1080 18Ø GOTO 117Ø 19Ø IF D3<>12 THEN RETUR 200 GOSUB 1080:PRINT "WA NT INSURANCE Y N" 210 GET #1, Y: YA=C(Y) 220 IF YA=6 THEN 1250 230 IF YA=7 THEN RETURN 24Ø GOTO 121Ø 250 IF 02-AM/2<0 THEN GO SUB 1080:GOSUB 1310: GOSUB 1150:RETURN 260 IN=AM/2:02=02-AM/2:D D=DO-IN: IN=Ø 270 IF DE<>21 THEN GOSUB 1320: IN=0: GOTO 1300 28Ø A=D1:A1=D2:V=1:H=2:G OSUB 1100:GOSUB 1080 290 PRINT "DEALER HAS BL ACKJACK YOU LOSE YOU R": ? "INSURANCE MONE Y AND SAVE BET. ": GOS UB 1150: IN=1 300 RETURN 310 PRINT "YOU DO NOT HA VE ENOUGH MONEY TO I NSURE":? "YOUR BET." :RETURN 320 GOSUB 1080:PRINT "DE ALER DID NOT GET BLA CKJACK YOU LOSE"; 330 PRINT "INSURANCE MON EY AND HAND CONTINUE S": GOSUB 1150: RETURN 340 POSITION 30, V: PRINT "BLACKJACK": PG(S1)=1 .5*AM: BJ=1: GOTO 830 350 POSITION 1,15:PRINT "YOU ARE OUT OF MONE V" 360 PRINT "WISH TO PLAY AGAIN (Y/N)?" 570 GET #1, Y: YA=C(Y) 380 IF YA=6 THEN 130 390 IF YA=7 THEN POKE 75 2,Ø:END ØØ GOTO 137Ø

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#### Program 6: PC/PCjr And Compatible Casino Blackjack

Version by George Miller, Editorial Programmer

- HE 10 ' COPYRIGHT (C) 1988 COMPU TE! PUBLICATIONS, INC.
- FC 20 ALL RIGHTS R
- 0K 30 KEY OFF:DEF SEG=0:DEFINT A -Z:DEFDBL B:POKE 1047,PEEK (1047) OR 64:RANDOMIZE TIM ER:SP\$=SPACE\$(40)
- DK 4Ø DIM CD\$(52),V\$(13),M(52) IA 5Ø SCREEN Ø,1:WIDTH 4Ø:COLOR
- 2,2:CLS:GOSUB 390:CLS:HA=1 N0 60 SP=0:DT1=0:DT2=0:PT1=0:PT2
- N 7Ø IF A\$="Y" THEN GOTO 5Ø ELS E IF A\$="N" GOTO 96Ø ELSE GOTO 7Ø
- EA 80 H=0:GOSUB 230:COLOR 0,2:LO CATE 3,13:PRINT"Playing Ha nd #";:PRINT HA
- LM 100 LOCATE 10,14:COLOR 4,7:PR INT" Q ":LOCATE 12,14:PRI NT" R ":COLOR 15,2:LOCATE 10,18:PRINT"Quit":LOCATE 12,18:PRINT"Restart game ":LOCATE 15,10:INPUT"Your bet, please";BET\$
- 68 110 IF BET\$="R" THEN GOTO 50 ELSE IF BET\$="Q" GOTO 760
- FC 12Ø BET=VAL(BET\$):IF BET=Ø TH EN COLOR 4:LOCATE 17,11:P RINT"Please bet again.":G OSUB 420:GOTO 60
- PM 130 IF BET>BA THEN LOCATE 17, 7:COLOR 4:PRINT"You only have \$";BA;" remaining.": LOCATE 18,12:PRINT"Please bet again.":GOSUB 420:GO TO 60
- 0 140 GOSUB 360:CLS:LOCATE 25,1 :COLOR 15,0:PRINT" it t and S lit ouble down Su rr nder ";
- JE 150 COLOR 4,0:LOCATE 25,2:PRI NT"H";:LOCATE 25,6:PRINT" S";:LOCATE 25,13:PRINT"p" ;:LOCATE 25,18:PRINT"D";: LOCATE 25,35:PRINT"e";:GO SUB 230:GOSUB 430
- CA 160 IF H=1 THEN GOSUB 420:601 0 60
- 04 170 GOSUB 950:H=0:IF A\$="H" T HEN GOSUB 560
- YN 180 IF AS="P" THEN GOSUB 680
- K0 190 IF A\$="S" THEN GOSUB 590: GOSUB 240:GOTO 60
- JC 200 IF A\$="D" THEN GOSUB 830: GOTO 180
- KP 210 IF A\$="E" THEN BA=BA-BET* .5:GOTO 60
- DA 220 IF H=1 THEN GOSUB 420:GOT D 60 ELSE GOTO 170
- N 230 LOCATE 1,12:COLOR 14,4:PR INT" CASINO BLACKJACK ":R ETURN
- NO 240 IF SP=1 THEN GOSUB 330
- CE 250 IF DT1<=21 THEN DT=DT1 EL SE DT=DT2
- NE 260 IF DT2>DT1 AND DT2<=21 TH EN DT=DT2

- 0A 27Ø IF PT1<=21 THEN PT=PT1 EL SE PT=PT2
- PE 280 IF PT2>PT1 AND PT2<=21 TH EN PT=PT2
- HH 290 COLOR 15,10:IF DT=PT THEN LOCATE 12,10:PRINT"Push, No winner."
- LH 300 IF DT>PT AND DT<=21 THEN GOSUB 920: BA=BA-BET
- N 310 IF PT>DT AND PT<=21 THEN GOSUB 930:BA=BA+BET HN 320 GOSUB 420:RETURN
- HN 320 GOSUB 420:RETURN PI 330 IF VT1<21 AND VT1>PT1 THE
- N PT1=VT1 HK 34Ø IF VT2<21 AND VT2>PT2 THE N PT2=VT2
- MH 350 RETURN
- M 360 COLOR 15,2:CLS:LOCATE 15, 13:PRINT"Shuffling Deck.. .":FOR I=1 TO 52:M(I)=I:N EXT:FOR I=1 TO 52:X=INT(5 2*RND)+1:TP=M(I):M(I)=M(X) ):M(X)=TP:NEXT:HA=HA+1:RE TURN
- P0 37Ø IF TP\$=" " THEN COLOR Ø ,4 ELSE IF ASC(MID\$(TP\$,2 ,1))<=4 THEN COLOR 4,7 EL SE COLOR Ø,7
- FK 380 LOCATE XL, YL:PRINT TP\$:FO R Y=1 TO 2:LOCATE XL+Y, YL :PRINT" ":NEXT:LOCATE X L+3, YL:PRINT ":LOCATE X L+3, YL+1:PRINT MID\$(TP\$,2 ,1):LOCATE XL+3, YL+2:PRIN T LEFT\$(TP\$,1):RETURN
- EL 390 RESTORE 970:FOR X=0 TO 3: FOR T=1 TO 13:READ CD\$(X* 13+T):CD\$(X*13+T)=CD\$(X*1 3+T)+CHR\$(X+3)+CHR\$(32):N EXT:RESTORE 970:NEXT:REST ORE 970:FOR T=13 TO 1 STE P-1:READ V\$(T):NEXT
- FD 400 XL=5:YL=16:TP\$=CD\$(1):GOS UB 370:XL=5:YL=20:TP\$=CD\$ (43):GOSUB 370
- AE 410 COLOR 15,2:LOCATE 11,12:P RINT"Casino Blackjack":CO LOR 1,2:LOCATE 15,4:PRINT "Copyright 1968 COMPUTE! Pub., Inc.":LOCATE 16,11: PRINT"All Rights Reserved ":HA=Ø:PX(Ø)=18:PY(Ø)=Ø:P X(1)=5:PY(1)=-2:FOR X=Ø T O 1:GOSUB 42Ø:NEXT:BA=10Ø :RETURN
- NN 420 FOR T=1 TO 6000:NEXT:RETU RN
- 8C 43Ø P=Ø:D=Ø:FOR C=1 TO 4:IF C =2 THEN TP\$=" " ELSE TP \$=CD\$(M(C))
- KC 44Ø IF INT(C/2)<>C/2 THEN XL= PX(Ø):YL=PY(Ø)+2*C:PL\$(P) =CD\$(M(C)):P=P+1 ELSE XL= PX(1):YL=PY(1)+2*C:DL\$(D) =CD\$(M(C)):D=D+1
- 1 450 GOSUB 370:NEXT:GOSUB 860
- 10 460 IF LEFT\$(DL\$(1),1)="A" TH EN LOCATE 12,10:COLOR 15, 2:PRINT"Purchase insuranc e? (Y/N)" ELSE GOTO 530 NN 470 GOSUB 950
- 66 480 LOCATE 12,1:PRINT SP\$:IF A\$="Y" GOTO 490 ELSE IF A \$<>"N" GOTO 460 ELSE GOTO 530
- 10 490 IF BA-BET-BET*.5<BA THEN INS=1:BA-BA-BET*.5 ELSE L DCATE 12,1:PRINT You can' t afford insurance.":GOSU B 420:LOCATE 12,1:PRINT S P\$
- NH 500 GOSUB 660: IF DT1=21 THEN GOSUB 670: GOSUB 620: GOSUB 420: IF INS<>1 THEN BA=BA -BET: GOTO 60 ELSE GOTO 60
- PF 510 LOCATE 12, 1: PRINT"Dealer does not have Blackjack." :PRINT"Hand continues." MK 520 GOSUB 420:LOCATE 12,1:PRI NT SP\$:LOCATE 13, 1: PRINT SPS N 530 IF PT1=21 AND P=2 THEN LO CATE 19, 10: COLOR 31, 2: PRI NT"BLACKJACK!": GOSUB 670: GOSUB 660: IF DT1<>21 THEN BA=BET#1.5+BA:H=1:RETURN 0 540 IF DT1=21 AND PT1=21 THEN LOCATE 6, 10: COLOR 31, 2:P RINT"BLACKJACK!": COLOR 15 ,10:LOCATE 12,10:PRINT"Pu sh, no winner":H=1:RETURN NJ 55Ø RETURN EL 56Ø C=C+1:PL\$(P)=CD\$(M(C)):TP \$=PL\$(P):P=P+1:XL=PX(Ø):Y L=(PY(Ø)+4*(P))-2 NB 57Ø GOSUB 37Ø: GOSUB 86Ø: IF PT 1>21 AND PT2>21 THEN LOCA TE PX(Ø)+1, (PY(Ø)+4*(P))+ 4: COLOR 15, 2: PRINT"BUSTED !": IF SP=Ø THEN GOSUB 920 : BA=BA-BET: GOSUB 670: GOSU B 420:H=1 ELSE SP=0:RETUR NP 580 RETURN NJ 590 GOSUB 670 DL 600 COLOR 15,2:LOCATE 19, (PY( Ø)+4*(P))+4:PRINT"Stand" KJ 61Ø GOSUB 660: IF DT1=>17 THEN RETURN A6 620 IF DT1=21 AND D=2 THEN LO CATE 6, 10: COLOR 31, 2: PRIN T"BLACKJACK!":H=1:GOSUB 4 20: RETURN 10 630 C=C+1:DL\$(D)=CD\$(M(C)):TP \$=DL\$(D):D=D+1:C=C+1:XL=P X(1):YL=(PY(1)+4*(D)) DO 640 GOSUB 370: GOSUB 660: IF DT 1>21 AND DT2>21 THEN LOCA TE PX(1)+1, (PY(1)+4*(D))+ 4: COLOR 15, 2: PRINT "BUSTED !": GOSUB 930: BA=BA+BET: GO SUB 420:H=1:RETURN FI 650 GOTO 610 HM 660 DT1=0:DT2=0:V1=0:V2=0:FOR X=Ø TO D-1:G\$=DL\$(X):GOS UB 870:DT1=DT1+V1:DT2=DT2 +V2: NEXT: RETURN 11 67Ø XL=5: YL=2: TP\$=DL\$ (Ø) : GOSU B 37Ø: RETURN PH 680 IF LEFT\$(PL\$(0),1)<>LEFT\$ (PL\$(1),1) THEN RETURN BH 690 SP=1:XL=PX(0):YL=PY(0)+2* (C-2): TP\$=" ":COLOR 15, 2: GOSUB 380 NL 700 PX(0)=PX(0)-5:XL=PX(0):YL =PY(Ø)+2*(C-4):TP\$=PL\$(1) :GOSUB 37Ø:T=P LP 71Ø TEMP\$=PL\$(Ø):PL\$(Ø)=PL\$(1 ):PL\$(1)=CD\$(M(C)):C=C+1: TP\$=PL\$(1):YL=PY(Ø)+3*(P) : GOSUB 370: GOSUB 840 EC 720 GOSUB 790: IF PT1>21 AND P T2>21 THEN GOSUB 800:GOTO 740 LJ 73Ø IF AS="S" THEN VT1=PT1:VT 2=PT2: XL=14: GOSUB 810: GOT 0 74Ø ELSE GOTO 72Ø BK 74Ø PX(Ø)=PX(Ø)+5:PL\$(Ø)=TEMP \$:C=C+1:PL\$(1)=CD\$(M(C)): P=T: TP\$=PL\$(1): XL=PX(Ø): Y L=PY(Ø)+3*(P):GOSUB 370:G OSUB 86Ø DM 750 GOSUB 790: IF PT1>21 AND P T2>21 THEN GOSUB 800:GOTO 780 EI 760 IF AS="S" THEN XL=19:GOSU B 810:GOTO 780 10 77Ø GOTO 75Ø
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OK 780 GOSUB 670: GOSUB 610: GOSUB

240:H=1:RETURN

J# 790 GOSUB 950: IF A\$="H" THEN MC 840 LOCATE 12, 10: COLOR 31, 2:P HA 900 V1=V1+V: V2=V2+V GOSUB 820: RETURN ELSE RET RINT"Double Down!":BET=BE HF 910 RETURN T#2: GOSUB 560: A\$="S": RETU URN CH 920 LOCATE 6, (PY(1)+4*(D))+4: CE 800 LOCATE PX (0) +1, (PY (0) +4*( RN COLOR 31, 2: PRINT "House Wi P))+4:COLOR 15,2:PRINT"Bu NM 85Ø RETURN ns!":RETURN sted!":RETURN BD 860 PT2=0:PT1=0:FOR X=0 TO P-PA 930 IF SP=1 THEN XL=17: YL=10 C6 81Ø LOCATE XL, (PY(Ø)+4*(P))+4
::COLOR 15,2:PRINT"Stand" ELSE XL=19: YL=PY (Ø) +4* (P) 1:G\$=PL\$(X):GOSUB 870:PT1 =PT1+V1:PT2=PT2+V2:NEXT:R +4 : RETURN CE 940 COLOR 31,2:LOCATE XL, YL:P FTURN IE 820 C=C+1:PL\$(P)=CD\$(M(C)):TP EP 870 V1=0:V2=0:FOR Y=1 TO 13:I RINT"Winner ! ": RETURN \$=PL\$(P):P=P+1:XL=PX(Ø):Y F LEFT\$ (G\$, 1) =V\$ (Y) THEN IE 950 A\$="": A\$=INKEY\$: IF A\$="" L=(PY(Ø)+4*(P))-2:PT1=Ø:P THEN 950 ELSE RETURN V=Y+1T2=0:GOSUB 370:GOSUB 860: KP 880 NEXT: IF V=14 THEN V1=11:V ND 960 SCREEN Ø, Ø, Ø: WIDTH 80: CLS RETHRN 2=1:GOTO 910 :END DA 830 GOSUB 860: IF PT1<10 OR PT EJ 97Ø DATA A,K,Q,J,T,9,8,7,6,5, KC 890 IF V>10 THEN V1=10:V2=10: 1>11 THEN A\$="":RETURN GOTO 91Ø 4,3,2 c=c+1:d1\$(d)=cd\$(m(c)):tp\$=d1\$(d):d=d+1:c=c+1:x= Program 7: Amiga Casino Blackjack dx*8-1:y=dy*8-114 Version by George Miller, Editorial Programmer xL=dx:yL=dy:dx=dx+6:GOSUB ShowCard:RETURN4 CheckCards: 4 Blackjack: 4 IF sp=1 THEN GOSUB SpLitHand4 IF dtl<=21 THEN dt=dtl ELSE dt=dt24 'Copyright 1988 COMPUTE! Publications, Inc. 4 IF dt2>dt1 AND dt2<=21 THEN dt=dt24 'All Rights Reserved4 IF ptl<=21 THEN pt=ptl ELSE pt=pt24 IF pt2>ptl AND pt2<=21 THEN pt=pt24 DEFINT a-z:DEFSNG r,g,b,cy:RANDOMIZE TIMER4 DIM cd\$(52),v\$(13),m(52),sb(36,3),card(507,4)4 COLOR 4,10:IF dt=pt THEN LOCATE 12,10:PRINT "Pus h, No winner":GOSUB DeLay4 sp\$=SPACE\$(40) + SCREEN 1,320,200,4,1:WINDOW 3,"",(0,0)-(311,186) ,16,1:WINDOW OUTPUT 3:COLOR 3,04 IF dt>pt AND dt<=21 THEN GOSUB HouseWin:ba=ba-be Start:s=1:GOSUB DoScreen:GOSUB InitiaLize:GOSUB t4 IF pt>dt AND pt<=21 THEN GOSUB Pwin:ba=ba+bet4 DispLav4 Main: IF s<>1 THEN GOSUB HoLdscrn4 RETURN4 COLOR ,10:CLS:GOSUB TitLe:h=0:sp=0:s=04 SpLitHand: 4 IF vt1<=21 AND pt1<=21 AND vt1>pt1 THEN pt1=vt14 IF ba<>Ø THEN 4 IF vt2<=21 AND pt2<=21 AND vt2>pt2 THEN pt2=vt24 GOTO DoIt4 ELSE4 RETURN4 Hit:c=c+1:pl\$(p)=cd\$(m(c)):tp\$=pl\$(p):p=p+1:x=px LOCATE 10,10:COLOR 4,10:PRINT "Sorry, you are br okel":LOCATE 12,124 *8-1:y=py*8-4:xL=px4 PRINT "Play again? (Y/N)"4 yL=py+1:px=px+64 GOSUB ShowCard: GOSUB PvaLue4 Answer: GOSUB GetKey4 IF pt1>21 AND pt2>21 THEN 4 IF a\$="Y" THEN GOTO Start ELSE IF a\$="N" THEN GO LOCATE py+2, px:COLOR 4, 10: PRINT "Busted!"4 TO EndGame4 IF sp=Ø THEN4 GOTO Answer4 GOSUB ShowDeaLer: GOSUB HouseWin: ba=ba-bet: GOSUB END IF DOIT:COLOR 7,10:LOCATE 6,12:4 DeLay:h=14 ELSE4 ba=INT(ba*100)/1004 PRINT USING " Bank = \$\$############;ba < LOCATE 8,12:PRINT "Playing Hand #"+STR\$(ha+1)< LOCATE 10,15:COLOR 11,15:PRINT " Q ":LOCATE 12,1 sp=Ø4 END IF4 END IF4 5:PRINT " R "4 RETURN4 COLOR 11,10:LOCATE 10,19:PRINT "to Quit":LOCATE 12,19:PRINT "to Restart"4 DoubLe:4 GOSUB PvaLue: IF pt1<10 OR pt1>11 THEN a\$="":RETU RN4 GetBet:LOCATE 16,1:PRINT sp\$:COLOR 1,10:LOCATE 1 LOCATE 10,12:COLOR 4,10:PRINT "Double Down!":bet 6,54 INPUT "Enter your bet"; bet\$:bet=INT(VAL(bet\$)*10 =bet*2:GOSUB Hit:a\$="S":RETURN4 ShowDeaLer:x=1*8-1:y=5*8-11:xL=1:yL=5:tp\$=d1\$(0) 0)/1004 :GOSUB ShowCard:RETURN4 bet\$=UCASE\$(bet\$)4 IF LEFT\$(bet\$,1)="Q" THEN GOTO EndGame4 HouseWin:LOCATE dy+2, dx:COLOR 4, 10: PRINT "House IF LEFT\$(bet\$,1)="R" THEN CLS:GOTO Start4 Wins!":RETURN4 IF bet <= 0 OR bet > ba THEN GOTO GetBet 4 Pwin:LOCATE py+2, px:COLOR 4, 10:PRINT "Winner!":R ETURN GOSUB GameScreen: IF h=1 GOTO Main4 ChecKey: GOSUB GetKey4 IF a\$="P" THEN GOSUB SpLit4 PvaLue:pt2=0:pt1=0:FOR x=0 TO p-1:g\$=p1\$(x):GOSU IF a\$="D" THEN GOSUB DoubLe4 B VaLue:ptl=ptl+v14 IF a\$="H" THEN GOSUB Hit4 pt2=pt2+v2:NEXT:RETURN4 IF a\$="S" THEN GOSUB Stand:GOTO Main4 VdeaLer:dt2=0:dt1=0:FOR x=0 TO d-1:g\$=d1\$(x):GOS IF a\$="E" THEN ba=ba-bet*.5:GOTO Main4 UB VaLue:dtl=dtl+v14 IF h=1 THEN h=0:GOTO Main4 dt2=dt2+v2:NEXT4 IF dtl<21 THEN dt2=dtl4 GOTO ChecKey4 IF dt1>21 THEN dt1=dt24 DeLay:FOR i=1 TO 5000:NEXT:RETURN4 RETURN4 Stand: GOSUB ShowDeaLer: GOSUB VdeaLer4 VaLue:vl=0:v2=0:FOR y=1 TO 134 IF sp<>1 THEN COLOR 4,10:LOCATE py+2,px:PRINT "S tand":GOSUB PvaLue:GOSUB VdeaLer4 IF LEFT\$(g\$,1)=v\$(y) THEN v=y+14 IF dt1=21 AND d=2 THEN LOCATE dy+2, dx:PRINT "Bla NEXT4 ckjack!":h=1:ba=ba-bet:RETURN4 IF v=14 THEN v1=11:v2=1:RETURN4 IF v>10 THEN v1=10:v2=10:RETURN4 DeaLerpLays: 4 IF dtl>21 THEN4 v1=v:v2=v4 LOCATE dy+2, dx:COLOR 4, 10:PRINT "Busted!":ba=ba+ RETURN4 bet:GOSUB Pwin:h=14 SpLit:4 IF LEFT\$(p1\$(0),1)<>LEFT\$(p1\$(1),1) THEN RETURN4 RETURN4 LINE(55,124)-(88,160),10,bf:r=04 END IF4 IF dtl<17 OR dt2<17 THEN GOSUB GetCard:GOSUB Vde c=c+1:sp=1:px=1:py=10:tp\$=p1\$(1):x=px*8-1:y=py*8 aLer:GOTO DeaLerpLays4 -4:xL=px4 yL=py+1:p=2:GOSUB ShowCard:px=px+64 GOSUB CheckCards: RETURN4 GetCard:FOR t= 1 TO 3000:NEXT4 temp\$=pl\$(0):pl\$(0)=pl\$(1):pl\$(1)=cd\$(m(c)):c=c+

```
END IF4
1:tp$=p1$(1)4
                                                      GOSUB DeLay4
x=px*8-1:y=py*8-4:xL=px:yL=py+1:GOSUB ShowCard:p
                                                       RETURN4
x=px+6:4
                                                       ShowCard: 4
pt1=0:pt2=0:p=2:GOSUB PvaLue4
                                                       IF tp$=" " THEN PUT (x,y), card(0,4), PSET: RETURN
SpLitLup:GOSUB GetKey-
IF a$="H" THEN GOSUB SPHit4
                                                       j=ASC(RIGHT$(tp$,1))-654
IF a$="S" AND r=1 THEN COLOR 4,10:LOCATE py+2,p
                                                       PUT (x,y), card(Ø, j), PSET: COLOR 1,44
x:PRINT "Stand":RETURN4
                                                       LOCATE yL, xL+1: PRINT LEFT$(tp$,1):LOCATE yL+3, xL
IF a$="S" AND r=0 THEN vtl=ptl:vt2=pt2:COLOR 4,1
0:LOCATE py+2,px:PRINT "Stand":GOSUB SecondHand4
                                                       +4:PRINT LEFT$(tp$,1) 4
IF pt1>21 AND pt2>21 THEN 4
                                                       RETURN4
                                                       TitLe:FOR i=Ø TO 3:j=i*2:LINE(64+j,j)-(256-j,23-
LOCATE py+2, px:COLOR 4, 10:PRINT "Busted!":a$=""4
                                                       j), i+12, bf:NEXT4
IF r=1 THEN a$="S":RETURN4
                                                       COLOR 2,15: LOCATE 2,13:PRINT "Casino Blackjack
IF r=Ø THEN vtl=ptl:vt2=pt2:GOSUB SecondHand4
                                                       ":RETURN4
END IF4
                                                       GetKey:a$=INKEY$4
IF a$<>"" THEN4
GOTO SpLitLup4
SPHit:c=c+1:pl$(p)=cd$(m(c)):tp$=pl$(p):x=px*8-1
                                                       a$=UCASE$(a$)4
:y=py*8-44
                                                       ELSE4
xL=px:yL=py+1:px=px+64
                                                       GOTO GetKey4
GOSUB ShowCard:p=p+1:GOSUB PvaLue4
                                                       END IF4
RETURN4
                                                       RETURN4
SecondHand: 4
                                                       ShuffLeCards:FOR i=1 TO 52:m(i)=i:NEXT:FOR i=1 T
ptl=0:pt2=0:r=1:px=7:py=16:pl$(0)=temp$:c=c+1:pl
                                                       0 52:x=INT(52*RND)+14
$(1)=cd$(m(c)):p=24
                                                       tp=m(i):m(i)=m(x):m(x)=tp:NEXT:CLS:ha=ha+1:RETUR
tp$=p1$(1):x=px*8-1:y=py*8-4:xL=px:yL=py+1:px=px
+6:GOSUB ShowCard:GOSUB PvaLue:LOCATE 1,1:PRINT
                                                       N4
                                                       InitiaLize:ha=0:GOSUB InitShapes:ba=100:RESTORE
pt1, pt2:RETURN4
GameScreen: GOSUB ShuffLeCards: CLS: GOSUB TitLe4
                                                       cards:FOR x=Ø TO 34
                                                       FOR t=1 TO 13:READ cd$(x*13+t):cd$(x*13+t)=cd$(x
FOR i=Ø TO 3:j=i*2:LINE(1+j,168+j)-(310-j,190-j)
 ,i+12,bf:NEXT4
                                                       *13+t)+CHR$(x+65) 4
COLOR 2,15:LOCATE 23,3:PRINT "it tand ouble-do
                                                       NEXT: RESTORE cards: NEXT: FOR t = 13 TO 1 STEP-1:R
wn S lit Surr nder"4
                                                       EAD v$(t):NEXT:RETURN4
                                                       cards:DATA A,K,Q,J,T,9,8,7,6,5,4,3,24
COLOR 12,15:LOCATE 23,2:PRINT "H":LOCATE 23,6:PR
INT "S":LOCATE 23,12:PRINT "D"+
                                                       DispLay:WIDTH 40:CLS:COLOR ,04
LOCATE 23,25:PRINT "p":LOCATE 23,34:PRINT "e":p=
                                                       FOR x=Ø TO 3:LINE (80+x*2,40+x*2)-(225-x*2,63-x*
                                                       2),12+x,bf:NEXT4
Ø:d=Ø4
                                                       COLOR .2, 15: LOCATE 7, 12: PRINT "Casino Blackjack"4
dx=1:dy=5:px=1:py=16:FOR i=1 TO 4:tp$=cd$(m(i))4
                                                       COLOR 2, 10:LOCATE 12, 4: PRINT "Copyright 1988 COM
IF i=1 OR i=3 THEN4
x=px*8-1:y=py*8-4:xL=px:yL=py+1:px=px+6:pl$(p)=t
                                                       PUTE! Pub., Inc."4
                                                       LOCATE 13,11:PRINT "All Rights Reserved":FOR x=
p$:p=p+14
                                                       1 TO 10:GOSUB DeLay:NEXT4
ELSE
x=dx*8-1:y=dy*8-11:xL=dx:yL=dy:dx=dx+6:dl$(d)=tp
                                                       COLOR 4, Ø: RETURN4
                                                       InitShapes:RESTORE InitShapes:check=04
S:d=d+14
                                                       LINE(4,4)-(37,40),12,bf:GET (4,4)-(37,40),card(0,4):FOR j=0 TO 3:FOR i=0 TO 304
READ a$:sb(i,j)=VAL("&H"+a$):check=check+sb(i,j)
END IF4
IF i=2 THEN tp$="
                    "4
GOSUB ShowCard:NEXT:c=44
                                                       :NEXT i, j4
Insurance:4
IF LEFT$(dl$(1),1)="A" THEN+
                                                       IF check <> 178748& THEN PRINT "Error in Shape Dat
LOCATE 12,12:COLOR 4,10:PRINT "Purchase insuranc
                                                       a":GOSUB DeLay:STOP4
e? (Y/N)":GOSUB GetKey4
                                                       FOR j=Ø TO 34
                                                       LINE(4,4)-(37,40),4,bf:PUT (14,6),sb(0,j),PSET:P
LOCATE 12,1:PRINT sp$:4
IF a$="Y" THEN4
                                                       UT (17,30), sb(0,j), PSET4
IF bet-bet-bet*.5<ba THEN4
                                                       GET (4,4)-(37,40),card(0,j):CLS:NEXT j:RETURN4
                                                       diamond: DATA B, 9, 3, 400, E00, 1F00, 3F80, 7FC04
ins=1:ba=ba-bet*.54
                                                       DATA 3F80,1F00,E00,400,400,E00,1F00,3F804
ELSE4
LOCATE 12,1:PRINT "You can't afford insurance.":
                                                       DATA 7FCØ, 3F80, 1F00, E00, 400, FBE0, F1E0, E0E04
GOSUB DeLay4
                                                       DATA C060,8020,C060,E0E0,F1E0,FBE0,04
LOCATE 12,1:PRINT sp$4
                                                       CLub: DATA B, 9, 3, 0, 0, 0, 0, 04
                                                       DATA 0,0,0,0,E00,1F00,1F00,7FC04
END IF4
                                                        DATA FFEØ, FFEØ, 75CØ, EØØ, 1FØØ, F1EØ, EØEØ, EØEØ4
ELSE4
IF a$<>"N" THEN4
                                                       DATA 8020,0,0,8A20,F1E0,E0E0,04
                                                       Heart: DATA B, 9, 3, 71CØ, FBEØ, FFEØ, FFEØ, 7FCØ4
GOTO Insurance4
END IF
END IF4
                                                       DATA 3F80,1F00,E00,400,71C0,FBE0,FFE0,FFE04
                                                        DATA 7FCØ, 3F8Ø, 1FØØ, EØØ, 400, 8E20, 400, 04
 GOSUB VdeaLer:4
                                                       DATA Ø,8020,C060,E0E0,F1E0,FBE0,04
                                                       Spade:DATA B,9,3,0,0,0,0,04
DATA 0,0,0,0,400,400,E00,1F004
 IF dtl=21 THEN 4
h=1:GOSUB ShowDeaLer:LOCATE dy+2, dx:COLOR 4, 10:P
RINT "Blackjack!":GOSUB DeLay:ba=ba-bet4
                                                        DATA 3F80,7FC0,75C0,E00,1F00,FBE0,FBE0,F1E04
 IF ins <> 1 THEN ba=ba-bet: RETURN ELSE RETURN 4
                                                       DATA EØEØ, CØ6Ø, 802Ø, 8A2Ø, F1EØ, EØEØ, Ø4
                                                        DoScreen:WINDOW OUTPUT 3:COLOR 3,0:WIDTH 40:REST
ELSE4
 LOCATE 12,8:PRINT "Dealer does not have BlackJac
                                                       ORE PaLetteData4
 k":GOSUB DeLay4
                                                        FOR i=0 TO 15:READ r,g,b:PALETTE i,r,g,b:NEXT:RE
 LOCATE 12,1:PRINT sp$4
                                                        TURN4
 END IF4
                                                        PaLetteData:DATA 0,.7,0,0,0,0,0,0,0,0,1,0,0,1,1,1,
 END IF4
                                                        0,0,0,1,0,0,1,1,1,0,0,04
 GOSUB PvaLue4
                                                       DATA 1,0,0,0,.7,0,1,0,0,1,0,0,1,.5,.1,1,.7,.1,1,
 IF pt1=21 AND p=2 THEN4
                                                        .6,.14
 COLOR 4,10:LOCATE py+2,px:PRINT "Blackjack!":h=1
                                                       HoLdscrn:LOCATE 12,6:COLOR 5,10:PRINT "Press any
                                                        key to continue .... ": GOSUB GetKey: RETURN4
 :GOSUB ShowDeaLer:GOSUB VdeaLer4
 IF dt2<>21 THEN4
                                                        EndGame:CLS:COLOR 1, 10:LOCATE 12, 10:PRINT "Thank
                                                        you for playing":COLOR 114
 ba=bet*1.5+ba:GOSUB DeLay:RETURN4
 ELSE4
                                                        LOCATE 14,12:PRINT "Casino Blackjack":GOSUB DeLa
 LOCATE dy+2, dx: PRINT "Blackjack!":LOCATE 12, 10:P
                                                       y:WINDOW CLOSE 34
 RINT "Push, No winner":h=1:GOSUB DeLay4
                                                       SCREEN CLOSE 1:END4
                                                                                                          0
END IF4
                                                                           C-www.Mcchhlogencomeutered.ca
```

# Centerstage: AMIGA! The World Of Commodore Show

Every December since 1983, Commodore Canada has sponsored the World of Commodore show at the International Centre in Toronto. The show spotlights Commodore computers and their wealth of thirdparty products. This year the showcase was seen by over 40,000 attendees. More than 85 exhibitors displayed their wares, with Commodore itself taking up the largest area.

Over the past five years, the Commodore 64 has been the World of Commodore's dominating star. In the recent 1987 show, however, the Amiga took center stage.

Amiga was everywhere, with its graphics dancing on monitors and its music booming from speakers. To find new products for the 64/128, one had to stop and search. Almost buried was the PC 10-III, Commodore's newest entry in its line of PC-compatibles. For the first time, the company heard complaints about the lack of new products for the 64/128, and for the first time, nobody speculated on the imminent demise of the Amiga.

#### **The New Machine**

Aside from its overt support for the Amiga, Commodore's biggest news was the brand new PC 10-III. An XT compatible, the PC 10-III is designed for those who want a PC compatible that anticipates the options they may later require. The MS-DOS world boasts (and in many ways, quite rightly) of its machines' expandability; but expandability, for many, is intimidating. String some wires together and you can operate a 64 or an Amiga, but PC compatibles and clones often need further purchases before they Neil Randall

can be considered fully loaded.

The PC 10-III includes only three expansion slots, but the machine's design implies that three is plenty. The package includes 640K RAM, monochrome and color graphics capability (for both RGB and composite monitors), Hercules and Plantronics video interfaces, a built-in clock/calendar with battery backup, a floppy drive controller, and a hard disk interface. Several of these features have to be added separately to many compatibles. Other features include a socket for an 8087 math coprocessor, software-controllable speeds of 4.77, 7.16, and 9.54 MHz, two built-in 360K floppy drives, and room for an internal half-height hard drive. The 10-III should carry a retail price under \$1,200.

#### The Old Machines

In this case, "the old machines" include the Commodore 64 and Commodore 128. To many, these computers have always been inextricably linked, and most software is marketed as 64/128 compatible. They are treated, for the most part, as one.

Most of the 64/128 products on display at the show took the form of productivity and applications software. Berkeley Softworks displayed their newest GEOS products, GeoFiler 128, GeoPublish 64, and GeoProgrammer 64 (128 versions of the latter two products should be available soon). GeoPublish is an extremely friendly desktop publishing package aimed for home and educational use, while GeoProgrammer combines an assembler, a linker, and a debugger for work in assembly language.

Supporting GEOS were Abacus' BeckerBASIC, for BASIC programming within the GEOS environment, and CDA's NeoFont, which gives all GEOS packages 23 new fonts in four different sizes. CDA also showed the Graphics Transformer. This package allows you to transfer pictures from one paint program to another. It supports most existing 64/128 paint programs.

Many attendees were impressed by *Multi-Link*, a 64/128 networking system designed for classroom use. The package links up to 48 Commodore 64s or 128s via linking hardware and an included 20-megabyte hard drive. Each computer station can interact directly with the control station (operated by the teacher), or they can operate individually as stand-alone 64s and 128s. A 10-station system, including the hard drive and the linking hardware, will cost about \$3,000.

Productivity packages from Electronic Arts included Paperclip III, Outrageous Pages, and Mavis Beacon Teaches Typing. Paperclip III is the latest version of the popular word processor from EA's "Batteries Included" line, while Outrageous Pages is desktop publishing software with strong graphics tools and the ability to snake text around graphics on the page. Mavis Beacon Teaches Typing is a typing tutor whose difference is its creation of customized lessons for each user. With a highly favorable review in The New York Times, the package

seems on its way to a strong future.

Games for the 64/128 line came almost exclusively from Electronic Arts. Halls of Montezuma is the latest module in SSG's Battlefront series, and the delayed Great Battles of the American Civil War is promised soon. Bard's Tale III has several new features, including an automatic mapping system. Skyfox II, Strike Fleet, and Skate or Die round out the new selections.

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#### The Machine That Stole The Show

What the World of Commodore showed most clearly was that the Amiga has come of age. Since its introduction, the Amiga has been the victim of Commodore's procrastination, and this, in turn, hampered its support by software developers. To judge from the dazzling new products both announced and displayed at this year's show, the Amiga is beginning to fulfill its promise of product availability.

Also evident was the growing split in the focus of Amiga software. The Amiga may have been intended as a home computer, but much of the software is squarely aimed at the professional user. Music professionals, graphics professionals, publishing professionals, and even airline professionals were well-targeted by this year's new products. Many of these products, in fact, lie well beyond the budget of the home user. But the nonprofessional had much to choose from as well, with word processors, paint programs, music programs, and games on display practically everywhere.

#### Amiga Hardware

Toronto-based Comspec demonstrated its new hard drive and its soon-to-be-released tape back-up system. Actually, the hard drive consists of two parts: the SCSI Host Adaptor and the Hard Drive Chassis. The software allows drive sizes ranging from 10–300 megabytes to be connected to the Adaptor, and the hard drive system allows you to boot the Amiga in eight seconds without using the Kickstart and Workbench disks. The tape backup on display backed up 120 megabytes worth of data.

Two companies showed new RAM expansion devices. Inboard,

from Spirit Technology of Salt Lake City, gives the 1000 or the 500 an extra megabyte of RAM, and the board is installed internally. Like most expansion boards now, *Inboard* is autoconfigurable. Byte by Byte announced the *Byte Box*, which gives the 500 up to two megabytes of external expansion. It, too, autoconfigures, and it has its own power supply.

A British Columbia company, Hypertek/Silicon Springs, was on hand with three products. The Amiga Light Pen is designed to work with any Amiga program. Its two buttons take the place of the two mouse buttons, and it allows single-pixel drawing precision. The Deluxe Midi Interface allows a serial pass-through, and includes MIDI In, MIDI Out, and switchable Thru/Out.

Finally, the TTL High Resolution Monitor is a device that plugs into the RBG port and offers relatively flicker-free high-resolution monochrome output.

NewTek, makers of the popular Digi-View system, announced the Video Toaster, which at almost \$800 offers realtime color digitizing, video effects, and broadcastquality genlock. This full-featured professional digitizer/genlock system should provide many users with the high-quality video tools they've been waiting for.

#### Amiga Software

Electronic Arts displayed Ferrari Formula One, a new racing game in its Sports Legends series. Announced for the Amiga were Bard's Tale II, Reach For The Stars (third edition), Sierra On-Line's Thexder (an arcade game from Japan), Space Quest II, and Police Quest, the latter two from the popular King's Quest system. Also announced was The Hunt For Red October, a submarine action/strategy game from Micro-Prose based on the Tom Clancy book of the same name.

EA also had two announcements for its Deluxe series. Deluxe Productions is a hi-res graphics animation program designed for business and professional use. Deluxe Write is a graphics word processor that allows the importing of color graphics from programs such as Deluxe Paint II and Deluxe Print II.

Three other new word proces-

sors let users combine text and graphics. *TextPro*, from Abacus, includes a snapshot program that saves IFF graphics from programs that do not offer this option. *Becker-Text* (also from Abacus) takes *Text-Pro* a few steps further with up to five math columns per page and printing in up to five columns. Both programs feature a C-Source mode for help in formatting the sourcecode around C's necessary braces.

A third word processor, *Kind-Words*, from The Disc Company, looks very much like *TextCraft*, as it should have been. It merges color IFF graphics within the text, contains its own fonts, and contains a host of very friendly features. The program's appearance is very close to *TextCraft*'s, but it has dispensed with the annoyances of the Amiga's first word processor.

Of course, WordPerfect has taken Amiga word processing by storm, and WordPerfect Corporation was on hand to display and support its product. WordPerfect for the Amiga set the company's alltime first-month sales record, and users of this full-featured product have no trouble figuring out why. The company also announced WordPerfect 5.0 for MS-DOS owners, which integrates text and graphics and introduces several other features. Certainly 5.0 will be available for Amiga soon.

The Other Guys, from Logan Utah, demonstrated *Promise*, a 90,000-word spelling checker, *Reason*—a professional text and style analyzer for writers—and *Synthia*, a program for creating digital IFF instruments for use with music programs. An impressive synthesizer program, *Synthia* includes such features as the simulation of plucked strings, drum-kit creation, an IFF music player for users with limited RAM, and a means of simulating the natural imperfections found in real instruments.

For musicians, Sound Quest had its *Editor/Librarian* for Roland, Yamaha, and Casio CZ synthesizers. Sound Quest's stage demonstration showed the ease with which the program lets you perform multitrack recording using a synthesizer, and the ease with which you can change instrument sounds as you play. Music professionals have been enchanted by Sound Quest since its origins as *Texture* (from the now-defunct Cherry Lane Technologies).

#### More For The Amiga

There was more, much more. Taurus Software showed its full-color 2D X-CAD Designer while Haitex Resources announced Acquisition Pioneer, a scaling-down of its Acquisition relational database for less demanding users. Gold Disk showed ComicSetter, a comic-book creation package to be released shortly. Syndesis offered Interchange, a program for sharing objects between Byte By Byte's Sculpt 3D and Aegis Development's Video-Scape 3D.

Software Visions demonstrated Microfiche Filer, a unique (and extremely easy to use) database system, while another easy solution came from Oxxi, with its Nimbus small-business accounting package. Meridian Software had Zing Spell, a 95,000-word realtime spelling checker; and Zing Keys, a macro and hot key program; and the company announced a significant update to Zing, its multifeatured Amiga utility. Finally, RGB Video Creations was on hand with Deluxe Help for Deluxe Paint, a well-designed tutorial for those intimidated by Deluxe Paint's multitude of features.

Of all the products on display, though, three merit special mention. From Gold Disk comes Professional Page, the first Amiga desktop publishing program designed specifically for professional use. A fully featured word processor and document-creation program, Professional Page supports output to any PostScript laser printer or typesetting machine. Its features are far too numerous to describe, but the program is fully supported by the Toronto-area Vellum Print and Graphic Services, who produced the fine-looking Professional Page manual using that program exclusively. In January, Vellum will begin offering training courses on the use of Professional Page and other print-oriented Amiga hardware and software.

Unquestionably, the most unusual product of the show was Very Vivid's *Mandala*. Described as an interactive realtime video development system, *Mandala* joins with realtime video digitizers to let you physically interact with the Amiga's monitor. By simply standing in front of the monitor and waving your arms around, you can create some extremely interesting graphics and sound effects. The potential use of *Mandala* is only within the realm of speculation, but working it into video presentations and interactive games seem two of the most obvious uses.

Airware Solutions of Laval, Quebec was on hand with its AWS-1000 Pairing Generator System. Designed with extensive research into airline systems, the AWS-1000 is the first pairing generator available to airlines. Basically, what a pairing system does is make sure that pilots and flight attendants all end up in the right places. Until now, airlines figured out the pairings in various ways, then ran them through a pairing optimizer to see if they were valid. The AWS-1000 does all that work for the airline. Future AWS modules will include a Flight Crew Blocking System, and Aircraft Fleet Management System, a Flight Crew Scheduling System, and a Pilot Cost Evaluation Analysis. Though aimed obviously at a niche market, this software is highly impressive.

### The View From Commodore

According to Stan Pagonis, Director of Marketing Operations for Commodore Canada, the emphasis on the Amiga was entirely appropriate. Although he quickly pointed out that the seminars and stage shows demonstrated the 64/128 and the P€ line as well, he suggested that "because we believe the Amiga is our future, we're going to concentrate on it." For the first time, he said, "we were finally able to tell the people that the Amiga was a professional machine." For the first time, too, "we put the software question to rest."

But he insisted that the 64/128 was not about to die. The ready base of available programs attracts many new computer owners, he suggests, and that is why sales of the 64/128 remain very strong. Commodore will continue to support it and they'll continue to expand their line of PC-compatibles. Yet, to judge from the World of Commodore show, the Amiga is becoming a dominant machine. ©



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# The Amiga Virus

Jim Butterfield, Contributing Editor

The Amiga has been the victim of a hacker's practical joke. A group of programmers from Europe developed a small program that affects Amiga Workbench disks. This not-so-harmless virus recently caused quite a stir at The World of Commodore show in Toronto, Canada. Jim Butterfield explains.

Some call it a minor annoyance. Some call it a serious hazard. Either way, a small system program found on some Amiga disks became widespread at The World of Commodore show in Toronto, Canada. This "virus" spreads from disk to disk without the user's knowledge and can "infect" an entire library before it makes itself known.

The World of Commodore show did not spawn this software infection. The virus comes from a group in Switzerland called SCA, so it's sometimes called the SCA virus. At least one other version (a mutation) exists. It has been known in Europe for some time, and it's believed to have made its way to North America from Germany in late October 1987.

#### **Spreading The Virus**

The virus affects Amiga Workbench disks. If you boot with an infected disk, the virus program installs itself into the computer's memory. To further spread the infection, this program wedges itself into the Amiga's reboot code.

The virus waits benignly until

the user gives the three-key Amiga reboot sequence. That's the one where you press the CTRL, Commodore, and Amiga keys together. On the Amiga 1000, it's the CTRL, left-Amiga, and right-Amiga keys. The virus survives the reboot and plants itself onto the boot track of the current Workbench disk.

Most users think that the three-key reboot makes the system start over, cleaning out any previous code. Not so with the virus: It stays in there, waiting to infect your next boot disk. And after a number of computer reboots, the virus prints a message such as: A wonderful thing has happened. Your Amiga is alive! And, even better, some of your disks are infected by a virus!

#### **Diagnosing The Virus**

Is the virus harmless? Not quite. Some commercial programs use disk copy-protection systems that live in the same area that the virus invades. If the virus spreads too far (infects too many disks), you could lose some of your most valuable programs. And there's another danger. With certain Amiga memory configurations, the virus mistakenly loads itself into the wrong place, thus causing a system failure.

How can you tell if any of your disks have the virus? There are programs available that analyze your disks, but there's an easier way: Insert the suspected Workbench disk, hold down the left mouse button, and reset your computer using the three-key reboot. If there is a virus in memory, the screen flashes green for about half a second as the computer begins to reboot.

There may be certain strains of the virus that do not exhibit this tell-tale green flash. For this reason, we offer "Vlook." Vlook is a short Amiga Basic program that checks the computer's memory for the virus. When you have typed in and saved the program, run it.

Vlook creates a program file on the Amiga's RAM disk. You may copy this file to the disk in drive 0 by activating the CLI and typing: COPY RAM:VLOOK DF0:

To run the program and test your computer's memory, enter this instruction from the CLI:

#### RAM:VLOOK

If your computer is infected, the warning *Memory contains a known VIRUS* appears. Otherwise you'll see "Memory contains no signs of a known virus." If you receive the first message, one or possibly all of your boot disks are infected.

#### The Antidote

How can you get rid of the virus? If your disk does not contain a commercial protection scheme, the CLI command INSTALL can rid your infected boot disks of the virus. To clear the virus from the Workbench disk in drive 0, for example, enter INSTALL DF0: from the CLI. Do **not** use INSTALL if your disk has a copy-protection scheme, since this would probably render the disk useless. Non-Workbench disks (disks that do not boot the computer) cannot be infected by the virus. Also, if you keep your Workbench disks write-protected, the virus does not affect them—an effective method of immunization.

Even after you clean up a disk, the virus remains in memory. To flush the virus from the computer's memory, shut the computer off and leave it off for at least a minute before rebooting.

#### Vlook

For instructions on entering these programs, please refer to "COMPUTEI's Guide to Typing In Programs" elsewhere in this issue.

```
DATA 1,210,0,199,0,3,243,2024
DATA 0,0,0,0,0,0,0,624
DATA 1,0,0,0,0,0,0,04
DATA 0,0,0,0,48,0,0,1144
DATA 3,233,0,0,0,48,67,2504
DATA 0,114,66,64,44,120,0,44
DATA 78,174,253,216,44,64,103,04
DATA 0,88,78,174,255,196,46,1954
DATA 0,69,250,0,100,38,60,04
DATA 0,0,34,78,186,0,70,124
DATA 185,67,72,87,33,0,7,2364
DATA 8,102,0,0,16,12,185,654
DATA 250,255,242,0,7,236,12,1034
DATA 0,0,16,69,250,0,92,384
DATA 60,0,0,0,12,78,186,04
DATA 28,69,250,0,90,38,60,1464
DATA 0,0,0,15,78,186,0,144
 DATA 34,78,44,120,0,4,78,1744
 DATA 254,98,78,117,36,10,34,74
 DATA 78,238,255,208,100,111,115,464
 DATA 108,105,98,114,97,114,121,04
 DATA 40, 32, 67, 111, 109, 112, 117, 1164
 DATA 101,33,32,49,57,56,56,324
 DATA 41,10,77,101,109,111,114,1214
 DATA 32,99,111,110,116,97,105,1104
 DATA 115, 32, 110, 111, 32, 115, 105, 1034
 DATA 110,115,32,111,102,32,97,324
 DATA 107,110,111,119,110,32,86,734
 DATA 82,85,83,46,10,0,0,04
 DATA 0,0,3,2424
p=2364
DIM k(10), fil(p) <
k(Ø)=14
FOR j=1 TO 84
 k(j)=k(j-1)*24
NEXT j4
FOR j=1 TO p4
 READ fil(j) +
NEXT j4
FOR j=1 TO p4
 FOR j1=0 TO 104
IF k(j1)<> j AND ((k(j1) AND j)>0) THEN4
   k=k(j1) 4
   fil(k)=fil(k) XOR fil(j) 4
  END IF4
 NEXT j14
NEXT j4
e=04
FOR j=Ø TO 74
 IF e<fil(k(j)) THEN e=fil(k(j)) 4
NEXT j4
IF e<>Ø THEN4
 a=Ø4
 mult=Ø4
```

```
FOR j=Ø TO 74
IF fil(k(j))<>Ø THEN4
   a=a+k(j) \neq
   IF fil(k(j)) <> e THEN mult=14
  END IF4
 NEXT
      14
 IF mult=1 THEN4
  PRINT "Multiple errors .. look around: "4
 ELSE 4
  PRINT "error at: "4
 END IF4
 a=a-1 4
 ln=INT(a/8):it=a-ln*84
 PRINT "Line"; 1n+1; " Item"; it+14
 STOP4
ELSE4
 PRINT "writing file ... "4
 OPEN "ram: VLook" FOR OUTPUT AS #14
 a=Ø4
 FOR j=1 TO p4
  IF j<>k(a) THEN4
   PRINT#1, CHR$(fil(j)); 4
  ELSE4
   a=a+14
  END IF4
 NEXT j4
 CLOSE 14
 PRINT "File complete."4
END IF4
                                             0
4
```

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Readers Feedback

The Editors and Readers of COMPUTE

If you have any questions, comments, or suggestions you would like to see addressed in this column, write to "Readers' Feedback," COMPUTE!, P.O. Box 5406, Greensboro, NC 27403. Due to the volume of mail we receive, we regret that we cannot provide personal answers to technical questions.

#### **A Volatile BASIC**

I have a Commodore 64. I want to copy the BASIC ROM to the underlying RAM (locations 40960–49151). Currently, I'm doing this with a FOR/ NEXT loop:

#### FOR I = 40960 TO 49151:POKE I,PEEK(I):NEXT

This loop requires a little more than 30 seconds to execute. Can you show me a faster way to move BASIC?

Dan Sanderson

The fastest way to move large blocks of memory is to use the 64's native language—6502 machine language. Figure 1 is a machine language program that moves BASIC from ROM to RAM.

You'll probably want the program in the form of a BASIC loader:

 FOR I = 679 TO 702:READ A:POKEI,A:NEXT
 DATA 169,0,133,251,168,169,160,133
 DATA 252,162,32,177,251,145,251,200
 DATA 208,249,230,252,202,208,244,96

Type in this program and type RUN.

#### Figure 1

When you're ready to move BASIC, type SYS 679. The cursor should reappear in about one second. BASIC has been copied to RAM.

Once you've moved BASIC into RAM, you can modify it as you wish. To put your modifications into effect, you must turn off the BASIC ROM with this statement:

#### POKE 1, PEEK(1) AND 254

There are many interesting modifications to BASIC that you can make. You could use a FOR/NEXT loop to search for certain BASIC messages or command names.

As a sample modification, let's change the question mark used by the INPUT statement into a colon: POKE 43846,58. The ASCII value for a colon is 58. Location 43846 normally holds the number 63—the ASCII value for the question mark.

Sheldon Leemon suggests other changes in Mapping The 64, from COM-PUTE! Books.

#### **NEW Does Work**

In recent issues of COMPUTE! magazine, the wrongful statement has been made that Atari BASIC does not clear the VNT (Variable Name Table) when NEW is typed. Actually, it does.

I have no doubt that programs of the complexity of Laser Chess and Biker Dave need to be LISTed and ENTERed, not because of left-over variables, but rather because people tend to inadvertently insert variable names while typing or editing or by "dry running" an unfinished program to see how it's doing.

Jesse Warford

We stand corrected. NEW does indeed effectively clear the variable table. The procedure we have given does work, but users may choose to type NEW after LISTing the program, rather than turning the computer off.

#### 1541/1571 Dual-Drive System

It is not necessary to see this in print, but if you could help me, I would appreciate it very much. I have a 128 and currently two disk drives—a 1541 and a 1571.

My problem is how to set up the 128 so that every time I turn it on with two separate disk drives—my 1541 and 1571—the system will behave like my IBM PC, seeing the disk drives as separate devices. Do I have to run the DOS Shell program every time to set up a two-drive system? I am also thinking about buying a second 1571. How can I set up a two-drive system with two 1571s?

#### T.J. Bynum

Setting up a two-drive system with a 1541 and a 1571 is easy. You'll use the 1541 as device 8—its default—and configure the 1571 as device 9. It's easier to set the system up this way—with the 1541 as device 8 and the 1571 as 9—because one

inguie							
02A7			FOUNTER	*=		679	; ROUTINE LOCATION
02 4 7		PACIC	EQUATES			10000	BLOKE BOLK
02A7		BASIC		=		40960	; BASIC ROM
02A7		ZP		=		251	; FREE ZERO PAGE ADDRESS
		;					
02A7	A9	00		LDA	# <basic< td=""><td></td><td>; POINT ZP TO START OF BASIC, LOW BYTE FIRST</td></basic<>		; POINT ZP TO START OF BASIC, LOW BYTE FIRST
02A9	85	FB		STA	ZP		
02AB	A8			TAY			; AT THE SAME TIME, PUT 0 IN .Y
02AC	A9	A0		LDA	#>BASIC		; THEN HIGH BYTE
02AE	85	FC		STA	ZP+1		
02B0	A2	20		LDX	#32		; X IS PAGE COUNTER (MOVING 32 * 256 BYTES)
02B2	B1	FB	LOOP	LDA	(ZP),Y		; MOVE A BYTE FROM ROM
02B4	91	FB		STA	(ZP),Y		; TO RAM
02B6	C8			INY			; NEXT BYTE
02B7	D0	F9		BNE	LOOP		; CONTINUE FOR 256 BYTES
02B9	E6	FC		INC	ZP+1		; FOR NEXT PAGE
02BB	CA			DEX			; DROP PAGE COUNTER
02BC	D0	F4		BNE	LOOP		; AND CONTINUE FOR 32 PAGES
02BE	60			RTS			; WERE DONE.

of the drive's device numbers must be changed to 9, and the 1571 is much easier to change than the 1541.

To change the device number of the 1571, first look in Appendix A of the 1571 Disk Drive User's Guide that came with your drive. This section describes how to change the device number. Briefly, to configure the drive as device 9, you move the left DIP switch at the rear of the drive down. After making this adjustment, make sure the drives are chained together, and you're ready to go. Your system should now boot up and recognize the two drives as separate devices.

If you buy another 1571 and want to configure the two 1571s as a two-drive system, simply use the new drive as device 8—its default—leave the other drive configured as device 9, connect the two, and your system's all set.

#### Super SpeedScrip?

I have an Atari computer, and I would like to know if "Atari XL/XE Super Editor" from the June 1987 issue of COMPUTE! can be modified to work with SpeedScript.

Susan Thompson

"Super Editor" is a handy editing utility for any program that uses the E: screen editing device. This includes BASIC and certain other programs. SpeedScript does not use the E: device—it has its own routines for handling keyboard entry and text displays. This allows SpeedScript to quickly handle word wrap, cursor movement, and scrolling. It also makes Speed-Script incompatible with any programs that depend on the E: device. So there is no way to make Super Editor compatible with SpeedScript.

#### **Punctuated Numbers**

I recently purchased a Tandy 1000SX computer. I have been working in BASIC, and I've noticed that when I list my program, any six-digit number has an exclamation point after it (123456!), and any eight-digit number has a pound sign after it (12345678#). To make the matter worse, these signs are also printed out when I make a hard copy listing of my program.

Could you please explain the reason for these punctuation marks?

Philip G. Crompton

Modern BASICs often have several ways to store variables. Numbers with few significant digits can be represented more compactly than numbers with more significant digits. When you type in a number, BASIC decides how much space it will need to store the number. It then places a suffix after the number to indicate which format it has used. The following table shows the types of numeric variables available in BASICA, GW-BASIC, and Amiga Basic, and the number of bytes each format requires for storage:

- % integer (two bytes)
- ! single-precision floating point
  (four bytes)
- # double-precision floating point (eight bytes)

These punctuation marks can be helpful. If you store a double-precision number in a single-precision variable, your calculations are likely to be less accurate than they would be if you used a double-precision variable.

#### **Trig Scales**

I own an Apple II and am working on a program that uses hi-res graphics. I'm trying to use SIN and COS to draw a line from the vertex of a circle to a point on its circumference. Here's my program:

#### 10 HGR

20 HCOLOR = 7

30 HPLOT 140,70 TO 40 * COS(45) + 140, 40 * SIN(45) + 70

This should draw a line from the point (140,70) to another point 40 pixels away at an angle of 45 degrees. It doesn't.

Sam Moelius

You have the right idea, but most computers don't do their trig functions in degrees—they do them in radians. To convert from degrees to radians, multiply by pi (3.14159265) and divide by 180 (or, equivalently, just divide by 0.017453312). Here is a corrected version of your program:

10 HGR

20 HCOLOR = 7

25 PI = 3.14159265

30 HPLOT 140,70 TO 140 - 40 * COS (45 * PI/180),70 - 40 * SIN(45 * PI/180)

#### **DIR Power**

When reading a directory on my PC, the file listing sometimes continues on for more than a full screen and it becomes impossible to read all the filenames before they are out of sight. Is it possible to stop this scrolling?

Also, on a keyboard that doesn't have a PrtSc key to print the screen, is it possible to get a printout of a directory listing?

#### Peter Richie

There are three ways to stop your directory listing from scrolling. The first is to press CONTROL-S to stop scrolling and to press any key to resume scrolling.

A second method is to append the switch /P to the DIR command like this DIR /P

This pauses the directory listing between screenfuls of data.

The third option is to use the DOS filter MORE in a command line like the following:

#### DIRIMORE

This command will give essentially the same results as DIR /P discussed above.

While on the subject of directories and filters, there's another very useful DOS filter called SORT. With it, you can sort a directory (or any other file) on any field you wish. To create a sorted directory that will pause its display after each screen, use the following command:

#### DIRISORTIMORE

Please note that you can't use the /P option to pause the directory when using the SORT filter. Also, when using filters, DOS creates a temporary file on your disk. There must be enough room on the current disk for the temporary file, and the disk cannot be write-protected.

The SORT filter can work wonders with directories. Since DOS is very rigid about the directory's format, you can tell SORT to begin sorting in certain columns and produce a directory sorted just the way you want. To sort a directory and specify a column in which to begin sorting, use a command of the form

#### DIR | SORT / + n

where n is the column number on which you want the sort to begin. Here are the important column numbers for the standard DOS directory:

- filename
- 10 file extension
- 24 date 34 time
- 39 meridian (a.m. or p.m.)

If you want to view a directory sorted by file extension, for example, and also want the listing to pause after each screen, you would give the following command:

#### DIR | SORT / + 10 | MORE

It's easy to obtain a printout of your directory without using a PrtSc key because of a DOS mechanism called piping. Piping allows you to redirect the output of a program—like a directory listing—to any file or device you wish. To send the output of the above directory command to the printer, all you need to do is append > PRN to the command. The > tells DOS to redirect output (you can redirect input with <) and PRN tells it to send the output to the printer.

So, the entire command would look like this:

#### DIR | SORT / + 10 > PRN

Notice we didn't use the MORE filter. When sending output to a diskfile or printer, pauses after each screen are unnecessary.

With DOS's filters and redirection, the simple DIR command becomes a powerful tool.



## Microscope

Sheldon Leemon

IBM wanted to celebrate the success of its PS/2 line at the fall COMDEX show, so it proclaimed that it had shipped the one-millionth PS/2 computer and rolled out a big ad campaign based on the theme *Thanks a million*. Industry pundits quickly scrambled to determine just what *shipped* meant.

The consensus of opinion among these party-poopers was that IBM had built a million units of the new models and had sent them to dealers, but that maybe as many as a third of them still actually hadn't been sold. This technicality didn't stop IBM from flying the dealer who sold the millionth unit to Las Vegas for the show.

How could even IBM, with all of its computing power, figure out exactly which dealer sold the millionth computer? Their rather pragmatic approach was to have each of about 200 regional sales representatives pick one of their dealers, all 200 of whom were brought to the show on the premise that they had sold the lucky machine. Well, the winner was probably in the group there, somewhere.

#### ****

It wouldn't be an IBM product introduction without rumors of problems with the new machines. First, there was a minor problem with the BIOS of the Model 50 and Model 60 which caused the time to be inaccurate in some situations. This reportedly caused some dealers to conclude that the clocks were bad and to ship back all of their units as defective. IBM issued a quick DOS patch to fix that problem, but the confusion lingers.

Recently, there have been rumors of power-supply problems with the Model 50 and a high overall failure rate for the machines. IBM has issued a firm statement saying that there are no problems with the new machines. Those of you who can remember way back to the AT introduction may recall that a number of users claimed that there were serious hard-drive problems with the machine. IBM denied all such reports. Several publications made intensive studies of the problem, leading to results that were inconclusive at best. By the time these studies were published, IBM had changed hard-drive vendors, and everybody had forgotten about the rumored problems.

#### ******

At the annual World of Commodore show in Toronto, Commodore officials announced that the company had met its goal of an installed base of 500,000 Amigas worldwide by the end of 1987. Part of the reason for this is the tremendous reception of the Amiga 500 in Europe. Over half of the Amigas sold have gone to customers outside of the U.S. Nonetheless, the 500 appears to be gaining momentum here as well. The 2000 has sold so much better than Commodore expected that the machine was unavailable for much of the Christmas selling season.

But, surprisingly enough, the Commodore 64 also appears to flourish. Despite the fact that the Amiga 500 offers ten times the power of the 64 for about a 50percent-higher price, the namerecognition factor generated by an installed base of over ten-million machines obviously still carries some weight. Commodore chairman Irving Gould stated that he could have sold an additional fiftythousand 64C's if he could have produced them in time for Christmas.

The continuing popularity of the 64 in Canada was particularly evident at the Toronto show, where the proportion of interest in the 64/128 as compared to the Amiga was much higher than at similar

#### U.S. shows.

****

Motorola has formally announced the 68030, the most recent addition to the 68000 family of processors used in such machines as the Macintosh, ST, and Amiga. While its predecessor, the 68020, has been likened in power to Intel's 80386 chip, the new processor is said to be two to four times as powerful. Since its instruction set is very close to those of the other 68000-series chips, software compatibility should be good.

The first name-brand machine to use the new processor will likely be the Macintosh. The Mac II already uses the 68020 and probably does not need any significant modifications in order to use the new chip. Insiders say that the 68030 version of the Mac II could show up any day now. Although such a machine would not be cheap, it would rank among the most powerful desktop units available. And though the ST and Amiga line still don't include a 68020 machine, both Commodore and Atari have stated that they intend to use the 68030 in future products.

#### ****

One of the most interesting stories to come out of the recent AppleFest was a statement from Apple that over 200,000 units of the IIGS had been sold so far. This figure is about twice as large as most previous industry estimates.

The reason so many people had underestimated the GS is that a large proportion of sales have been to schools and other institutions. Such sales may not be as visible as retail sales, but they are perhaps even more important to the continued success of the GS. Apple is well aware that large sales to schools today can generate even larger sales for home use in the future.

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Computers and Society

David D. Thornburg, Contributing Editor

## Computers, Writing, And Al

Of all the myriad applications for personal computers, I would guess that, by far, the most popular use is word processing. In the early 1980s, the availability of good word processing programs on micros virtually drove the dedicated word processors from the marketplace. Even though there has been a resurgence of dedicated word processors, there is little question that the personal computer will continue to be king in this application area.

As a writer who feels naked without his computer, I occasionally startle people when I say that I don't use a spelling checker. I thrive on the computer's ability to let me move text around to my heart's content; I enjoy the ability to format my output in any fashion I want, but I don't use the computer to check my spelling or usage.

#### **Casting A Spell**

My reluctance to use spelling checkers has nothing to do with my spelling skills; I make plenty of mistakes. My problem is that spelling checkers don't catch the kinds of errors I commonly make. Many (but not all) of my spelling errors result in other words. For example, *stop* becomes *spot*. A word-based spelling checker is useless in such cases. I would love to have a spelling checker that catches errors like these, but such programs have to be context sensitive.

Another problem with most spelling checkers is that they can lead you to wrong choices. For example, with the word *alot*, most spelling checkers would offer the choice *allot* instead of the correct split into two words, *a lot*. The word *payed* would be even harder to handle since spelling checkers that scan letter by letter would end up with *payer*, and so on, and not offer the correct past-tense form, *paid*.

The complexities of English are

such that a good proofreading tool needs to be based on something far more sophisticated than a word list. It needs to have access to rules of grammar—an ability to deal with phonology, orthography, morphology, syntax, and semantics.

This is a tremendously complex task.

Because of the rule-based nature of much of English grammar, it is appropriate to seek some solutions for this problem in the domain of expert systems—sophisticated programs that are an outgrowth of years of research in the field of artificial intelligence.

#### A Model Emerges

A few months ago, I was privileged to visit with Dr. Robert Arn, the creator of just such a program for the ICON computer.

The ICON is manufactured by Unisys to meet the needs of educational computing in Canada. Dr. Arn designed the ICON, and he holds a doctorate in the field of linguistics. His interests in technology and linguistics came together in a project that has kept him and his colleagues busy for the past three years. During this time, he designed *English1*—a rule-based program that sits in the background of a word processor, ready to offer advice when asked.

To use English1, the user simply selects the text to be analyzed and requests that it be examined. Words that seem incorrect are highlighted. The user can then select any highlighted word and ask for an explanation of what may be wrong. The computer looks for spelling and usage errors and provides as much coaching and advice as it can. The reason for providing extensive coaching (as opposed to simply correcting the error) is that this program is designed to serve as a writing tutor. The goal is to help the writer avoid errors in the future, not just to correct them.

The program version I used worked with a base of rules for all but the semantic level of language. Dr. Arn is working in that area now. Using our previous example, it correctly identified that *alot* should be *a lot* and that *payed* should be *paid*. This latter error was detected by first catching the misspelling, noticing that the *-ed* ending may imply a past-tense form, and then exploring rules for forming past-tense forms.

In addition to providing an intelligent spelling checker, *English1* also examines the text for words that present usage problems for some writers, for example, *fewer/ less, seasonal/seasonable*, and so on. Consequently, this program can serve as a writing coach to a student who is working on an essay. *English1* does not make any changes in the author's text; it makes only observations and suggestions.

#### English1 Is RAM Tough

In the form I saw, *English1* takes five megabytes of disk space. The new version that includes the ability to deal with semantic issues will be distributed on CD ROM since it is going to use about 500 megabytes. These sizes indicate just how complex natural languages are.

Even though Unisys is starting to sell the ICON in the U.S., it is targeted to classrooms, not businesses. Consequently, it is unlikely that we will have access to tools as sophisticated as *English1* for some time. On the other hand, the fact that *English1* exists at all proves that good proofreading tools can be created to run on microcomputers. Continued work in this area will result in programs that run on the machines we have on our desks.

Until then, I'll have to be content to do my grammatical analysis with the one computer that outstrips them all—the human brain.© The Beginner's Page

### Making Music With BASIC

I enjoy programming music on the computer. Since I am a former piano teacher, I have been able to use the computer for tutorial and drill programs. With the computer's exact tones and timing, I also use the computer to play written music so I can hear how it's supposed sound.

C. Regena

I would have liked to present a music program this month—however, sound commands are different among the various versions of BASIC. Each computer has its own special music features. So my advice is to read the manual that comes with your computer. Here, I'm going to review some of the more common BASIC sound commands. Unfortunately, because many early versions of BASIC do not support sound, these examples do not work on the Commodore 64 or Apple II family of computers.

#### Sounding Off

BEEP—available on the Amiga and IBM PC/PCjr—is probably the easiest command to use when you want to produce a sound. Some computers, such as the Apple II, Atari ST, and Commodore 128, use PRINT CHR\$(7) to produce a bell or beep sound. The Atari eight-bit computers use PRINT CHR\$(253). Whenever you want a short tone, such as a prompting tone, you can use BEEP. You may also use it for a game sound.

Most computers have a SOUND command, although the parameters vary from computer to computer. Here are some examples:

Amiga SOUND frequency,duration,volume,voice Atari

SOUND voice, note, tone, loudness

Atari ST SOUND

voice,volume,note,octave,duration Commodore 128

SOUND voice, frequency, duration

IBM PC and compatibles SOUND frequency, duration IBM PCjr with Cartridge BASIC SOUND frequency,duration,volume,voice

The Commodore 128's SOUND command includes several optional parameters, such as waveform and pulse width, that are not listed above. In each case, parameters may be numeric constants or numeric variables, and there are certain limits for each parameter.

The Amiga and IBM SOUND statements use frequency numbers in cycles per second, or hertz (Hz), that produce a certain tone—frequencies with which many musicians are already familiar. For example, 440 Hz create what we hear as the note A.

Duration is a number often denoting the number of "clock ticks" that a particular sound lasts. You may need to experiment a little to see which numbers correspond to the timing you want. Because the eight-bit Atari SOUND command does not have a duration parameter, you must time the sound's duration yourself, using something like a FOR-NEXT loop. To turn the sound off with the Atari, use a SOUND command specifying a volume of 0.

Here is an example of how you can use SOUND to write music.

100 REM AMIGA, IBM PC/PCjr AND COMPATIBLES 4 110 SOUND 523,204 120 SOUND 659,204 130 SOUND 784,204 4 1000 REM EIGHT-BIT ATARI 105 DURATION=90 110 FOR I=1 TO DURATION:S OUND 0,121,10,15:NEXT I 120 FOR I=1 TO 10:NEXT I 120 FOR I=1 TO DURATION:S OUND 0,96,10,15:NEXT I 130 FOR I=1 TO DURATION:S OUND 0,81,10,15:NEXT

```
135 FOR I=1 TO 10:NEXT I
140 SOUND 0,0,0,0
```

100	REM	ATA	ARI	ST	- ST	BASIC
110	SOU	DI I	, 15	5, 1,	4,20	
120	SOUN	ND 1	, 15	5,5,	4,20	
130	SOUN	ND 1	, 15	5,8,	4,20	
100	REM CO	DWW	DOP	(E) T	.28	
110	SOUND	1,	429	91,	20	
120	SOUND	1,	540	57,	20	
130	SOUND	1,	643	sø,	20	
		-				

The voice parameter is available on computers that have more than one voice—computers on which you can hear more than one note at a time. For example, here's how to play a chord using three voices:

100 REM AMIGA4 110 SOUND 523,30,10,04 120 SOUND 659,30,20,14 130 SOUND 784,30,30,24 100 REM EIGHT-BIT ATARI 105 FOR DURATION=1 TO 90 110 SOUND 0,121,10,15 120 SOUND 1,96,10,15 130 SOUND 2,81,10,15 140 NEXT DURATION 150 SOUND 0,0,0,0 160 SOUND 1,0,0,0 170 SOUND 2,0,0,0 REM ATARI ST - ST BASIC 100 SOUND 1,15,1,4,10 110 SOUND 2, 15, 5, 4, 20 120 SOUND 3, 15, 8, 4, 30 130 100 REM COMMODORE 128 110 SOUND 1, 4291, 60 120 SOUND 2, 5407, 60 130 SOUND 3, 6430, 60 100 REM PCjr WITH CARTRIDGE BAS IC 105 SOUND ON 110 SOUND 523, 30, 10,0

120 SOUND 659, 30, 10, 1 130 SOUND 784, 30, 10, 2

#### **Playing Music**

The IBM PC/PCjr and compatibles have a PLAY command. (The Commodore 128 has a PLAY statement as well, but the options are quite different.) This command can be used to play simple melodies using the letter names of notes—*A*, *B*, *C*, *D*, *E*, *F*, and *G*. As you get more experienced, you will find that there are more options in the PLAY command. There are certain default values for the PLAY command, but you can change them by adding options. You may add a sharp to a note by using the character # or +, and you may add a flat by using the – character. The octave number can be specified with *O*, such as O3, indicating the middle-C range. (Make sure you use the letter *O* and not the number 0.) You may also change the octave by using > to go to the next higher octave and < to go to the next lower one.

The command PLAY "MN" plays normal notes (a slight pause between notes). The string "ML" indicates legato, or notes smoothly connected; "MS" plays staccato notes.

You use *L* to indicate the length of notes. Actually, you indicate what fraction the note should be. For example, L1 is a whole note, L2 is a half note, L4 is a quarter note, and L8 is an eighth note. The L option affects all the notes that follow. L8C plays C as an eighth note. A shorter form is to simply follow the note name with a number and not use the L. For example, C8 also indicates C as an eighth note.

*P* is used for a pause or rest, and you specify the length just as in the L option. P4 is a quarter-note rest.

There is a default tempo, but if you want to go slower, use T followed by the number of quarter notes per minute, such as T88. You may change the volume by using Vfollowed by a number.

I like to use variables in the PLAY statement. When you use a numeric variable, you need to use the equal sign before the variable name and a semicolon after the variable name. For example, PLAY "O=H; GEC" plays the notes G, E, and C in the octave specified by the variable *H*.

You may define a string variable to be a series of notes and then use that string in the PLAY command. To execute a string variable, use "X". For example, PLAY "XA\$;" plays the notes defined in string A\$. Note that there is a semicolon after the string name. Here is an example of PLAY using variables. The octave is set using a FOR-NEXT loop, and the actual notes are stored in S\$.

100 REM IBM PC/PCjr AND COMPATI BLES

110 S\$="CDEFGAB" 120 FOR C=1 TO 6

130 PLAY "0=C; XS\$;"

14Ø NEXT C

You may use string variables for storing musical phrases. For example, you might set up A\$ for the first musical phrase, B\$ for the second phrase, and C\$ for the third phrase (have you ever heard of ABCA format?). This way, you can piece your music together. Here is a simple example:

100 REM IBM PC/PCjr AND COMPATI BLES 110 A\$="GGFE" 120 B\$="EEFG" 130 C\$="FEDC"

0

140 PLAY "XA\$; XB\$; XC\$; XA\$;"

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**IBM Personal Computing** 

Donald B. Trivette

Once each year I clean my cupboard of all the stuff that is good and worth talking about, but for one reason or another didn't make it into a column. December or January is a logical time to do this—year end and all that—but I'm late, as usual. So here, in the March issue, is a stew concocted from two of last year's left-over goodies.

#### The Bible As Data

Bryan Moore is an inventor and entrepreneur who developed a major piece of ophthalmological equipment. After he sold his invention to a large company, he turned his energies and talents to his passion—the study of the Bible.

The King James version of the Holy Bible was published in 1611, during the reign of James I of England. There are hundreds of editions of this book in hard-copy form and maybe a dozen computerized versions. But when Bryan Moore investigated biblical computer software, he was disappointed with what he found and thought he could do better. He did. The result is a product called *God Speed* distributed by Kingdom Age Software (3368 Governor Dr., Suite F-197, San Diego, CA 92122).

God Speed can locate any word or phrase in the 66 books of the Bible-both Old and New Testaments-in less than three seconds. This incredible speed-other software takes as long as 30 minutesis due to a unique indexing and searching technique Moore devised just for this application. For example, you type "an eye for an eye," and in the twinkling of your own eye the screen displays the three locations where that is found. It doesn't just tell you that it's in Matthew 5:38, First Corinthians 15:52, and Exodus 21:24, but it shows you the phrase within the chapters and verses.

## **Computer Stew**

If you know your Bible, you are no doubt astonished and puzzled that "eye for an eye" appears in First Corinthians. And this points out one of the few weaknesses of *God Speed*. It searches and locates the words that you enter, but it doesn't require that they be consecutive within the verse. The screen shows that First Corinthians 15:52 says, "... in the twinkling of *an eye*, at the last trump: *for* the trumpet shall sound...." The verse meets all requirements—it contains "eye," "for," and "an"—so *God Speed* reports it as a match.

Unlike some of the other software on the market, *God Speed* cannot perform sophisticated and lengthy searches based on logical ANDs, ORs, or NORs, but the program is so fast and simple to use that this is easy to forgive. You can manually toss out the verses that don't meet your criteria—and you might learn something in the process.

A menu bar across the top of the screen presents the program's four command choices: *Help, Find, Map,* and *Exit.* Press F for Find and then enter the word or words you want to look up. Press M for Map, and the program will show you a distribution for a word—"Love," for example, appears 310 times in 280 verses. You can jump immediately to any book, chapter, or verse by entering its name: GEN 1:1 takes you to the familiar "In the beginning...."

God Speed is distributed on seven 5¹/₄-inch disks and requires a hard disk with 2.5 million free bytes to install; the program uses 256K of RAM memory. If you have a color display, the program will display the search words in blue and the words of Jesus in red. A smaller, less-expensive version (\$27) covers just the New Testament and can be run from a floppydisk-based computer.

#### **Apple And Pepsi**

If you liked Lee Iacocca's book about his rescue of Chrysler—and enough of you did to keep it on the best-seller's list for several months—then you'll love John Sculley's book, *Odyssey*, about his adventures at Pepsi-Cola and Apple Computer.

Sculley began his business career as a fast-track executive at Pepsi. He was a shoo-in for the top job but was lured away to become President of Apple Computer by Steven Jobs, one of Apple's cofounders.

Sculley relates many wonderful inside stories about Pepsi and Apple. He tells how he once selected Coke over Pepsi in a blind-taste test; how he first met IBM's legendary Tom Watson, Jr., who swooped out of the clouds piloting his own stunt plane; how Big Blue sprays the apple trees at its corporate headquarters so they won't bear fruit and spoil the lawn.

More importantly, Sculley gives us an insider's view of the running of Apple Computer, how it stumbled and almost failed; and he tells of his painful rescue that cost him his friendship with Jobs. You'll be privy to the clashes in the board room and at the ad agency as Apple positioned itself to challenge IBM.

Even if you know nothing about computers, you'll enjoy this book—it's a good story, well told. Although at \$21.95 (Harper & Row, 450 pages), you might want to wait for the paperback edition and use your savings to buy my book, *A Quick and Easy Guide to Dow Jones News/Retrieval*, from COMPUTE! Books (\$10.95). It's not as long nor as entertaining as Mr. Sculley's, but it might help you locate the next Apple Computer. The World Inside the Computer

Fred D'Ignazio, Contributing Editor

### Computers Of The Future

In the November 1987 issue of COMPUTE!, I challenged readers to imagine what computers would be like in the future. Many readers wrote me, and I'd like to share some of their images with you.

#### Wired To The Brain

The most popular image was of computers directly wired to the human brain. Georg Zimmer of Watertown, Wisconsin, wrote that "the interface will look like a headband and will plug into your computer." He says the computer won't need a monitor since its sounds and images can be piped directly into the brain. It won't need a keyboard since you'll just need to think of something, and it will go directly into the computer.

Electronic entertainment will be much more realistic. In an adventure game, for example, Zimmer says, "It would be like you were actually crawling across a smoky battlefield. You could smell the smoke, feel the pain, hear the explosions, and taste your rations (yecch!)." Georg goes on to predict that "this device means the end of TV. Why watch Magnum P. I. when you can be Magnum P. I.?"

#### A New Birthright

C. E. Deckard predicted that "direct neural hookups will allow the computer to process visual and aural information for blind and deaf people. It's only a short step from that to 'a computer in every head' as the birthright of every true American."

Deckard's line of reasoning produced some interesting predictions. He forecasted that teachers will become a thing of the past since education in the future will consist of periodic "curriculum downloads" from a school computer to students' neural and home computers; and since the greatest teachers known to man will be fabricated as expert systems on silicon chips and available to everyone via broadcast or as a "whim purchase" at the local 7-11.

The publishing industry, too, according to Deckard, is in a precarious position. "CD-ROM, CD-I, and WORM are clanging the death knell for the publishing business as we know it," he wrote. "Who can afford to keep (as I do) yards and yards of shelf space for printed books, when the entire contents of my library could be handled on a very small number of optical disks and include search algorithms that are a bunch better than my weary gourd?" As traditional publishers struggle or disappear, a new "clandestine cottage industry" will emerge which will use hi-res scanners to translate printed books and magazines into computer format.

#### **Beneath The Skin**

According to reader Wally Frisbie, computers in the future will invade the cosmetics industry: "They'll clear up your skin. And that's just the beginning." Wally foresaw a computer-brain interface in the form of microchips "implanted just beneath the skin in the head."

He predicted that home computers in the future will monitor the electrical signals emitted from a person's body cells and be capable of curing any illness while a person slept by altering the electrical signals and returning them to a normal, healthy pattern.

#### The Sensual Computer

Lucy Valka, of Haslett, Michigan, imagined a writer and an artist's computer of the future. According to her, "Since the computer can translate and process information so well, let's give it eyes, ears, and speech. For eyes, the computer needs two color cameras. They need to have auto focus, and low lux, maybe even infrared and heat sensitivity.

"For musical applications, we should be able to record in quadraphonic sound from an orchestra or marching band." Lucy called for pocket-size computers which writers could use to record their ideas while they were walking down the street. The little computers would upload their information into the writer's main computer which Valka said would have access to all the libraries in the world and which could "multitask when a writer has a leap of imagination."

Almost everyone mentioned that computers in the future should have artificial intelligence (AI), but no one agreed on what that should be. James Whitmore, called for RI (Real Intelligence) instead of AI.

Whitmore even came up with an entire system which he called DORIS, based on VOS (Voice Operating System). DORIS would get her input not from keyboards but from an amazing array of scanners—including sonic scanners, motion scanners, video scanners, impulse scanners, analytic scanners, and energy scanners. DORIS would not use a monitor. Instead she would use a variable beam generator to produce a "virtual screen" made of colorful 3-D holograms.

#### A New Attitude

Ramona Boger, an accountant in Spokane, Washington, didn't ask for her future computer to be intelligent, just forgiving. She wanted her computer to keep letting her make mistakes without complaining or mocking her. "Ten years from now," she writes, "I hope my computer will not change its attitude toward me, and will never tire of me. The programs, the speed, the versatility is bound to be exciting and productive, but the machine will still be my best friend." Telecomputing Today

## The Trojan Wars

Telecomputing and the sharing of public domain data is a way of life for hundreds of thousands of computer users. Unfortunately, a handful of miscreants seem to want to share their misery with the rest of us as well. These antisocial folks write programs intended to wreak havoc on innocent users and their computer systems. Such programs, which masquerade as useful code, are often referred to as "Trojan horses" and have been around for years. As the popularity of modems and downloading public domain programs from computer bulletin boards and information services increases, the chances that the average user will encounter a Trojan Horse also increases.

Arlan R. Levitan

A nondescript BASIC statement for the Commodore PET is generally credited as being the first Trojan program. The one-line program could actually damage the system's hardware, due to a design flaw in the PET. Since then, most Trojan programs have concentrated on corrupting data stored on disks.

One recent Trojan horse program was even widely rumored to have been created by a less-thanresponsible copy-protection firm. The Trojan's description professed that it would remove a particular proprietary copy-protection scheme. Upon invocation, the program would prompt the user to insert the original copy-protected disk and then would erase all disk space that the system could access. After the erasure, a stern lecture on the evils of disobeying the terms of software licenses was displayed.

#### **Computer Virus**

"Viruses" are a new variant of Trojan Horse programs that are more difficult to detect and control. When virus programs are run, they typically inject a lethal bit of code into a file or disk location used by your computer's operating system. Viruses even have an "incubation period" which is controlled by a counter within the infecting code. During incubation, the virus will attempt to spread itself to any media that is inserted in or attached to the infected system.

The first microcomputer virus appeared late in 1987 and managed to infect thousands of Amiga computer systems. Thankfully, the Amiga virus was relatively benign. The Amiga virus's mission in life is to write itself to the hidden boot block on Amiga floppy disks, and, after infecting a number of disks, flash the message "Your computer has a virus" on the user's screen. Shortly after the virus was detected, a "cure" program was written that could detect and remove the virus from infected disks (for more on this topic, see "The Amiga Virus," elsewhere in this issue).

It didn't take long for a new, more virulent bug aimed at IBM PCs and compatibles to show up. The PC virus inserts itself onto one of DOS's disk files and goes into incubation. It waits until it replicates itself four times and then attempts to wipe out every file it can lay its binary fingers on.

#### **How To Protect Yourself**

So what is the average telecomputer to do? While some may choose to abstain completely from downloading or accepting public domain program files from acquaintances, such behavior is contrary to the norm of the computing community at large. If forswearing shared data is not compatible with your computing style, there are a number of precautions you can take to minimize the danger involved.

1. Know where you're getting your data. Restrict your downloading activity to commercial information services and bulletin boards

that you know and trust. While dialing into new and far away systems is a lot of fun, it's often impossible to tell how closely system operators screen their files.

2. Try to be selective. Resist the temptation to immediately grab every new program that comes available. If you insist on being a downloading pioneer, be prepared for the occasional arrow in the back.

3. Take steps to protect your system. Make liberal use of writeprotect tabs on your floppies. Hard disks usually cannot be physically write-protected but can often be logically protected by "anti-Trojan" programs that inhibit disk write activity or intercept updates to critical operating system files (ironically, one such "anti-Trojan" has turned out to be a cleverly disguised destructive program).

4. Backup is your best defense. Backup data regularly and keep multiple backups to insure that if you do encounter a virus, you can fall back to a clean operating environment. Keep the original disks from commercial publishers in pristine (write-protected) condition as a base to build upon if all else fails.

All warnings considered, it's important to keep the magnitude of the problem in perspective. In over ten years of regular telecomputing, using many different types of systems, I have encountered only a single Trojan horse program. While the experience of having one of my hard disks wiped clean in early 1986 was decidedly unpleasant, the would-be catastrophe was mitigated to an inconvenience by the availability of a system backup I had luckily made the day before.

Even so, this Achilles has traded his thongs for combat boots and remembers to beware of geeks bearing gifts.

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## Third-Party Hardware And Software

In my last column, I discussed the new Amiga products Commodore was showing at the fall COMDEX. There are, however, many new products on the horizon from thirdparty developers as well.

In the hardware category, NewTek is developing a product to rival Commodore's Professional Video Adapter for the Amiga 2000. Dubbed the Video Toaster, this product will, like the PVA, include a realtime color digitizer, genlock interface, and field store for freezing single frames from live video. In addition, NewTek's board will come with software for realtime digital special effects.

For example, NewTek demonstrated a live video image enclosed in a tumbling frame. They also showed a live video image being mapped around a sphere and other special effects like pixelization. At about \$800, the Video Toaster should challenge the PVA when it appears sometime in the second quarter of 1988. NewTek is working on a number of new products, including a rumored Digi-View II a \$300 color frame grabber.

#### A Faster Amiga

Finally Technologies was showing off its Hurricane Accelerator board, a 68020 card for the 1000. This card plugs into the 68000 processor slot, and it provides a 14-MHz 68020 processor and 16-MHz 68881 coprocessor. An optional board holds up to two megabytes of 32-bit dynamic RAM. Finally Technologies claims that the Hurricane runs all standard Amiga software packages from four to eight times normal speed. The board will be available for the 500 and 2000 as well and will cost approximately \$1,000 including the 68020 and 68881 chips. The optional 32-bit memory will also be in the neighborhood of \$1,000. Finally Technologies also

displayed the FourInOne expansion box for the 1000, which includes a DMA SCSI controller, 512K of fast RAM, and a clock/ calendar for \$700. Finally Technologies expects to sell versions of this box for the 500 and 2000, which would add to the list of hardware manufacturers making DMA SCSI controllers for the new machines. This list includes Phoenix, Pacific Peripherals, and Supra.

In another encouraging hardware development, Progressive Peripherals came out with the first third-party floppy drive for the Amiga. The ProDrive external drive is less expensive than the Amiga 1010, quieter, and quite smallonly a bit larger than the bare drive itself. It also comes with a longer cable than the Amiga drive, making it more convenient for use with the 500. However, unlike the Amiga external drive, this one has no passthrough for additional drives, so it must be the last drive in the chain. This should present no problem for owners of the 500; the 500's power supply is really not meant to support more than one external drive.

The small power budget of the 500 means that owners of that machine should be careful about the peripherals they add. Low-power devices like the Digi-View digitizer and audio digitizers should work, but Commodore does not recommend use of higher-power boards, like internal memory cards which take their power from the 500. While some power supplies may have enough power to support these cards, Commodore does not guarantee that future supplies will.

To be on the safe side, owners of the 500 should look for peripherals that come with their own power supplies. One such add-on is the Byte Box, from Byte-by-Byte. This \$300 (0K) memory-expansion module plugs into 500's external bus connector and accepts 256K RAM chips for expansion from 512K to two megabytes of fast memory. Byte-by-Byte has made it very easy for the user to add memory chips to the Byte Box. They've even included a diagnostic program that displays the exact location of any chips that are bad or are improperly installed.

#### **New Software**

There's plenty of new software in store for Amiga owners as well. Progressive Peripherals was previewing Superbase Professional, a powerful new version of its popular database. It adds such features as keyboard macros, a database programming language, a forms editor, and a text editor with mail-merge. These new features mean that you can design a screen display that mixes data fields from separate, linked databases, and that mixes text with graphics on the same screen. Reports can be designed graphically onscreen. You can even design your own pull-down menus to replace the standard Superbase menus, and you can custom-tailor data-entry screens. Superbase Professional appears to be worth the wait.

Some familiar products have taken on a new look and/or new distributors. ITC, of *Textcraft* fame, had been working on *DeluxeWrite* for Electronic Arts but decided to market it as *KindWords* through its own subsidiary, the Disc Company. This package is like an enhanced version of *Textcraft Plus*, featuring a spell checker, graphics capabilities, and detailed graphics printer fonts.

Softwood has added a word processor to its *File* program, which will now be distributed by Brown-Wagh as *Write and File*. Brown-Wagh has also announced that they will soon release *Publisher Plus* to replace *Publisher 1000*. The new version will support laser printers and will not be copy-protected. ©



## **Snooping Into Your Disks**

Admit it: Most of us treat computer disks like a magician's silk top hat. We toss a chunk of information into the hat, trusting that it will reappear when needed. When that time comes, we perform the right incantation, and—presto—changeo! The same chunk of information recombobulates itself as if by magic.

If it didn't happen so often and so reliably—this process might seem quite remarkable. We create collections of information called files. A file can be anything from the text of this column, to a dazzling arcade game, to a digitized image of your Uncle Charlie whittling on his front porch. Those files are stored as electromagnetic patterns of ones and zeros on circular sheets of plastic. By reading those patterns from a whirling disk, the computer recreates the file in its original form.

#### The Veil Removed

This month's program lets you pull aside the veil and peer directly into a disk's individual sectors. It won't make you a GEMDOS expert overnight, but with this program and a decent reference book, you'll have the basic tools for learning a lot about how ST disk files are put together.

By the way, if you're queasy about tampering with disk files, you can be reassured that this program poses absolutely no danger. It can *read* exactly what's on any sector of a disk, but it can't change what's contained there. So you can use it without risking the loss of valuable information.

The program, DISKPEEK.BAS, is written in *GFA BASIC* with lots of comments to make it easy to translate into other languages. When you run the program, it prompts you to enter the track and sector (see below) you want to examine. If you enter an illegal value, the program puts up a warning and invites

#### Typical Sector Display

Track: 2 Sector: 1 Bytes 0-255 43 88 88 88 88 00 00 ...GfABASIC..... 8888: 80 82 47 66 41 42 41 53 49 0010: 00 52 00 00 00 70 00 00 00 70 00 00 70 00 00 .R...p...p...p. .p...p...p...p... 0030: 00 8E 00 00 00 8E 00 00 8E 00 00 8E 00 00 8E 00 00 ................ .h...h...h...h. 0040: 00 8E 00 00 03 88 00 00 07 EA 00 00 08 3E 00 00 0050: 08 68 00 00 08 68 00 00 08 68 00 00 08 68 00 00 0060: 08 68 00 00 08 68 00 00 08 68 00 00 08 74 00 00 0070: 08 74 00 00 08 74 00 00 08 74 00 00 08 74 06 46 .h...h...h...t. t...t...t...t.F LOPRD. DRVNUM. SID 0080: 4C 4F 50 52 44 06 44 52 56 4E 55 4D 07 53 49 44 

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Press SPACE for bytes 0-255 of this sector RETURN for bytes 256-512 of this sector ESC for a different track and sector CTRL-SHIFT-ALT to quit

you to try again. A legal entry is rewarded by a sector display similar to the accompanying figure. Since a disk sector contains too many bytes to display on the screen at once, the program shows half of a sector at a time, letting you flip between the first and second halves by pressing a key. Press the Escape key to view a different sector.

#### The Basic Scheme

Knowing something about disk organization will help you understand what this program shows you. ST disks, like all others, are organized in circular, concentric tracks. There are 80 tracks in all, numbered 0-79. Each track is divided into nine 512-byte sectors, which are numbered 1-9. If you multiply these numbers (80 * 512 * 9) you come up with 368,640 (360K) bytes, the total amount of space available on a single-sided ST disk. A double-sided disk has information on both sides of the disk, and stores twice as much: 737,280 bytes, or exactly 720K. The space available for your use is somewhat smaller, since GEMDOS sets aside small areas on each disk to keep track of your files.

What you see on a given disk depends on what you've stored there. A 1ST Word document file, for instance, contains formatting characters in addition to ordinary text. And a BASIC program looks very different on disk than it does when listed on the screen. The figure shows the very beginning of DISKPEEK.BAS as it is stored in Track 2, Sector 1 on a disk of mine. (On a different disk, of course, the same file might appear on a different track and sector.)

If you compare the figure to the program listing, you'll notice that the program's variable names appear in a bunch near the beginning of the file. With DISKPEEK .BAS, we can discover, at a glance, that GFA BASIC puts a variable table in its .BAS files, and we can examine that table in detail.

#### Where It All Begins

One place where every devoted disk snooper goes again and again is the directory, which begins at Track 1, Sector 3, Side 0. Each file on the disk has a 32-byte directory entry, which records its name and other information shown in the Disk Directory Entry table.

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#### ST Disk Directory Entry

Contents
Name and extension
Attribute
Reserved for future use
Time of creation
Date of creation
Beginning cluster
Size

In addition to existing files, the directory shows files that have been deleted. With a little experimentation, you ought to be able to deduce how GEMDOS marks a deleted file. (Hint: Look at the first character of the filename.)

Disk storage is a large topic, one that can easily fill a book. If you get interested in the subject, take a look at *ST Disk Drives: Inside and Out*, published by Abacus Books. I can't recommend this book wholeheartedly, since it does have its share of flaws. Nevertheless, it contains lots of information that's not easily available from any other source.

#### **Disk Peek**

For instructions on entering this program, please refer to "COMPUTE!'s Guide to Typing In Programs" elsewhere in this issue.

```
' DISKPEEK.BAS Examine ST disk sectors {
14
floprd=8
               ! XBIOS routine 8 (Floprd) reads
 a disk sector€
drvnum=Ø
               ! Drive \emptyset = A:, 1 = B: \in
sidenum=Ø
               ! Double-sided disks have sides
Ø and 1+
               ! Number of sectors to read with
numsects=1
 each Floprd call +
dum=Ø
               ! Dummy parameter for Floprd cal
14
14
new sector:
              ! Read the specified track and s
ector <
CLS+
blok$=STRING$(512,Ø) ! 512-byte space for sec
tor contents {
INPUT "Track number (Ø-79)";trknum ! Track w
e want to read 
INPUT "Sector number (1- 9)"; secnum
                                      ! Sector
we want to read {
' Flag illegal track/sector choice <
IF trknum<0 OR trknum>79 OR secnum<1 OR secnum
>9 THEN+
  alrt$="Illegal track ("+STR$(trknum)+") for s
  ector ("+STR$(secnum)+")"€
  ALERT 1, alrt$, 1, "Dops", dum <
  GOTO new_sector <
ENDIF
' Call the XBIOS routine Floprd to read a disk
 sector. <
result=XBIOS(floprd,L:VARPTR(blok$),L:dum,drvn
um, secnum, trknum, sidenum, numsects) <
' Check for a disk error. Return code of zero
means no error occurred. <
IF result<>Ø THEN€
  ALERT 1, "Disk error! Gotta go.", 1, "OK", dummy
  END
ENDIF€
start=Ø€
14
sho_loop: ! Display sector contents <
CLS
PRINT SPACE$(10); "Track: "; trknum; SPACE$(5); "S
ector: ";secnum; <
PRINT SPACE$(5); "Bytes "; start; "-"; start+2554
offset=start{
```

FOR j=Ø TO 15€ offset\$=HEX\$(offset) < WHILE LEN(offset\$)<4+ offset\$="Ø"+offset\${ WEND PRINT offset\$;":";" ";€ offset=offset+16+ ask\$=""+ byt\$=""€ FOR k=Ø TO 154 x=PEEK(VARPTR(blok\$)+start+(16*j)+k) byt\$=byt\$+CHR\$(x) € IF x<16 THEN€ ask\$=ask\$+"Ø"€ ENDIE4 ask\$=ask\$+HEX\$(x)+" "< NEXT k€ PRINT ask\$; < FOR k=1 TO 164 x\$=MID\$(byt\$,k,1) ← IF x\$<CHR\$(33) OR x\$>"z" THEN€ PRINT "."; + ELSE4 PRINT x\$; < **ENDIF**€ NEXT k4 PRINT NEXT je PRINT PRINT "Press SPACE for bytes Ø-255 of this sector "+ PRINT " RETURN for bytes 256-512 of this sector " < PRINT " ESC for a different track and sector" PRINT " CTRL-SHIFT-ALT to quit"+ get_a_key: < ky\$=""€ WHILE kys="" ! Wait for a keypress. < ky\$=INKEY\$€ WENDE IF ky\$=CHR\$(27) THEN ! You pressed ESC. € GOTO new_sector ! Choose new track/secto ENDIF+ IF ky\$=CHR\$(13) AND start=Ø THEN+ start=256 ! View bytes 256-511 of this sect ort GOTO sho_loop < **ENDIF**€ IF ky\$=CHR\$(32) AND start=256 THEN+ start=Ø ! View bytes Ø-255 of this sector€ GOTO sho_loop€ **ENDIF**€ GOTO get_a_key< 0

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PRINT



## More On Structure

In last month's column, I discussed structured data types. In the program listing, I then used a large string and its substrings to simulate an array of records. This month, I will continue my efforts to help you write more structured programs, but first I'll make some general comments on Atari BASIC strings.

I think that last month's program demonstrates that long strings can be just as powerful as string arrays. I would expect that program to operate at least as quickly as an equivalent Microsoft BASIC program using string arrays, because the typical Microsoft implementation goes through a lot of overhead generating and reclaiming dynamic strings. In that example, we were inserting new records into our string structure. If we had been deleting records, Atari BASIC really would have shone. For example, suppose we have a string filled with 50-character pseudorecords. To delete the third such record, we could simply do this:

#### RECORD\$(101) = RECORD\$(151)

Presto! All records are moved up one spot, and the third one is gone.

A small sidetrack: Unfortunately, one failing of Atari BASIC is that it has no built-in way to conveniently save and restore such long strings to and from disk. The most common output method is to PRINT# such a string, but that doesn't help a lot, since INPUT# is limited to no more than 255 bytes per line. I have seen many users resort to using a FOR/NEXT loop to PRINT# or INPUT# the individual pseudorecords one at a time. That works, but it certainly slows down disk I/O speed. In BASIC XL and BASIC XE, we added a pair of special statements for this purpose (BPUT# and BGET#, where the B stands for Block or Buffer), but you can accomplish the same thing in Atari BASIC with a pair of fairly

short USR assembly language subroutines. (These routines have been published several times, and I won't repeat them this month.)

#### **Out Of Sorts**

To continue my discussion of how to achieve structured data features in Atari BASIC, I call your attention to Program 1. Study it, type it in, and run it. It is a fairly clumsy but working record-sort routine. That is, it sorts the kinds of pseudorecord strings that we also used in last month's program. (Incidentally, I have used the worst of all possible sort algorithms: the bubble sort. Please, if you are serious about sorting your data, learn a couple of other methods, such as the heap sort, Shell sort, and quicksort. Why do I use the bubble sort? Because it is the smallest and easiest to demonstrate. Or maybe because I'm just lazy.)

As you study that listing, pay attention to lines 230–260, where the tests and swaps necessary to any sort routine are made. Because I purposely organized the data in my array of pseudorecords in the worst possible way (for a bubble sort, at least), the IF test will never branch around the swap, and we will make more than 4900 of these string swaps. Surely there must be a better way.

#### **Pointing The Finger**

Time to introduce another concept from the structured languages. In *any* computer language, moving blocks of data around (whether records, pictures, disk blocks, or whatever) is time-consuming. So most programs don't actually move the data. Instead, they move pointers to the data.

What is a pointer? Quite simply, a pointer is a variable that contains the address of another variable. Atari BASIC allows only one *explicit* kind of pointer—the ADR function that gives the address of a string. And, indeed,

many programmers use ADR as a pointer when they pass the address of a string to an assembly language subroutine. (Imagine having to pass the bytes of a string through a series of POKEs.)

But there is another, hidden kind of pointer in almost any computer language: array and string indices. As an example, if the record data we are working on is *always* within a particular string, for example, then we need only know the relative position of a given record within the string in order to obtain its information. We most likely do not care about the actual physical memory address of the data.

Merge the lines shown in Program 2 to those already in place in Program 1 (deleting the three lines noted) and study the results of using implicit pointers. There is (rather obviously) little difference between the two programs. Instead of swapping actual substring pseudorecords, we are now swapping only the indices into the master string. When you run this second version, you should notice a speed improvement of almost 2:1. (I got 70.8 seconds versus 135.3 seconds, but that was done using the FAST mode of BASIC XL. Your times will likely be slower.)

As clever as this trick is, it does not answer all of a programmer's needs. Suppose, for example, that the data to be sorted resides in two or three different arrays. The logistics in BASIC get complicated. In a language with more data structuring capabilities, where a pointer can point to a given record type no matter where the record might be, such a division of data would probably make virtually no difference on program speed.

Enough for this month. Next month, we will go back to the acrostics puzzle of the December issue, since it generated more mail for me than any topic in recent months. If I have managed to convince you that records and pointers are valuable tools, wait until you see my proposed solution to the acrostics problem!

#### Program 1

BD 100	DIM TEST\$ (10000), TEMP
	\$(100),BLANK\$(100)
NK 110	BLANK\$=" ":BLANK\$ (100)
	\$
NI 12Ø	FOR R1=Ø TO 99:RPTR=R
60 1 3 Ø	TEST\$ (RPTR) ="THIS IS
	RECORD NUMBER "
MP 14Ø	TEMP\$=STR\$(199-R1):TE
DH 15Ø	TEST\$ (RPTR+22) = TEMP\$ (
	2)
FJ 16Ø	NEXT R1
	RT THEM
LF 180	POKE 20,0:POKE 19,0
BP 1 9 10	TUK RI=98 TU Ø STEP -
JA 200	FOR R2=Ø TO R1
JC 210	PTR1=R2#100+1
MC 230	IF TEST\$ (PTR1, PTR1+99
	) < TEST\$ (PTR2, PTR2+99)
PI 240	THEN 270
	+99)
60 250	TEST\$(PTR1,PTR1+99)=T
PN 260	TEST\$ (PTR2, PTR2+99) =T
	EMP\$
FH 270	NEXT R2
FN 290	NEXT R1
CA 300	PRINT
6F 31Ø	TICK=PEEK(20):TOCK=PE
	20) THEN 310
EP 320	TIME=TICK+256*TOCK
01 330	ME/60; " SECONDS"
CE 34Ø	PRINT "HIT RETURN TO
10 350	SEE LIST "; INPUT TEMPS
ND 360	FOR R1=Ø TO 99:RPTR=R
NE 770	1*100+1
Ur 370	+99)
FN 380	NEXT R1
Progr	am 2
CJ 105	DIM RPT(99)
OH 125	RPT(R1)=RPTR
MC 210	PTR1=RPT(R2) PTR2=RPT(R2+1)
CA 230	IF TEST\$ (PTR1, PTR1+99
	)>TEST\$(PTR2, PTR2+99)
	T( $R2+1$ )=PTR1
CN 240	REM DELETE
PE 250	REM THESE
A0 360	FOR R1=Ø TO 99:RPTR=R
	PT (R1)

## **Cursor Plus**

Emmanuel Gendrano and Greg Knauss

Add even more power to the Atari 400, 800, XL, and XE editor device. Compatible with most environments and programs.

Atari computers have the most powerful screen editing features of any eight-bit computer. "Cursor Plus" extends the editor even further, adding functions to move the cursor by one word, change the case of an entire screen line, delete the remainder of the line, and more.

Cursor Plus is compatible with most programs that use the E: editor device. This includes Atari BASIC, BASIC XL, MAC/65, and other environments. It does not include programs that use their own editors, such as Action!, Atariwriter, and Atari's MEDIT editor.

#### Typing It In

Cursor Plus works on all Atari eight-bit computers. Type it in and save it to tape or disk. The program is written in BASIC, but it creates a machine language program when it is run.

After saving the program, type RUN. You'll be asked if you want to save a copy or install it in memory. If you have a disk system, you must choose the option to save a copy. The program asks for a filename with which to save Cursor Plus. Be sure to use a name that's different from the one you used to save the creator program. After the machine language program has been written to disk, you can install Cursor Plus by going to DOS and using the L option to load it. Alternatively, you can name the file AUTORUN.SYS, causing the program to install automatically whenever you boot up the computer.

If you have a tape system, choose the memory option.

#### The New Editor

When you're using Cursor Plus, all of the regular cursor movement and editing capabilities are still in effect. In addition, Cursor Plus adds the following controls:

• **Control-ESC** Go to the end of the line. This command moves the cursor to the end of the physical screen line (not the logical line).

• **Control-Shift-RETURN** Go to the beginning of the line. This command moves the cursor to the beginning of the physical screen line. It does not enter the line, as a regular RETURN would.

• **Control-Shift-(minus sign)** Go to previous word. This command moves the cursor to the word immediately to the left of the current cursor position.

• Control-Shift-(equals sign) Go to next word. This command moves the cursor to the word immediately to the right of the current cursor.

• **Control-Shift-SPACE** Delete to end of physical line. This command deletes everything after the current cursor position to the end of the line.

• Control-Shift-Caps Change case of the rest of the physical line. This command begins at the current cursor position and changes all lowercase letters to uppercase and all uppercase letters to lowercase. Single words can be changed by cursoring to the beginning of the word, changing the case of the rest of the line, cursoring to the next word, and changing the case again.

• **Control-Shift-Inverse** Change regular text to inverted text and inverted text to regular text. This command is similar in operation to the change case command. It begins at the current cursor position and changes the high bit of all of the text to the end of the physical line, thus, changing inverted letters (blue on white) to normal letters

#### (white on blue), and back.

• Shift-Inverse Change case of one letter. This command is similar to Control-Shift-Caps, except that it changes the case of only one character. This keypress also advances the cursor by one character, so you can repeatedly press Shift-Inverse to change the case of a range of characters.

• Control-Inverse Change one character from normal text to inverted text, or back. This command is similar to Control-Shift-Inverse, but it changes the high bit of only one character. Like Shift-Inverse, it advances the cursor, making it easy to change a range of characters.

• **Control-Clear** Move cursor to the home position (top left of screen). This command normally clears the screen. In Cursor Plus, however, it simply moves the cursor to home without clearing the screen. Use Shift-Clear to clear the screen.

• **Control-Shift-Clear** This command places the cursor in the middle of the screen.

Cursor Plus survives SYSTEM RESET. Disable it by turning off the computer. This is the only way to recover the memory used by the program.

#### **Cursor Plus Creator**

MH 1000	REM CURSOR PLUS
IN 1010	REM COPYRIGHT 1988 C
	OMPUTE! PUB.
LB 1020	REM ALL RIGHTS RESER
	VED
AI 1030	REM D: CURSOR. BAS
KB 1040	DIM ID\$(15):OPEN #1,
11050	12,9, "E:
HP 1040	2 "(CLEAR) (2 DOWN)
	(TAB) (6 FIDTERS) (HUTTER
	R PLUS(7 SPACES)
	(DOWN) "
PC 1Ø7Ø	? "(TAB)COPYRIGHT 19
	BB COMPUTE! (3 DOWN)
PA 1080	to cre
	ALE ODJELL TILE
18 1090	2 " statement to ins
IH 1090	? " STELEGT to ins tall CURSOR+(3 DOWN)
IH 1070	? " SELECT to ins tall CURSOR+(3 DOWN)
IH 1090 HP 1100	? " SELECT to ins tall CURSOR+(3 DOWN) " CN=PEEK(53279):IF CN
IH 1090 MP 1100	? " SELECT to ins tall CURSOR+(3 DOWN) " CN=PEEK(53279):IF CN =7 THEN 1100
IH 1070 HP 1100 HM 1110	? " SELECT to ins tall CURSOR+(3 DOWN) " CN=PEEK(53279):IF CN =7 THEN 1100 POKE 53279,0:REM cli
IH 1070 HP 1100 HM 1110	? " SELECT to ins tall CURSOR+(3 DOWN) " CN=PEEK(53279):IF CN =7 THEN 1100 POKE 53279,0:REM cli ck
IH 1090 HP 1100 HM 1110 A6 1120	? " SELECT to ins tall CURSOR+(3 DOWN) " CN=PEEK(53279):IF CN =7 THEN 1100 POKE 53279,0:REM cli ck IF CN=3 THEN 1150:RE
IH 1090 MP 1100 HM 1110 A6 1120	? " SELECT to ins tall CURSOR+(3 DOWN) " CN=PEEK(53279):IF CN =7 THEN 1100 POKE 53279,0:REM cli ck IF CN=3 THEN 1150:RE M make IF CN=5 THEN 1240:RE
IH 1090 HP 1100 HM 1110 A6 1120 GP 1130	? " STREET to ins tall CURSOR+(3 DOWN) " CN=PEEK(53279):IF CN =7 THEN 1100 POKE 53279,0:REM cli ck IF CN=3 THEN 1150:RE M make IF CN=5 THEN 1240:RE M do it pow
IH 1090 HP 1100 HM 1110 A6 1120 GP 1130 HB 1140	? " STREET to ins tall CURSOR+(3 DOWN) " CN=PEEK(53279):IF CN =7 THEN 1100 POKE 53279,0:REM cli ck IF CN=3 THEN 1150:RE M make IF CN=5 THEN 1240:RE M do it now GOTO 1100
IH 1090 NP 1100 HM 1110 AG 1120 GP 1130 MB 1140 FP 1150	? " STELECT to ins tall CURSOR+(3 DOWN) " CN=PEEK(53279):IF CN =7 THEN 1100 POKE 53279,0:REM cli ck IF CN=3 THEN 1150:RE M make IF CN=5 THEN 1240:RE M do it now GOTO 1100 REM CREGIE FILE
IH 1090 NP 1100 HM 1110 A6 1120 GP 1130 MB 1140 FP 1150 PH 1140	? " STELECT to ins tall CURSOR+(3 DOWN) " CN=PEEK(53279):IF CN =7 THEN 1100 POKE 53279,0:REM cli ck IF CN=3 THEN 1150:RE M make IF CN=5 THEN 1240:RE M do it now GOTO 1100 REM GREATERE
H 1090 HP 1100 HM 1110 A6 1120 6P 1130 HB 1140 FP 1150 PH 1160	? " STELECT to ins tall CURSOR+(3 DOWN) " CN=PEEK(53279):IF CN =7 THEN 1100 POKE 53279,0:REM cli ck IF CN=3 THEN 1150:RE M make IF CN=5 THEN 1240:RE M do it now GOTO 1100 REM MERICIPATION ? "Enter DEVICE:FILE SPEC >";

CH 118Ø	CLOSE #3: TRAP 1320:0		,93,232,48,228,164,8
11100	PEN #3,8,0,10\$	# 1500	DATA 128,145,88,136
CH 1200	READ DITE DON-1 THEN		196.85.240.202.240.7
	PUT #3.D:GOTO 1200		2, 176, 241, 144, 196, 14
HD 1210	CLOSE #3:? "DONE"		4,140,164,85,252,96,
HK 122Ø	GOTO 1350:REM Wait		247, 97, 16, 11
JN 123Ø	END	LA 1510	DATA 173,9,210,201,1
BD 124Ø	REM <b>ENSTRACE</b> now		03,240,196,208,181,1
KE 125Ø	? : IF PEEK(145)>=96		64,83,177,88,170,41,
	THEN ? "Memory conti		170 144 140
DE 1940	2 "LOADING AT "	NJ 1520	DATA 201, 59, 176, 5, 13
DE IZOD	RESTORE : READ L.D		8.73.64.145.88.196.8
BD 1270	READ L.D:X=L+D#256:A		5,240,3,136,16,227,1
	=X:? X:GOTO 1290	1	38,207,88,240,211,16
E6 128Ø	READ L, D: A=L+D*256: I	and a series	5,93,73
	F L=-1 THEN L=USR(X+	DH 153Ø	DATA 64,133,93,56,17
	3)		6,202,176,141,208,53
NP 1290	READ L, D: B=L+D*256		, 164, 83, 16, 137, 164, 8
NO 1300	FOR L=A TO BEREAD DE		A1 67 201
	PUKE L, DINEAT L	EI 154Ø	DATA 16, 176, 17, 136, 4
EL 1310			8.236.177.88.41.63.2
KR 1330	TE PEEK(195)=130 THE		Ø1,16,176,6,196,82,1
ND 1000	N ? "BAD DEVICE": GOT		76,241,144,158,136,4
	0 1350		8,219,177
PK 134Ø	? "####ERROR - ";PEE	LK 155Ø	DATA 88,41,63,201,16
	K(195)		,144,173,192,0,16,24
CC 135Ø	REM MEREN		1,48,200,144,167,164
06 1360	? :? "Press Remunit t		,05,200,177,00,41,05
1 1776	O CONTINUE ";	LE 1560	DATA 144.18.201.26.1
11 13/0	COTO 1040. REM restar		44.8.201.32.144.10.2
UF 1369	+		Ø1, 59, 176, 6, 196, 83, 1
PH 1390	REM DEC DATA		44,231,176,25,200,17
DL 1400	DATA 255,255,0,96,25	in the second	7,88,41
	1,96,76,201,97,104,1	JH 157Ø	DATA 63,201,16,144,1
	69,160,72,169,0,72,1		2,201,26,144,212,201
	33,8,240,242,67,85,8		, 32, 144, 4, 201, 37, 144
	2,83		174 143
NE 1410	DATA 79,82,43.32,32,	NT I EDG	DATA 102 244 154 204
	86,69,82,83,73,79,78	161380	225 167 231 103 252
	, 32, 31, 40, 40, 32, 32, 3		206.207
W1 1 4 20	DATA 155, 138, 72, 152.	-	PEN HOME MIDHOME END
10 1 720	72,160,10,173,9,210,	AL IJOI	LINE STARTI INE, 7FROL
	217,165,97,240,10,13		INF. INVERSE, INVERSEL
	6, 16, 248, 104, 168, 104	1.00	INE, CAPS, CAPSLINE, WO
	,170,76,190	and sector	RDLEFT, WORDRIGHT
LB 1430	DATA 255, 165, 88, 72, 1	6D 1585	DATA 169,0,141,8,2,1
	65,89,72,166,84,240,		69, Ø, 141, 9, 2, 169, Ø, 1
	16,24,167,40,101,88,		33,2
	133,00,107,9,191,07,	HN 1590	DATA 169, 0, 133, 3, 165
14 1440	DATA 202,208,240,240		, 7, 7, Z, 133, 7, 70, 173,
	.61.169.23.164.82.13		2 141 66 96 173
	3,84,132,85,169,143,	HH 1600	DATA 231.2.133.0.141
	208,96,160,20,169,10		.177.97.173.232.2.13
	,208,242,164		3, 1, 141, 182, 97, 24, 16
08 1450	DATA 83, 177, 88, 41, 12		5,0,105,133,141,187,
	7,208,69,136,177,88,	No and the	97,165
	41,127,208,71,170,02	LI 1610	DATA 1,105,1,141,191
	7 14 41		,97,24,165,0,105,248
1440	DATA 149. 0. 133. 93. 16		,97,67,98,122,141,33
54 1 40 D	0.39.196.85.144.5.14		, 70, 100, 1, 100, 1, 141,
	5.88,136,16,247,56,1	AJ 1620	DATA 96.160.0.185.43
	76, 35, 152, 240, 192, 13		,96,145,0,136,208,24
	6,240,201		8,238,7,98,230,1,173
C6 147Ø	DATA 136,240,204,136		,7,98,201,98,144,236
	,240,222,136,240,223		,24
	,136,240,44,136,240,	ED 1630	DATA 169,160,109,231
	43,136,240,70,136,24		,2,141,231,2,167,1,1
	DATA 200 100 111 0		69 14 141 49 3 140 0
JF 1480	DATA 208,122,164,85,		6.141
	172, 164, 83, 132, 85, 1	BL 1640	DATA 69,3,141,73,3.1
	69, 135, 141, 252, 2, 104		69,9,141,66,3,162,0,
	,133,87.104		32,86,228,76,176,97,
KF 1490	DATA 133,88,104,168,		224, 2, 225, 2, 201, 97, -
	104, 170, 104, 64, 162, 1		1,-1
	28, 165, 93, 73, 128, 133	FI 165Ø	END : REM ELD

## Math Graphics For The IBM PC

Jay Seaver

If you think that math is boring, then you have a pleasant surprise in store. With these two programs you can either custom design your own dazzling Math Graphics or you can sit back, let the computer do all the work, and enjoy a beautiful graphics show. A color/graphics adapter or equivalent hardware is required, along with BASICA for the PC or GW-BASIC for compatibles.

While your computer can't create *pictures* without a paint program, a graphic *pattern*—which can be the result of a mathematical formula is often surprisingly easy to create. In fact, if you have a flexible formula, you can create thousands of images by simply varying the formula.

One program that has done this well is "Math Graphics," versions of which have been published in COMPUTE! for three different computers: Amiga, Apple II series, and Atari ST. Because of the beautiful graphics generated by this program, I decided to design a PC version, but with a major enhancement, "Math Graphics Construction Set."

#### **Getting Started**

Since both "Demo" (Program 1) and "Construction Set" (Program 2) are written entirely in BASIC, just type each one in and save a copy of each to disk. To see the demonstration program, load it, type RUN, sit back, and enjoy.

If the demonstration program piques your interest in creating graphics of your own, you'll want to explore the Construction Set program. When you first run the Construction Set, you'll see a large menu. Understanding this menu is the key to using the program.

#### Constructing Math Graphics

When you first run the Construction Set, the menu's 19 numbered options have values assigned to them. The prompt at the bottom of the screen asks you to *Enter number* to modify, 20 to RUN, 21 to QUIT. By



Several complex geometric designs are showcased in the "Math Graphics" demo program.

	***********************
CD 11: 159	
(1) 12: 3	
(1) Sheet of Thete Long (5) a size B	
fal Tal of Thats Loop (Pl + v): 6	
(7) Increment of Thota Loop (Pi / w)= 54	
(8) X1's Offset (Pi / x)= 10000	
(9) 11's Offset (21 / x)= 10000	
(10) 72's Offset (Pi / x)= 19088	
till to a offset (Fi / x) a 10010	
131 Pek of Their Loop #2 (P) + x1: 0	
(10) increment of Theta form \$2 (Fi a she 28	
(15) X1 uper Lose #1	
(16) 71 were Loop #1	
(17) X2 lines Loop #1	
(18) TZ lines Loop 21	
177 Color Failette #1	

The "Math Graphics Construction Set" offers a menu that makes it easy to change parameters for altering images.

typing the number of one of the options and then, when prompted, the new value you wish to assign it, you change the way the final picture is formed. To see the default Math Graphic, choose option 20 from the menu. If you want to return to the menu before the Math Graphic is finished forming, simply press any key. Let's take a look at each option.

Options 1–4 are the R values, which define the shape of the graphic. Note that R1, R2, R3, and R4 modify X1, Y1, X2, and Y2, respectively. To get an idea of how to use the construction set, change the value of Option 1 to 20 and then view the graphic.

Options 5 and 6 define the limits of the theta loop in terms of *pi*. If the difference between these values is exactly 2, the picture will be drawn once and won't be retraced. If the difference is more than 2, parts or all of the picture will be retraced and will change color. If the difference is less than 2, an incomplete drawing will result.

Option 7's value is divided into pi to determine how quickly the theta loop proceeds from one end to the other. If Option 6 is less than Option 5, Option 7 should be a negative number. To see how this parameter changes the image, try changing the value of Option 7 to 8 and view the graphic.

Options 8–11 are the offsets for X1, Y1, X2, and Y2, respectively. Because each value is divided into pi, the lower the number, the larger the offset. The default for these options is 10,000, so any offset will be

#### imperceptible.

Options 12 and 13 are the start and end of a second theta loop. Use these options like 5 and 6 above.

Option 14 is the increment for the second theta loop. Use it just like Option 7.

Options 15-18 decide which theta loops X1, Y1, X2, and Y2 will use. If you don't want to use the second theta loop at all, set all of these to 1. Changing these values can produce dramatic, exciting changes in your graphics. For example, exit the program by choosing option 21 from the menu and type RUN (or Press F2), so you'll start with the Construction Set's default values in place. Now change Option 13 to 6, so you'll have a second theta-loop value, and change both Options 15 and 18 to 2, so they each use the second loop. Now you can view the graphic.

Option 19 lets you choose which color palette to use. It accepts a number from 0 to 3. See the table for the colors associated with each number.

#### **Color Palette Numbers**

#### Palette Colors

- 0 green, maroon, brown
- pale green, purple, white 1
- 2 green, pink, brown
- 3 pale green, red, white

Option 20 displays the current graphic. Option 21 returns you to BASIC.

For instructions on entering these programs, please refer to "COMPUTEI's Guide to Typing In Programs" elsewhere in this issue.

#### Program 1: Math Graphics Demo

- 00 100 KEY OFF
- 01 110 ' Mathgraphics For the IB M PC HL 120 Copyright 1988 COMPUTE! Publications, Inc. -- Al
- 1 Rights Reserved N 130 CLS:WIDTH 40:LOCATE 1,10:
- PRINT"MathGraphics Demo 60 140 LOCATE 3, 1:PRINT"Copyrig ht 1988 COMPUTE! Publ., I
- nc. " LK 150 LOCATE 4,9:PRINT"All Righ
- ts Reserved" QJ 160 LOCATE 22,8:PRINT"Press A
- ny Key To Begin" K\$=INKEY\$: IF K\$="" THEN 1 E6 17Ø
- 70 CB 180 GOSUB 2320
- Module #1 RightOvals HO 190
- 1J 200 R1=150:R2=25:R3=25:R4=85

EL 85Ø

FD 86Ø

- 210 INC=PI/64 IN
- PL 220 FOR THETA=0 TO PI\$4 STEP INC
- CO 23Ø X1=FNPOLARX (R1, THETA)

FJ 24Ø Y1=FNPOLARY (R2, THETA) X2=FNPOLARX (R3, THETA+PI) JE 250 MP 260 Y2=FNPOLARY (R4, THETA+PI) LD 270 KOLOR=KOLOR+1: IF KOLOR=4 THEN KOLOR=1 LINE (X1, Y1)-(X2, Y2), KOL 61 280 DR 00 290 NEXT THETA 68 300 GOSUB 2380 'Module #2 - SideOvals F0 310 R1=150:R2=35:R3=65:R4=85 08 320 LN 330 INC=PI/64: OFFSET=PI/3 JD 34Ø FOR THETA=1 TO 6*PI STEP INC X1=FNPOLARX (R1, THETA) Y1=FNPOLARY (R2, THETA) CD 35Ø F0 360 FB 37Ø X2=FNPOLARX (R3, THETA+OFF SET) Y2=FNPOLARY (R4. THETA) 19 380 KOLOR=KOLOR+1: IF KOLOR=4 MI 390 THEN KOLOR=1 LINE (X1, Y1)-(X2, Y2), KOL FK 400 DR NF 41Ø NEXT THETA 66 42Ø GOSUB 238Ø JC 43Ø 'Module #3 - TwistedBand 06 44Ø R1=15Ø:R2=35:R3=65:R4=85 INC=PI/64: OFFSET=PI/3 LC 45Ø FOR THETA=1 TO 6*PI STEP KI 46Ø INC X1=FNPOLARX (R1, THETA) 01 470 FD 48Ø Y1=FNPOLARY (R2, THETA) X2=FNPOLARX (R3, THETA) 61 490 Y2=FNPOLARY (R4, THETA+OFF HD 500 SET) KOLOR=KOLOR+1: IF KOLOR=4 LK 51Ø THEN KOLOR=1 LINE (X1, Y1)-(X2, Y2), KOL FP 520 OR 6F 53Ø NEXT THETA HL 540 GOSUB 2380 'Module #4 - TiltedOvals BF 55Ø R1=150:R2=35:R3=65:R4=85 PL 560 57Ø INC=PI/64:OFFSET=PI/3 LH KN 580 FOR THETA=1 TO 6*PI STEP INC PC 59Ø X1=FNPOLARX (R1, THETA+OFFS ET) OH 600 Y1=FNPOLARY (R2, THETA) AC 610 X2=FNPDLARX (R3, THETA) DK 620 Y2=FNPOLARY (R4, THETA) CD 630 KOLOR=KOLOR+1: IF KOLOR=4 THEN KOLOR=1 HK 640 LINE (X1, Y1)-(X2, Y2), KOLD R HK 650 NEXT THETA HA 660 GOSUB 2380 'Module #5 - StretchedOva DL 670 15 PA 680 R1=150:R2=35:R3=65:R4=85 MM 690 INC=PI/64:OFFSET=PI/3 700 FOR THETA=1 TO 6*PI STEP JP INC CP 710 X1=FNPOLARX (R1, THETA) Y1=FNPOLARY (R2, THETA+OFF EH 720 SET) FA 730 X2=FNPOLARX (R3, THETA) IL 74Ø Y2=FNPOLARY (R4, THETA) KOLOR=KOLOR+1: IF KOLOR=4 LE 75Ø THEN KOLOR=1 6J 76Ø LINE (X1, Y1)-(X2, Y2), KOL OR 0E 77Ø NEXT THETA HF 78Ø GOSUB 238Ø HO 790 'Module #6 - MultiLobes DL 800 R1=100 EN 81Ø INC=PI/128 18 820 LOBES=4 6P 83Ø FOR THETA=Ø TO 4*PI STEP INC FK 840 R2=R1*SIN(LOBES*THETA)

X1=FNPOLARX (R2, THETA)

Y1=FNPOLARY (R2, THETA)

KOLOR=KOLOR+1: IF KOLOR=4 HJ 87Ø THEN KOLOR=1 LINE (XCENTER, YCENTER) - ( PP 880 X1, Y1), KOLOR PJ 890 NEXT THETA 6H 900 GOSUB 2380 'Module #7 - SpiralCone DK 910 00 920 R1=100:R2=85 A6 930 INC=PI/160 11 940 LOBES=3 SE 950 FOR THETA=0 TO 4*PI STEP TNC MF 960 X1=FNPOLARX (R1, THETA*LOBE S) F6 97Ø Y1=FNPOLARY (R2, THETA) KOLOR=KOLOR+1: IF KOLOR=4 98Ø MM THEN KOLOR=1 LINE (XCENTER, YCENTER) - ( PC 990 X1, Y1), KOLOR KF 1000 NEXT THETA 1010 GOSUB 2380 LP 'Module #8 - SideSpiralC DI 1020 one 6N 1030 R1=130:R2=80 INC=PI/160 6K 1Ø4Ø EP 1050 LOBES=3 60 1060 FOR THETA=0 TO 4*PI STEP TNC X1=FNPOLARX (R1, THETA) NC 1070 Y1=FNPOLARY (R2, THETA*LO CP 1080 BES) KOLOR=KOLOR+1: IF KOLOR= LL 1090 4 THEN KOLOR=1 LINE (XCENTER, YCENTER) -EC 1100 (X1, Y1), KOLOR LK 111Ø NEXT THETA LE 1120 GOSUB 2380 'Module #9 - Circles BN 1130 KD 114Ø R1=115:R2=85:R3=4Ø:R4=45 HJ 115Ø INC1=PI/3: INC2=PI/20 PB 1160 FOR THETA1=Ø TO PI*2 STE P INC1 FOR THETA2=Ø TO PI#2 ST 6C 117Ø EP INC2 Q0 118Ø X1=FNPOLARX (R1, THETA2) Y1=FNPOLARY (R2, THETA2) DA 1190 X2=FNPOLARX (R3, THETA1) QP 1200 DB 121Ø Y2=FNPOLARY (R4, THETA1) KOLOR=KOLOR+1: IF KOLOR 66 1220 =4 THEN KOLOR=1 LINE (X1, Y1)-(X2, Y2),K NI 123Ø OLOR P0 124Ø NEXT THETA2 NEXT THETAL QJ 125Ø MC 1260 GOSUB 2380 'Module #10 - Spikes KC 1270 LB 128Ø R1=115:R2=85:R3=4Ø:R4=45 INC1=PI/3: INC2=PI/18 CH 1290 FOR THETA1=Ø TO 2*PI STE FF 1300 P INC1 FOR THETA2=Ø TO 2*PI ST M6 131Ø EP INC2 PA 1320 X1=FNPOLARX (R1, THETA2) Y1=FNPOLARY (R2, THETA1) AG 1330 BN 134Ø X2=FNPOLARX (R3, THETA1) 6L 135Ø Y2=FNPOLARY (R4, THETA2) HE 1360 KOLOR=KOLOR+1: IF KOLOR =4 THEN KOLOR=1 FE 137Ø LINE(X1, Y1)-(X2, Y2), KD LOR NEXT THETA2 QM 138Ø EB 139Ø NEXT THETA1 ' change window size to FB 1400 equal that of Apple]['s WINDOW SCREEN (Ø,Ø)-(279 PC 141Ø , 191) : XCENTER=140: YCENTE R=96 MK 1420 GOSUB 2380 BI 143Ø 'Module #11 - A Ball Of String CN 144Ø X1=52:Y1=59:R1=95 EK 1450 FOR LOOP=1 TO 150 FP 146Ø THETA=RND*PI*2

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0C 147Ø X2=ENPOLARX (R1, THETA) QN 1480 Y2=FNPOLARY(R1, THETA) LD 1490 KOLOR=KOLOR+1: IF KOLOR= THEN KOLOR=1 LINE (X1, Y1)-(X2, Y2),3 FP 1500 MN 151Ø X1=X2:Y1=Y2 PA 1520 NEXT LOOP MP 1530 GOSUB 2380 FC 1540 'Module #12 - LinedCircl JK 1550 THETA=2*PI*RND 01 1560 R1=95 HE 1570 X1=FNPOLARX (R1, THETA) Y1=FNPOLARY (R1, THETA) JP 1580 FOR LOOP=1 TO 110 PE 1590 IB 1600 THETA=PI*2*RND X2=FNPOLARX (R1, THETA) NE 1610 PP 1620 Y2=FNPOLARY (R1, THETA) KOLOR=KOLOR+1: IF KOLOR= KF 1630 4 THEN KOLOR=1 LINE (X1, Y1)-(X2, Y2), KD LJ 1640 LOR PL 1650 NEXT LOOP NK 1660 GOSUB 2380 'Module #13 - SqureCircl IO 167Ø M0 1680 R1=95: R2=R1^2+1 N 1690 FOR LOOP=0 TO R1 STEP 5 60 1700 X1=SQR(R2-LOOP*LOOP) BE 171Ø Y1=SQR(R2-X1*X1) KE 1720 KOLOR=KOLOR+1: IF KOLOR= 4 THEN KOLOR=1 06 1730 LINE (X1+XCENTER, Y1+YCE NTER) - (XCENTER-X1, YCENTE R-Y1), KOLOR, B ₽K 174Ø NEXT LOOP NJ 1750 GOSUB 2380 FP 1760 'Module #14 - CircularSp ikes H6 177Ø R1=20:R2=45:R3=115:R4=85 DO 178Ø INC1=PI/3: INC2=PI/6 FOR THETA1=Ø TO PI#2 STE AG 1790 P INC1 FOR THETA2=Ø TO PI#2 ST 6L 18ØØ EP INC2 X1=FNPOLARX (R3, THETA2) CB 1810 FD 1820 Y1=FNPOLARY (R4, THETA2) PK 1830 X2=FNPOLARX (R1, THETA1) Y2=FNPOLARY (R2, THETA1) CH 184Ø KOLOR=KOLOR+1: IF KOLOR IL 1850 =4 THEN KOLOR=1 ON 1860 LINE (X1, Y1)-(X2, Y2),K OLOR NEXT THETA2 AD 1870 BO 188Ø NEXT THETA1 1890 GOSUB 2380 'Module #14 - ExplodedCi PL 1900 rcularSpikes HI 1910 R1=20:R2=45:R3=115:R4=85 INC1=PI/3: INC2=PI/6 CA 1920 1930 FOR THETA1=0 TO PI#2 STE P INC1 FOR THETA2=Ø TO PI#2 ST HJ 194Ø EP INC2 DP 1950 X1=FNPOLARX (R3, THETA2) Y1=FNPOLARY (R4, THETA1) EF 1960 QI 197Ø X2=FNPOLARX (R1, THETA1) E6 198Ø Y2=FNFOLARY(R2, THETA2) KOLOR=KOLOR+1: IF KOLOR JJ 199Ø =4 THEN KOLOR=1 LINE (X1, Y1)-(X2, Y2),K MM 2000 DLOR NEXT THETA2 00 2010 2020 NEXT THETA1 PN L6 2030 GOSUB 2380 HH 2040 'Module #15 - BigMultiLo bes FI 2050 R1=95:LOBES=2 KB 2060 INC=PI/128 EI 2070 FOR THETA=0 TO 2*PI STEP INC R2=R1*SIN(LOBES*THETA) BC 2080 X1=FNPOLARX (R2, THETA) PN 2090

PH 2100 Y1=FNPOLARY (R2. THETA) J6 211Ø KOLOR=KOLOR+1: IF KOLOR= 4 THEN KOLOR=1 FJ 2120 LINE (XCENTER, YCENTER) -(X1, Y1), KOLOR LB 2130 NEXT THETA ML 2140 GOSUB 2380 KN 2150 'Module #16 - DoubleOval Cone 6A 216Ø R1=12Ø:R2=3Ø:R3=4Ø:R4=15 11 217Ø INC=PI/32 6K 2180 FOR THETA=PI TO 3*PI STE P INC BK 2190 X1=XCENTER-R1*COS (THETA 1 2200 MH Y1=R3-R2#SIN(THETA) X2=FNPOLARX (R1, THETA) 2210 Y2=FNPOLARY (R2, THETA) -Y HE 2220 CENTER+R4 KD 2230 KOLOR=KOLOR+1: IF KOLOR= 4 THEN KOLOR=1 KC 2240 LINE (X1, Y1)-(X2, Y2), KD LOR MJ 2250 NEXT THETA MD 2260 GOSUB 2380 6A 227Ø CLS:WIDTH BØ PRINT "Press "CHR\$ (34) "G EK 2280 "CHR\$(34)" to view again HB 2290 A\$=INPUT\$(1) NC 2300 IF A\$="G" OR A\$="g" THEN RUN KI 2310 WIDTH BO:SCREEN Ø:END MC 2320 SCREEN 1:CLS:LOCATE 1,1: PRINT "Mathgraphics" HB 2330 PI=3.1415927# IC 234Ø XCENTER=151: YCENTER=93 BI 2350 DEF FNPOLARX (R, THETA) =R* COS (THETA) +XCENTER DEF FNPOLARY (R, THETA) =R* NL 2360 SIN(THETA) +YCENTER JH 237Ø RETURN FD 238Ø TIME=TIMER MB 2390 WHILE TIMER<TIME+15:WEND NI 2400 CLS JI 2410 LOCATE 1,1:PRINT "MathGr aphics" JY 2420 RETURN Program 2: Math Graphics Construction Set 00 100 REM Copyright 1988 COMPUT E! Publications, Inc. --All Rights Reserved PD 110 PI=3.141592654# DF 120 DIM R(19):KEY OFF NB 130 DEF FNPOLARX (R, THETA) =R*C OS (THETA) +XCENTER JH 140 DEF FNPOLARY (R, THETA) =R*S IN (THETA) +YCENTER CB 15Ø XCENTER=159: YCENTER=100 00 160 FOR I=1 TO 19:READ R(I):N EXT I AF 170 DATA 150, 35, 65, 85, 0, 6, 64, 10000, 10000, 10000, 10000, 0 ,0,20,1,1,1,1,1 EL 180 ON ERROR GOTO 630 ND 190 SCREEN Ø,Ø,Ø DH 200 WIDTH 80:CLS J8 210 PRINT STRING\$ (78, "*") LB 220 PRINT " MathGraphic Const ruction Set - Copyright 1 988 COMPUTE! Publications Inc." KK 230 PRINT STRING\$ (78, "*") IA 240 PRINT "(1) R1="R(1) L6 250 PRINT "(2) R2="R(2) PM 260 PRINT " (3) R3="R (3) CC 27Ø PRINT "(4) R4="R(4) PRINT "(5) Start of Theta EN 280 Loop (Pi * x)="R(5)

NE 290 PRINT "(6) End of Theta L oop (Pi * x)="R(6) P 300 PRINT "(7) Increment of T heta Loop (Pi / x)="R(7) BK 310 PRINT "(8) X1's Offset (P i / x)="R(8) FB 320 PRINT "(9) Y1's Offset (P i / x)="R(9) JN 330 PRINT "(10) X2's Offset ( Pi / x)="R(1Ø) 01 340 PRINT "(11) Y2's Offset ( Pi / x)="R(11) JE 350 PRINT "(12) Start of Thet a Loop #2 (Pi * x)="R(12) P8 36Ø PRINT "(13) End of Theta Loop #2 (Pi * x)="R(13) MO 370 PRINT "(14) Increment of Theta Loop #2 (Pi * x)="R (14)M 380 PRINT "(15) X1 uses Loop #"RIGHT\$(STR\$(R(15)),1) F# 390 PRINT "(16) Y1 uses Loop #"RIGHT\$ (STR\$ (R(16)),1) N 400 PRINT "(17) X2 Uses Loop #"RIGHT\$(STR\$(R(17)),1) FJ 410 PRINT "(18) Y2 Uses Loop #"RIGHT\$ (STR\$ (R (18) ), 1) LM 420 PRINT "(19) Color Palette #"RIGHT\$(STR\$(R(19)),1) 0] 430 INPUT "Type number to mod ify, 20 to RUN, 21 to QUI T >",60 1 440 IF GO=21 THEN CLS:END 00 450 IF GO=20 THEN 500 68 460 IF GO>19 THEN ERROR 13 HA 47Ø INPUT "Change to >", VA EI 480 R (GD) =VA HJ 490 GOTO 180 JE 500 IF R(19)=Ø THEN SCREEN 1, Ø:COLOR ,Ø ELSE IF R(19)= 1 THEN SCREEN 1, Ø:COLOR , 1 ELSE IF R(19)=2 THEN SC REEN 1,1:COLOR ,Ø ELSE IF R(19)=3 THEN SCREEN 1,1: COLOR ,1 ELSE ERROR 13 FC 51Ø FOR THETA1=PI*R(5) TO PI* R(6) STEP PI/R(7) KF 520 FOR THETA2=PI*R(12) TO P I*R(13) STEP PI/R(14) IF R(15)=1 THEN X1=FNPD L6 53Ø LARX (R(1), THETA1+PI/R(8)) ELSE IF R(15)=2 THEN X1= FNPOLARX (R(1), THETA2+PI/R (8)) ELSE ERROR 13 AC 54Ø IF R(16)=1 THEN Y1=FNPD LARY (R(2), THETA1+PI/R(9)) ELSE IF R(16)=2 THEN Y1= FNPOLARY (R(2), THETA2+PI/R (9)) ELSE ERROR 13 IF R(17)=1 THEN X2=FNPO CE 55Ø LARX(R(3), THETA1+PI/R(1Ø) ) ELSE IF R(17)=2 THEN X2 =FNPOLARX (R(3), THETA2+PI/ R(10)) ELSE ERROR 13 IF R(18)=1 THEN Y2=FNPD HH 560 LARY(R(4), THETA1+PI/R(11) ) ELSE IF R(18)=2 THEN Y2 =FNPOLARY (R(4), THETA2+PI/ R(11)) ELSE ERROR 13 6C 57Ø KOLOR=KOLOR+1: IF KOLOR= 4 THEN KOLOR=1 6F 58Ø LINE (X1, Y1)-(X2, Y2), KD LOR K\$=INKEY\$: IF K\$<>"" THE 06 590 N THETA1=PI*R(6): THETA2=P I*R(13):K=1 NEXT THETA2 PF 600 EB 61Ø NEXT THETA1 LK 615 IF K=1 THEN K=0:GOTO 190 K\$=INKEY\$: IF K\$="" THEN G P6 62Ø OTO 620: ELSE GOTO 190 IN 630 PRINT "Bad Equation": GOTO 190 0

## The Elementary Amiga Part 4

#### Jim Butterfield

This month's installment focuses on the CLI and talks about special directories, logical devices, and timesaving command files. With command files, you can create your own CLI "macros" for copying fonts, deleting multiple files, or almost anything.

You may have noticed that most CLI commands reside in a directory called C (the directory has nothing to do with the language C). CLI commands are simply programs. So if I type ZAP, and there's a program called ZAP in my current directory, that program loads and runs. If I enter *DIR*, the computer looks for the DIR program in my current directory. Chances are, the computer will not find DIR in the current directory. In this case, it looks in the C directory.

C is just one of the Amiga's special directories. If I enter EXE-CUTE STARTUP-SEQUENCE, the computer knows that if it doesn't find the STARTUP-SEQUENCE in the current directory, it should look in the S directory. And if an Amiga Basic program contains a LIBRARY statement asking the system to load a specific .BMAP file, the computer looks in the LIBS directory.

A number of Amiga directories are set aside for special jobs. But how does the Amiga know to look in these directories? Whenever the Amiga needs to access certain types of information, it uses a *logical device*.

#### Logical Devices

Logical devices can be referred to just like hardware devices, such as DF0: for the internal disk drive or PRT: for a printer. For example, if the computer needs the system disk for some reason, it refers to it as logical device SYS:. When you boot your Amiga, the computer assigns SYS: to the Workbench disk that starts the system.

The Amiga has six other logical devices that are used to point to different disks and/or directories. These devices are explained below.

Logical device C: tells the computer where to look for CLI commands. By default, this device points to the C directory on the Workbench disk from which you booted. S: points to the S (sequence) directory, where the computer looks for command files. Files in this directory can usually be listed with the CLI's TYPE command and often make interesting reading.

DEVS: points to the DEVS directory, which holds information on devices. Information about your printer is found here, plus modules for handling other input/output operations. L: points to the L (library) directory. This contains overlays for large commands and nonresident parts of the operating system.

LIBS: specifies the LIBS directory, where information for Open Library calls is stored. Generally, this directory doesn't contain program code, just lookup tables. Logical device FONTS: points to the FONTS directory, where character fonts are kept. If you don't use fonts, you can delete this directory with no ill effects.

There's one more logical device called T: for *temporary*. During editing and similar operations, a copy of your original file is placed here. That way, if you really botch things up you can go back to the earlier file.

To see a complete list of logical devices and what disks and/or directories they are currently linked with, enter the CLI command AS-SIGN without any parameters.

#### Flexible Commands With EXECUTE

If there's a series of commands that you need to repeat, EXECUTE can do the job nicely. We'll start with a simple example and then work up to something more elegant.

Suppose you want to search through a series of disks to see which ones contain the ADD-BUFFERS command within the C directory. You could insert each disk into DF1: and enter LIST DF1:C/ADDBUFFERS. That seems like a lot of typing, and if you're like me, you're likely to spell something wrong. You might find it easier to create a file named Q containing this command and then EXECUTE it repeatedly. Try this:

ECHO >RAM:Q "LIST DF1:C/ADD-BUFFERS" COPY C:EXECUTE RAM:EX CD RAM:

The first line creates a file called Q on the ramdisk, containing our LIST command; the second line copies the EXECUTE command to RAM, with a shorter name (EX); and the last line switches our current directory to RAM. Now, each time we put a disk into DF1:, we need only enter EX Q, and the command LIST DF1:C/ADDBUFFERS is executed. If ADDBUFFERS is not on the disk, you get an *object not found* response. If the file exists, the computer gives you details such as ADDBUFFER's file size and date.

Let's try something more complex. Suppose we want to copy a complete font set from one disk to another. In fact, maybe we want to copy several fonts.

Font copying is tedious. First, you must make a directory with the correct name on the target disk. Then you must copy all the individual fonts into the newly created directory. Finally, you must copy the associated .FONT file into the target disk's FONTS directory. This process is hard enough with just one font, but when you have to copy several fonts, it really becomes work.

Try this: Enter the command ED S:FC to create a new file within the S directory called FC (for Font Copy). Now enter the following lines:

.KEY fontname/a IF NOT EXISTS DF1:FONTS MAKEDIR DF1:FONTS ENDIF MAKEDIR DF1:FONTS/<fontname> COPY DF0:FONTS/<fontname> TO DF1:FONTS/<fontname> COPY DF0:FONTS/<fontname>.FONT TO DF1:FONTS

The first line insists on receiving a font name with this command. Lines 2–4 create a FONTS directory on the disk in DF1: if one does not already exist. Line 5 creates the font's subdirectory on the disk in DF1:. Line 6 copies the contents of the font's subdirectory from the disk in DF0: to the disk in DF1:, and line 7 copies the associated .FONT file to disk in DF1:. When you've completed entering this command file, press ESC, X, and then RETURN to wind things up.

Now, if you want to copy a set of fonts called SAPPHIRE from a disk in DF0: to a disk in DF1:, just enter EXECUTE FC SAPPHIRE. If you have several fonts to copy, this command file makes the job easy. Don't forget that by copying this command file into the ramdisk and entering CD RAM:, you can really speed things up.

#### More Command Files

The versatility of ED and the power of EXECUTE can make some useful combinations. Let's look at the possibility of deleting a whole set of files from a disk.

Insert a disk from which you'd like to delete a number of files into DF1: and type

LIST >RAM:FLIST DF1: QUICK

Of course, you may list a subdirectory if that suits your purposes or use pattern matching to single out certain types of files. After entering this command, we have a list of files stored away in RAM:FLIST. Edit it with

#### ED RAM:FLIST

You'll see a list of files and directories, together with the header *Directory* ... Move the cursor to this top line and press the ESC, D, and RETURN keys to delete this line.

In the same way, go through this list, removing the names of files that you don't want to delete. You can press the ESC-D sequence again, if you wish; alternatively, you may find it easier to press CTRL-G, which repeats the previous command. Either way, continue through the list until you have deleted the final line, which shows the count of files and directories.

At this point, you might like to press ESC followed by SA and then RETURN to save the file in its current state. Now, get ready for the high-powered stuff.

Press ESC and then type the following line, followed by a RETURN:

T; RP (E //DELETE DF1:/; N)

Let me explain this string of commands. The character *T* means go to the top of the document. The *RP* means repeat the following sequence in parentheses. In the repeated section, *E* means to exchange every null string (there's nothing between the first two slashes) with DELETE DF1:. The *N* commands the computer to move to the next line. Or in simpler terms, these commands mean go to the top of the text and insert the characters DELETE DF1: at the start of each line until you run out of lines.

Now we have a file to do some work for us. Exit the editor by pressing ESC, X, and RETURN. Then, assuming you really want to delete all those files on the disk in DF1:, activate the command file with

#### EXECUTE RAM:FLIST

You may have access to other supereditors with which you can do the same sort of thing. But if not, ED does the job neatly.

#### More To Come

Next time, we'll look at some more of my favorite CLI commands and take a closer look at multitasking.©

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# CAPUTE!

#### **Premature Prose**

In last month's feature,"Superconductors: A Technology Coming Of Age" (p. 18), we incorrectly stated that researchers have superconductors working at room temperatures. This is not true. Somewhere in the editing process, a few words were dropped from the article's original text. The passage should have read: With these recent developments, researchers believe that they'll soon have superconductors working at room temperatures.

#### Softkey For Atari XL/XE

Some users may experience problems with the program "Softkey Editor" (January 1988). The program depends on the variable SCREEN\$ being the first variable in the program. Unfortunately, the FOR/NEXT delay loop we added makes TT the first variable. Typing errors and immediate mode statements can also cause entries to be made in the variable name table.

To correct the problem, remove line 30 in the program. Next, LIST the program to disk with a command like LIST"D:TEMP". Do not use the SAVE command. Reboot your computer and type ENTER"D:TEMP". Finally, type SAVE"SKCREATE" to create a working version of the program.

#### Canfield For Apple II

There are a number of corrections to the Apple version of "Canfield" from the January 1988 issue. These lines need the following changes:

215 IF A\$ = "y" THEN GOTO 40 220 IF A\$ = "Y" THEN GOTO 40 1930 VTAB 18: HTAB 2: PRINT "{4 SPACES) ";: HTAB 2: PRINT "\$"BR 2000 VTAB 22: HTAB 2: PRINT "PL AY AGAIN? (Y/N) ". 2020 IF A\$ = "y" DR A\$ = "Y" TH EN BR = 500: POP : GOTO 40

2030 IF A\$ = "n" DR A\$ = "N" TH EN BR = Ø: POP : GOTO 410

These changes are for both the DOS 3.3 and ProDOS versions. 0



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Forrest Bentley

Perhaps the best Commodore 64 drawing program COMPUTE! has ever published, "Color Pad" includes many features and fast response. Features such as Fill, Square, Ellipse, Text, and Transfer—a powerful copyand-paste option—make designing spectacular screens quick and easy. A joystick and a disk drive are required.

"Color Pad" is a full-featured drawing program that allows you to create detailed multicolor pictures using a joystick. Every program option is available through a single keypress, making the program easy to use. And Color Pad has a wide variety of functions, from Draw mode to Ellipse and Fill options.

Worth noting here is Color Pad's unique copy feature, Transfer. With Transfer, any section of the screen can be duplicated and saved to disk for later use. You can not only transfer objects from one section of the screen to another, but you can also transfer objects from one complete drawing to another.

#### Typing It In

Color Pad is composed of Programs 1 through 4. Program 1 is written in BASIC, so it is recommended that you use the "Automatic Proofreader," found elsewhere in this issue, to assist you in typing it in. Programs 2, 3, and 4 are each written in machine language and must be entered using "MLX," the machine language entry program found elsewhere in this issue. When you run MLX, answer the prompts as follows for each program:

Program 2	
Starting address:	80E8
Ending address:	92C7
Program 3	
Starting address:	C000
Ending address:	CEBF
Program 4	
Starting address:	92E0
Ending address:	9CB7

After typing in each program, save a copy to disk. Save Program 1 with the filename COLOR PAD, Program 2 with the filename COLOR PAD.O, Program 3 with the filename COLOR PAD2.O, and Program 4 with the filename COLOR PAD3.O, all on the same disk. When run, Color Pad looks for the programs with these filenames.

#### Typing In Multiple Sittings

Programs 2–4 are quite long machine language programs. If you want to stop typing one of the listings at some point and resume later, press SHIFT-S and follow the screen prompts. Remember to note the line number of the last line you typed in.

When you are ready to continue typing, load MLX, answer the starting and ending address prompts, then press SHIFT-L. MLX asks for the filename you gave to the partially typed-in program. After the load is complete, press SHIFT-N and tell MLX the line number you stopped at. Now, continue typing as before. When you finish typing, MLX automatically prompts you to save the program.

#### Starting Up

To run Color Pad, plug a joystick into port 2, turn on your 64, and enter LOAD "COLOR PAD",8. After the program is loaded, type RUN and press RETURN. After a while, Color Pad's multicolor bitmapped screen appears. Pressing f1 returns you to BASIC.

Once in Color Pad's bitmapped screen, you'll notice a penshaped sprite indicating where you're plotting. The joystick controls the pen. To draw, the pen must be down. The joystick's fire button toggles the pen up and down. So you know the current orientation of your pen, two dark lines appear within the pen when it's down.



"Color Pad" can produce beautiful, detailed color screens such as this one.



The transfer function can be used to stamp images.

Color Pad contains many drawing tools for the computer artist. The following describes these tools and how to access and use each of them.

#### The Basics

*Brushes:* Color Pad offers a selection of two brushes: large and small. To select a new brush, press B. Your pen changes in size to reflect the new size of your brush.

*Eraser:* If you make a mistake—and we all do—you'll want an eraser. To access the eraser, press E. The eraser end of the pen opens up to indicate that Erase mode is in effect. Now, when the pen is down, you erase points rather than draw them. The eraser uses the current brush shape. To return to Draw mode, press D.

Drawing Color: This option allows you to access the 64's palette of 16 colors. To change the color your pen draws with, press the space bar. The border color indicates the new color. Pressing the space bar repeatedly cycles through all 16 different colors. To cycle backward through the colors, press SHIFT-SPACE.

The Commodore 64 allows

only four colors in any eight by eight pixel area. If you try to use more than four colors in an eight by eight block, one color will "splash" into another. Just be careful when using multiple colors in a small area.

*Pen Color:* To change the color of your pen, press A. Continue to press A until you find the color you want. This does *not* change the plotting color, just the color of the pen sprite. It's best to choose a pen color that contrasts well with the paint and canvas colors.

*Pen Speed:* You can speed up and slow down the pen's movement by pressing the plus and minus keys, respectively. Be careful when increasing your pen's speed this program can move very fast.

*Clear:* The garbage can is probably an artist's most important tool. Everyone needs to throw away his or her work once in a while. The Clear option gives you this ability by disposing of your current sketch and giving you a clean slate. You may also wish to use the Clear option to begin a new drawing after saving the current one to disk.

To clear a sketch, press C. The pen vanishes, acknowledging your keypress. If you really wish to toss your sketch into the garbage can, press C again and the screen will clear. If you change your mind, press any key other than C and the pen will return, leaving your drawing intact.

*Oops:* Here you can dig through your garbage and pull out an old version of your drawing. The Oops option restores your drawing back to a previous state. To enter Oops mode, press O. The pen will vanish. Press O again to restore the sketch. Pressing any other key aborts the Oops process.

To specify the "previous state" that your drawing is restored to, press SHIFT-O. Whenever you press SHIFT-O, your drawing is copied into the Oops buffer, where it can be recalled by pressing O twice. The sketch is also copied into the Oops buffer whenever you use one of the function key options or display a directory.

It's a good idea to press SHIFT-O before making drastic modifications to a sketch. This way, you always have a good sketch to Oops back to.

#### Lines And Shapes

*Lines:* This option, a straight-edge tool, lets you draw accurate, straight lines.

To draw a line, move your pen to where you want the line to start and press L. A plus sign (+) appears on the screen at the location of your pen. Now, move your pen to where you want the line to end, and press the fire button. Instantly, a line is drawn using the current brush.

After the line is drawn, the plus sign moves to the current pen position (the line's endpoint), ready for another line. By allowing you to draw connecting lines like this, triangles, rectangles, and other polygons are easily created.

While in line mode, you may change your mind as to where the start of the line should be. To do this, simply press L again, and the plus sign exchanges places with the pen. To exit line mode, press RETURN.

*Rays:* Press R to enter ray mode. Rays work like lines, with one exception. After a ray is drawn, the + sign remains where it was before the ray was drawn. To exit ray mode, press RETURN.

*Square:* To draw a square, press S. Four plus signs appear, indicating the shape and size of the square. Move the joystick right or left to increase or decrease the horizontal length of the square. Similarly, move the joystick up or down to increase or decrease the vertical height of the square. Once you have the shape you want, press the fire button. Now, move the square to where you want it and press the fire button again. The square is placed onto the screen. To escape from this mode, press RETURN.

Diamond: A diamond is a square that sits on its corner. To draw a diamond, press Q. Four plus signs appear. As with a square, use the joystick to determine the shape of the diamond and press the fire button. Move to the desired location on the screen and press fire to draw the object. Pressing RETURN exits diamond mode.

*Ellipse:* To draw a circle or an ellipse, press I. Again, you are presented with four plus signs. Move the joystick to determine the shape of the ellipse. Once you have the shape you want, press the fire but-

ton. Now, move the plus signs to where you want the ellipse drawn and press the fire button again. An ellipse is placed onto the screen. To escape from this mode, press RETURN.

#### The Extras

*Fill:* To fill an enclosed area on your sketch, move the pen inside the area and press F. Make sure that there aren't any holes in the edges, or the paint will leak out. To terminate a Fill before it is finished, press RETURN.

After an area is filled, you may want to refill it with a different color. To do this, lift the pen up, select the new color using the space bar, and press F again. The new color covers the old color.

Fill reads the color under the pen's point and fills until it reaches a different color. If the color under the pen matches the current drawing color, the fill is stopped.

*Text:* With this tool, you can draw text in several different sizes. To place text onto a drawing, press T. The pen changes to an underline cursor. Now, simply type in your message. The cursor keys and the RETURN key can be used to move the cursor around the screen.

When you reach the end of the screen, the cursor does not automatically move to the next line. You must manually move to the next line using the cursor-down key or the RETURN key. The f1 key exits Text mode.

To erase a character while entering text, press f3. The cursor splits in two, indicating that you're in Erase mode. Now, use the cursor keys to move on top of the incorrect letter and retype that same letter. Just as with correctable ribbon on a typewriter, the offending letter is deleted from the screen. Press f3 again to draw characters.

Toggling the text cursor between Draw and Erase is identical to setting the pen to Draw and Erase. For instance, if you wish to enter reverse letters on a solid object, type your letters in Erase mode.

To increase the size of your characters, press the up-arrow key  $(\uparrow, \text{ not the cursor-up key})$ . Each time you press this key, the character size increases. The left-arrow key  $(\leftarrow)$  reduces the character size.

To give words a three-dimensional look, type a word in black, back up to the first letter in the word using the cursor keys, press f1, move the pen a few pixels up and left, select a different paint color by pressing the space bar, press T to enter text mode, and retype the word.

*Transfer:* This option offers three important tools—a photocopier, scissors, and paste. You can select an area of the screen, copy it, and then paste the copy anywhere on your sketch.

To begin the transfer, move the pen to the upper-left corner of the area that you wish to select and press X. As with the square tool, four plus signs appear. Move the plus signs with the joystick to form a square that encloses the area to be transferred. Press the fire button and the enclosed area is copied. Now, move to where you want the copy to be placed and press the fire button again. The copy is pasted onto the sketch.

After you're through making all the copies you want, press RE-TURN and the pen reappears. If you want to retransfer the same copy later, just press N. The selection square reappears. Move to where you want the copy placed and press the fire button.

To transfer a copy to another sketch, press X, select an area, press RETURN to exit Transfer mode, press f4 to load a new drawing, and press N to transfer the copy. Transfers may also be saved to disk for later use (see below).

If you use a drawing tool that uses the plus signs (like Square or Ellipse) between the transfer and retransfer functions, the retransfer does not work properly. In this case you have to copy the original again, or save it to disk and load it back in.

Zoom: To add detail to your pictures, Color Pad offers Zoom mode. You activate Zoom mode by pressing Z. A square area defined by four plus signs appears. Move the square area over the section of the screen that you wish to edit and press fire. The selected area is enlarged to fill the entire screen.

To edit this magnified view of your sketch, simply use your pen and draw. If you wish to erase pixels, enter Erase mode by pressing E.

# **Using Color Pad Pictures**

#### From Color Pad To BASIC

Programs 5 and 6 allow you to load Color Pad pictures from BASIC. You may use these pictures in your own programs, or simply create a Color Pad slide show that exhibits your finest creations.

To begin, type in Programs 5 and 6. Program 5 is written in BASIC, so be sure to use the "Automatic Proofreader" to ensure accurate entry.

Program 6 is written in machine language. You must enter Program 6 using "MLX," the machine language entry program found elsewhere in this issue. Enter the following starting and ending addresses for Program 6:

#### Starting address: C350 Ending address: C437

Save Program 5 and 6 to the same disk. Save Program 6 using the filename CPBASIC.O. Program 5 looks for Program 6 using this filename.

When you run Program 5, the computer requests the filename of a Color Pad file. Insert the disk containing the desired picture and enter the picture's filename. After the picture loads, it is displayed on the screen. Press any key to exit the program.

You can modify Program 5 for your own purposes. For example, by deleting line 150 and changing line 160 to

#### 160 FL\$="MYPICTURE"

the program automatically loads and displays the drawing saved as MYPICTURE.

Graphics programmers may be interested to know that Color Pad's bitmapped picture loads into memory at 8192–16383. The text screen is still located at 1024–2023. Because the multicolor drawing resides in the BASIC workspace, a POKE 52,32:POKE 56,32:CLR is necessary to keep BASIC from intruding on your picture. These POKEs, however, reduce the workspace to a little under 6K.

#### From Koala Pad To Color Pad

Program 7 is a machine language program that transfers files created by Koala Pad's *Koala Paint* program into Color Pad. To use Program 7, you must first type it in using MLX. Enter the following values when prompted:

Starting address: C000 Ending address: C047

shung address: Co

When you are finished, save the program as CONVERT.O. Now, to convert the picture to Color Pad format, enter the following lines. Note that the *A* in line 10 should be changed to specify the desired Koala Pad file.

#### NEW

10 F\$=CHR\$(129)+"PIC A*":REM WHERE "A" IS THE PICTURE'S LETTER 20 IF L=0 THEN L=1:LOAD F\$,8,1 RUN LOAD "CONVERT.O",8,1 SYS 49152 LOAD "COLOR PAD",8 248 POKE 821,87 RUN

When Color Pad runs, the converted Koala Pad drawing appears on the screen, ready for you to edit or save.

Press D to return to Draw mode. You can change the color that your pen draws with by pressing the space bar. To move the Zoom viewing area around the sketch, use the cursor keys.

Press RETURN to restore your

screen to normal. The Zoom selection square remains on the screen for you to use. If you wish to exit Zoom mode entirely, press RE-TURN again. Zoom mode is perfect for adding final touches to a detailed drawing.

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#### **Special Features**

*Exchange Color:* After drawing for a while, you may want to exchange all occurrences of one color for another. To do this, lift the pen up, move the point of the pen on top of the color that you want to change, press the space bar until you find the color that you want, and press SHIFT-A. All occurrences of the old color switch with the new color.

Rapid Colors: For interesting color effects, turn on Rapid Colors by pressing SHIFT-R. When activated, the drawing color rapidly cycles between all 16 colors. Press SHIFT-R again to turn this mode off. Rapid Colors affects all drawing functions, such as Draw, Ellipse, and Fill.

Shading: Shading allows you to draw using different patterns or shades. Press SHIFT-S to activate Shading. When activated, the pen toggles quickly between Draw and Erase mode, creating a shading effect. The speed at which the pen switches between drawing and erasing depends on the speed of your pen. You can adjust the pen speed by pressing the plus and minus keys. To turn off Shading, press SHIFT-S again.

Shading can be useful for drawing dotted lines. Try using the Fill option using different pen speeds while Shading is on. You can create some very interesting graphics this way.

Screen Scroll: By using the cursor keys, you can move a drawing around on the screen. Any part of the drawing that moves off the edge of the screen is erased, so be careful. It is a good idea to create borders for your drawings last, just in case you accidentally hit a cursor key.

Swap: With Swap, you can have two sketches in memory at one time. When you press f2, the current screen "swaps" with the one stashed in memory. When loading, saving, or printing a sketch, only the current screen the one that's visible—is affected.

Using Color Pad's Transfer feature, you can copy objects from one screen to the other. Just press X for Transfer, select an area, press RETURN to exit Transfer mode, press f2 to Swap screens, and press N to Transfer a copy to the alternate screen. Screen Copy: Pressing f8 copies the current screen to the alternate screen. The border changes color briefly while the current screen is being duplicated. When the border color returns to normal, both screens are identical.

*Help:* All of Color Pad's options are documented in an online help screen. The f7 key opens the help screen and RETURN closes it.

#### **File Commands**

*Directory:* Pressing SHIFT-RETURN prints the current disk directory to the screen. To resume drawing, press RETURN.

*Save:* To save your sketch, press f3. The program prompts you for a filename. When saved, the characters *CP*. are added to the beginning of the filename to help you remember which files are Color Pad files. For this reason, you must enter a filename with 13 or fewer characters. Pressing RETURN without entering a filename exits this option.

Load: Here you can load a previously saved sketch by pressing f4. When the program prompts you, enter the filename that you used to save the sketch (without the added CP.). The sketch is loaded and ready for editing. Pressing RE-TURN without entering a filename returns you to Draw mode.

Save Transfer: This option allows you to save a transfer. A transfer is a selected portion of your sketch (see the Transfer description above). To save a transfer, press f5. The program prompts you for a filename. Transfer files are saved with the characters CX. added to the beginning of the filename. You may exit this option by pressing RE-TURN without entering a filename.

Load Transfer: This option allows you to load a previously saved transfer. To load a transfer, press f6. When the program prompts you, enter the filename that you used to save the sketch (without the added CX.). The transfer is loaded and ready for use. You may exit this option by pressing RETURN without entering a filename.

After the transfer is loaded, the retransfer function is automatically called and you are presented with the four + symbols. Press RE-TURN if you do not wish to place the transfer yet.

#### Quitting

*Exit:* To exit the program, press f1. If you exit Color Pad accidentally, entering RUN immediately restarts the program with your drawing intact.

#### Color Pad

XQ	100	REM COPYRIGHT 1988 COMP
		UTEI PUBLICATIONS, INC.
FF	110	POKE 53269.0
MH	120	IF PEEK(52)>28 THEN POK
	120	E52,28: POKE56,28: POKE82
		Ø,87:CLR
EC	130	IF PEEK(821)=87 THEN L=
		99
ES	140	IF L>Ø THEN GOTO23Ø
AA	150	GOSUB1190
DR	160	PRINT" (15 RIGHT) (BLK) R
		FOND CONTROLOGY
.TD	170	PRINT" {15 RIGHT } RIK C
01	110	R730 [RED]L [CYN] O[PUR] R
		[SPACE] [GRN] PE7 3AE1 3D"
PM	180	PRINT" [15 RIGHT] [BLK]E
		E7 E [ RED ] E [ CYN ] E [ PUR ] E
		E83E[GRN]EE73EE13E
	Sec. 1	[2 DOWN]"
JS	190	PRINT" {3 RIGHT } { WHT } COP
		YRIGHT 1988 COMPUTEI PU
DD	200	DETIM" (10 PICHT) ALL PIC
PD	200	HTS RESERVED [ 3 DOWN] "
MF	210	PRINT" [15 RIGHT] [BLK]LO
-		ADING [CYN]"
MM	22Ø	L=1:LOAD"COLOR PAD.O",8
		,1
FM	23Ø	IF L<>1 THEN GOTO270
BD	240	OPEN15,8,15:OPEN2,8,2,"
		COLOR PAD2.0, P, R": INPUT
VD	250	#15, E, ES :CLOSE2:CLOSE15
RP	250	559 96. COTO 310
PG	260	IF L=1 THEN L=2:LOAD"CO
	200	LOR PAD2.0", 8,1
XG	27Ø	IF L<>2 THEN GOTO300
CJ	280	OPEN15,8,15:OPEN2,8,2,"
		COLOR PAD3.0, P, R" : INPUT
		#15, E, E\$:CLOSE2:CLOSE15
PM	290	IF E>Ø THEN L=3: POKE 49
vv	200	ITE 1-2 THEN 1-3.104D"CO
vv	300	LOR PAD3. O" 8.1
RP	310	POKE835, 1: POKE836, Ø: POK
		E837,Ø:POKE838,55
SH	32Ø	IF DT>Ø THEN GOTO350
HQ	33Ø	DT=1:FORC=1 TO 128:READ
		D: POKE 16255+C, D: NEXT
CF	340	POKE 37465, 5: POKE 37664
CV.	250	,5 DOVERAG G. DETNER! (CIP)".
SK	350	SVS33000
TE	360	POKE53280.6: POKE53281.6
	000	:PRINT" {CYN } {CLR } ";
XD	37Ø	IF PEEK(839)=1 THEN GOT
		0410
FE	38Ø	IF PEEK(839)=136 THEN G
		OSUB890:GOTO350
PX	39Ø	IFPEEK(839)=141 THEN GO
		SUB1310:SYS49152:GOSUB8
FT.	100	COSUBERRA COTO 250
SA	410	PRINT"COLOR PAD PROCESS
Un	410	ING COMPLETE."
JX	420	END
GP	430	REM SPRITE DATA
JM	440	DATA000,000,000,000,000

		,000,000,000
QP	45Ø	DATA000,000,000,000,000
CJ	460	,000,000,000 DATA000,000,000,000,000
DE	170	,255,128,000
DP	470	,000,160,192,000,160,224
JD	480	DATA000,255,128,000,000
QS	490	DATA000,000,000,000,000
FR	500	DATA000,000,000,000,000
R.T	510	,000,000,000 DATA000,000,000,000,000
	510	,000,000,128
RX	520	DATA000,000,000,000,000 ,000,000,000
BX	53Ø	DATA000,000,000,000,000
AC	54Ø	DATA000,000,000,000,000
BP	55Ø	DATAØØØ,006,005,000,014
GT	560	,005,000,006
00	500	,000,000,000
BC	570	DATA000,000,000,000,000 ,000,000,000
FD	58Ø	DATA000,000,000,000,000
RS	590	DATA000,000,000,000,000
QH	600	,000,000,128 REM LOAD/SAVE
PK	610	FC=PEEK(839)
MM	62Ø	IF FC=134 THEN PRINT"SA
		"CP."
GR	63Ø	IF FC=138 THEN PRINT"LO
		"CP."
JS	64Ø	IF FC=135 THEN PRINT"SA
		\$="CX."
JP	650	IF FC=139 THEN PRINT"LO AD TRANSFER{2 DOWN}":BC
		\$="CX."
AQ	660	GOSUB1310
	010	{SPACE}FILE NAME";FC\$:I
		F FC\$="" THEN GOTO880
JE	690	PCS=BCS+LEFTS(FCS, 12) OPEN15.8.15
QJ	700	OPEN2, 8, 2, FC\$+", P, R": IN
		PUT#15, E, E\$:CLOSE2:CLOS
JA	710	IF E>Ø THEN IF FC>137 T
MG	720	HEN830 IF E>Ø AND E<>62 THEN T
	120	F FC<137 THEN830
FH	73Ø	IF FC=139 THEN POKE 198 ,1:POKE631,78
AS	740	IF FC>137 THEN PRINT"
		OAD FC\$,8,1
SM	75Ø	POKE 840, FC: POKE841, LEN (FCS): PRINT" [3 DOWN] SAV
		ING "; FC\$; "{3 DOWN}"
RB	76Ø	FOR C1=1 TO LEN(FC\$):PO
		1,1)):NEXT
FP	770	IF FC=134 THEN GOTO810
KH	180	)*PEEK(27001))+10
XD	79Ø	EH=INT (EA/256): EL=EA-(E
HP	800	POKE860, EL: POKE861. EH
BM	810	SYS33000:IF PEEK(840)=0
		THEN PRINT"GOOD SAVE": GOTO840
DK	82Ø	PRINT"BAD SAVE"; PEEK(84
HD	83Ø	PRINTE;E\$

GS	84Ø	PRINT" { 3 DOWN } PRESS RET	1		(5 S
AD	85Ø	OPEN15,8,15: INPUT#15,E,			13 S
HS	86Ø	GET FC\$: IF FC\$ <> "" THEN	ME	1070	PRIN
AB	87Ø	GET FC\$: IF FC\$="" THEN			DIAM
сх	88Ø	{SPACE}GOTO87Ø RETURN	1 ale		{RVS {WHT
FP	89Ø 9ØØ	REM HELP SCREEN	MC	1080	PRIN
DF	910	PRINT" {CLR} {10 SPACES}			CCCCC
		{PUR}R {GRN}PE73AE13D	cs	1090	UNCT
		{RED}F{GRN}U{YEL}N{BLK} C{RED}T[2]I[3]O[5]N[5]S	CA	1100	PRIN
MR	920	" PRINT" { BLK } CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC			AM (C
		CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC			ENS {
MR	93Ø	PRINT"{UP}{12 SPACES}MI	RQ	1110	PRINT {2 SI
JC	940	NOR FUNCTIONS {CYN} " PRINT" { RVS} FIRE { OFF }=			WHT
		{WHT}PEN UP/DOWN {CYN}			= { WH
		[OFF]={WHT}STORE PIC.	PD	1120	PRIN
ED	95Ø	{CYN}" PRINT"{RVS} D,E{OFF}=			5 (OFI
		[WHT] DRAW/ ERASE			F6 (0)
		<pre>{5 SPACES}SPACE{OFF}=</pre>	HC	1130	PRIN
JF	960	{WHT}DRAW COLOR{CYN}" PRINT"{RVS}{3 SPACES}B			7 [OF]
		{OFF}={WHT}BRUSH SIZE			F8(0)
		{3 SPACES} SHIFT-A {OFF}=	SR	1140	PRIN
XE	97Ø	<pre>{WHT}EXCH COLOR{CYN}" PRINT"{RVS}C(2){OFF}=</pre>			CCCCC
		{WHT}CLEAR{7 SPACES} {CYN}{RVS}{9 SPACES}A	MS	1150	PRIN
		{OFF}={WHT}PEN COLOR			TO
ХН	98Ø	PRINT" [RVS] O(2) [OFF]=	JB	1160	GET I
		{CYN}{RVS}{7 SPACES}+,-	нн	1170	N GOT
		{OFF}={WHT}PEN SPEED {CYN}"	FM	1190	GOT
SJ	99Ø	PRINT" {BLK} CCCCCCCCCC	GM	1190	REM
		CCCCC{UP}"	HM	1200	POKE: 6:PR
RG	1000	PRINT"{UP}{12 SPACES}M AJOR FUNCTIONS{CYN}"	BJ	1210	BC\$=
QF	1010	PRINT" {RVS} {3 SPACES} F {OFF}={WHT} FILL			{PUR
		[8 SPACES] [CYN] [RVS]			:CP=
		TRANSFER{CYN}"	CH	1220	FOR O
QM	1020	PRINT" {RVS} {3 SPACES}L {OFF}= {WHT}LINES	GC	1230	FOR O
		{7 SPACES { CYN } { RVS }			";:G
		RETRANSFER{CYN}"	HS	1240	FOR O
ХВ	1030	PRINT"{RVS}{3 SPACES}R {OFF}={WHT}RAYS	MF	1250	PRIN
		<pre>{8 SPACES}{CYN}{RVS} {9 SPACES}T(OFF)={WHT}</pre>		1000	[3 D
	1949	TEXT {CYN}"	JK	1260	REM I
AH	1040	{OFF}={WHT}SQUARE	DE	1280	CP=CI
		<pre>{6 SPACES}{CYN}{RVS} {3 SPACES}CURSORS{OFF}</pre>	QS	129Ø	PRIN
		={WHT}SHIFT SCREEN	AA	1300	RETUR
PF	1050	PRINT"{UP}{RVS}	SA	131Ø 132Ø	OPEN: IF ST
		<pre>[3 SPACES]Z{OFF}={WHT} ZOOM{8 SPACES}{CYN}</pre>	RF	1330	OPEN
		{RVS}{3 SPACES}SHIFT-S {OFF}={WHT}SHADE		1040	CLOSI
CE	1000	[6 SPACES] [CYN]"	AR	1340	B=B+J
GE	1000	{OFF}={WHT}ELLIPSE	MF	1360	131Ø B=Ø
					-

		15 SPACES   (CVN) (PVS)
		<pre>[3 SPACES]SHIFT-R{OFF}</pre>
		= {WHT } RAPID COLORS
ME		{CYN}"
ME	1010	13 SPACES O OFF = [WHT]
		DIAMOND 5 SPACES (CYN)
		{RVS} SFT-RETURN {OFF}=
		{WHT}DIRECTORY{CYN}"
MC	1080	PRINT" [BLK] CCCCCCCCCC
		CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CS	1090	PRINT" [UP] [13 SPACES] F
	1000	UNCTION KEYS [CYN] "
CA	1100	PRINT" [RVS] [2 SPACES] F
		1{OFF}={WHT}EXIT PROGR
		AM(CYN) [RVS] [8 SPACES]
		F2{OFF}={WHT}SWAP SCRE
RO	1110	PRINT" (IIP) { RVS}
	****	{2 SPACES}F3{OFF}=
		{WHT} SAVE SKETCH {CYN}
		[RVS] [8 SPACES] F4 [OFF]
		={WHT}LOAD SKETCH{CYN}
DD	1120	DRINT" ( PUS) ( 2 SPACES) F
10	1120	5 (OFF = [WHT] SAVE TRANS
		. {CYN} [RVS] [8 SPACES]
		F6 [OFF] = [WHT] LOAD TRAN
110	1120	S. [CYN]"
HC	1130	7 OFF = [WHT] HELD SCREE
		N (CYN) [RVS] [8 SPACES]
		F8{OFF}={WHT}COPY SCRE
		EN{CYN}"
SR	1140	PRINT" {BLK} CCCCCCCCCC
		CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
MS	1150	PRINT 2 DOWN
	1100	{10 SPACES } [RVS ] RETURN
		TO CONTINUE {OFF}
		{3 UP}{CYN}"
JB	1160	GET FCS: IF FCS <> "" THE
нн	1170	GET FCS TF FCS="" THEN
		GOTO117Ø
FM	118Ø	RETURN
GM	1190	REM PRINT BORDER
HM	1200	POKE53280,6:POKE53281,
B.T	1210	BCS="{RVS} {OFF}" CRS=
20		"[BLK][WHT][RED][CYN]
		[PUR] [GRN] [7] [YEL] [1]
		E23E33E43E53E63E73E83"
	1000	:CP=1
Сп	1220	Ø:NEXT
GC	1230	FOR C=1 TO 23:GOSUB127
		Ø:PRINT" {2 LEFT } { DOWN }
	10.0	";:GOSUB127Ø:NEXT
HS	1240	FOR C=1 TO 39:GOSUB127
MF	1250	PRINT" [LEET] ". CHRS (148
	1200	);:PRINT" [HOME]
		[2 DOUNT] !!
KS		13 DOWNS
JK	1260	RETURN
DE	126Ø 127Ø	RETURN REM BORDER CHARACTER
DE	126Ø 127Ø 128Ø	RETURN REM BORDER CHARACTER CP=CP+1:IF CP>16 THEN [SPACE]CP=1
DE	126Ø 127Ø 128Ø	RETURN REM BORDER CHARACTER CP=CP+1:IF CP>16 THEN {SPACE}CP=1 PRINT MID\$(CR\$.CP.1):B
DE QS	126Ø 127Ø 128Ø 129Ø	RETURN REM BORDER CHARACTER CP=CP+1:IF CP>16 THEN {SPACE}CP=1 PRINT MID\$(CR\$,CP,1);B C\$;
DE QS AA	126Ø 127Ø 128Ø 129Ø 13ØØ	RETURN REM BORDER CHARACTER CP=CP+1:IF CP>16 THEN {SPACE}CP=1 PRINT MID\$(CR\$,CP,1);B C\$; RETURN
DE QS AA SA	1260 1270 1280 1290 1300 1310	RETURN REM BORDER CHARACTER CP=CP+1:IF CP>16 THEN {SPACE}CP=1 PRINT MID\$(CR\$,CP,1);B C\$; RETURN OPEN2,8,2:CLOSE2
DE QS AA SA DM PF	1260 1270 1280 1290 1300 1310 1320	RETURN REM BORDER CHARACTER CP=CP+1:IF CP>16 THEN {SPACE}CP=1 PRINT MID\$(CR\$,CP,1);B C\$; RETURN OPEN2,8,2:CLOSE2 IF ST<>0 THEN GOTO1350 OPEN15 8 15:OPEN2 8 2
DE QS AA SA DM RF	1260 1270 1280 1290 1300 1310 1320 1330	RETURN REM BORDER CHARACTER CP=CP+1:IF CP>16 THEN {SPACE}CP=1 PRINT MID\$(CR\$,CP,1);B C\$; RETURN OPEN2,8,2:CLOSE2 IF ST<>Ø THEN GOTO135Ø OPEN15,8,15:OPEN2,8,2, "\$,P,R":INPUT#15,E,E\$;
DE QS AA SA DM RF	1260 1270 1280 1290 1300 1310 1320 1330	RETURN REM BORDER CHARACTER CP=CP+1:IF CP>16 THEN {SPACE}CP=1 PRINT MID\$(CR\$,CP,1);B C\$; RETURN OPEN2,8,2:CLOSE2 IF ST<>Ø THEN GOTO135Ø OPEN15,8,15:OPEN2,8,2, "\$,P,R":INPUT#15,E,E\$: CLOSE2:CLOSE15
DE QS AA SA DM RF BR	1260 1270 1280 1290 1300 1310 1320 1330	RETURN REM BORDER CHARACTER CP=CP+1:IF CP>16 THEN {SPACE}CP=1 PRINT MID\$(CR\$,CP,1);B C\$; RETURN OPEN2,8,2:CLOSE2 IF ST<>Ø THEN GOTO135Ø OPEN15,8,15:OPEN2,8,2, "\$,P,R":INPUT#15,E,E\$: CLOSE2:CLOSE15 IF E=Ø THEN GOTO139Ø
DE QS AA SA DM RF BR AR	1260 1270 1280 1290 1300 1310 1320 1330 1340 1350	RETURN REM BORDER CHARACTER CP=CP+1:IF CP>16 THEN {SPACE}CP=1 PRINT MID\$(CR\$,CP,1);B C\$; RETURN OPEN2,8,2:CLOSE2 IF ST<>Ø THEN GOTO135Ø OPEN15,8,15:OPEN2,8,2, "\$,P,R":INPUT#15,E,E\$: CLOSE2:CLOSE15 IF E=Ø THEN GOTO139Ø B=B+1:IF B<2 THEN GOTO

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bit 100         construction          const	MR 1370 PRINT"TURN ON THE DISK DRIVE AND INSERT A DI	8338:83 4C E2 83 4C E6 83 4C F9 8340:FF 83 4C FB 83 4C F7 83 32 8348:4C 98 83 4C 16 84 4C 18 67	85DØ:F2 91 AD B8 92 29 Ø8 DØ 15 85D8:Ø3 EE 78 69 AD B8 92 29 65 85FØ:Ø4 DØ Ø3 CF 78 69 AD B8 FC
XX 1380       Normal       Side 1.5       Si	DK 1380 GOSUB840:PRINT" [DOWN] "	8350:84 4C 1E 84 4C 30 84 A9 8E 8358:61 8D 68 03 60 A9 00 8D 87	85E8:92 29 02 D0 03 EE 79 69 05 85E8:4D B8 92 29 01 D0 03 CE 06
Color Pard. O.         B378:10         D6         D5         D6         D5         D5        D5	XK 139Ø RETURN	8360:68 Ø3 60 A9 Ø1 8D 47 Ø3 D2 8368:60 FF 45 Ø3 AD 45 Ø3 C9 86	85F8:79 69 20 B5 86 4C A9 85 B8 8600:49 00 8D 67 03 60 49 00 F6
eres         4.0         3.1         Fe         4.0         3.1         Fe         3.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0         8.0         7.0	Color Pad .O	8370:10 DØ Ø5 A9 ØØ 8D 45 Ø3 B2 8378:8D 20 DØ 6Ø AD 46 Ø3 69 64	86Ø8:A2 4Ø 9D 8Ø Ø3 CA DØ FA 12 861Ø:8E 8Ø Ø3 A9 1Ø 8D 96 Ø3 66
000000000000000000000000000000000000	80E8:AD 48 03 F0 04 20 2F 8E CF	8380:0A 18 C9 F0 90 02 A9 F0 AB 8388:8D 46 03 60 AD 46 03 E9 C4	8618:8D 99 Ø3 8D 9F Ø3 8D A2 52 862Ø:Ø3 A9 7C 8D 9C Ø3 A9 ØE D3
11         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10<	80F8:30 81 60 AD 18 D0 09 08 77	8390:0A 18 C9 0F B0 F2 A9 10 81 8398:4C 88 83 CE 45 03 AD 45 1C	8628:8D F9 Ø7 8D FA Ø7 8D FB 3F 8630:07 8D FC Ø7 AD 27 DØ 8D 6D
111         110         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100 <td>8108:8D 11 DØ AD 16 DØ 09 10 21</td> <td>83AØ:03 C9 FF DØ 05 A9 0F 8D 23 83A8:45 03 8D 20 D0 60 EE 27 D3</td> <td>8638:28 DØ 8D 29 DØ 8D 2A DØ B3 8640:8D 28 DØ A9 1E 8D 15 DØ B5</td>	8108:8D 11 DØ AD 16 DØ 09 10 21	83AØ:03 C9 FF DØ 05 A9 0F 8D 23 83A8:45 03 8D 20 D0 60 EE 27 D3	8638:28 DØ 8D 29 DØ 8D 2A DØ B3 8640:8D 28 DØ A9 1E 8D 15 DØ B5
14.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4         10.4 <td< td=""><td>8110:8D 16 D0 20 51 81 AD 15 7C 8118:D0 09 01 8D 15 D0 A9 00 FD</td><td>8380:DØ AD 27 DØ C9 10 DØ 05 B2 8388:A9 00 8D 27 DØ 60 A9 00 14</td><td>8648:A9 ØØ 8D 67 Ø3 A9 Ø1 8D AØ 8650:78 69 8D 79 69 60 A5 C6 IC</td></td<>	8110:8D 16 D0 20 51 81 AD 15 7C 8118:D0 09 01 8D 15 D0 A9 00 FD	8380:DØ AD 27 DØ C9 10 DØ 05 B2 8388:A9 00 8D 27 DØ 60 A9 00 14	8648:A9 ØØ 8D 67 Ø3 A9 Ø1 8D AØ 8650:78 69 8D 79 69 60 A5 C6 IC
11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         10         10         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100 </td <td>8128:AB 82 AD 47 Ø3 60 20 0C 82 20 78 8128:AB 82 AD 47 Ø3 FØ F5 60 F3</td> <td>83CØ:8D 15 DØ 2Ø E4 FF FØ F6 EF 83C8:42 Ø1 8E 15 DØ C9 43 DØ 89</td> <td>8658:FØ Ø1 6Ø AD 27 DØ 8D 28 C4 8660:DØ 8D 29 DØ 8D 24 DØ 8D AF</td>	8128:AB 82 AD 47 Ø3 60 20 0C 82 20 78 8128:AB 82 AD 47 Ø3 FØ F5 60 F3	83CØ:8D 15 DØ 2Ø E4 FF FØ F6 EF 83C8:42 Ø1 8E 15 DØ C9 43 DØ 89	8658:FØ Ø1 6Ø AD 27 DØ 8D 28 C4 8660:DØ 8D 29 DØ 8D 24 DØ 8D AF
81.44         10         10         20         20         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10	8130:20 7D 8A AD 16 DØ 29 EF 05 8138:8D 16 DØ AD 18 DØ 29 F7 CA	83DØ:08 A9 ØØ 8D 35 Ø3 2Ø 51 66 83D8:91 60 20 39 84 60 20 34 64	8668:28 DØ AD ØØ DC 8D B8 92 16
B151:64 D       35 B3       C3 55 7       DB       B151:20       TA       DE       26 20       DE	8140:8D 18 DØ AD 11 DØ 29 DF Ø3 8148:8D 11 DØ A9 ØØ 8D 15 DØ 3C	83EØ:85 6Ø 2Ø AC 87 6Ø A9 6Ø Ø3 92E9:85 6Ø 2Ø AC 87 6Ø A9 6Ø Ø3	8678:03 4C 87 86 CE 66 03 D0 5A
8166         816         93         93         94         96         95         94         95         94         95         94         95         94         95         94         95         94         95         94         95         94         95         94         95         94         95         94         95         94         95         94         95         94         95         94         95         94         95         94         95         94         95         95         95         95         74         95         95         95         74         95         95         95         74         95         95         95         95         74         95         95         95         95         74         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95         95	8150:60 AD 35 03 C9 57 D0 06 19 8158:20 75 8A 4C A8 81 A9 57 D4	83FØ:8D 45 86 2Ø A9 88 6Ø 2Ø 33 92FØ:42 95 6Ø 2Ø A9 88 6Ø 2Ø 33	8688:B8 92 29 Ø8 DØ Ø3 20 6C 7B
817.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.7       17.8       17.8       17.7       17.8       17.8       17.7       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8       17.8	8160:8D 35 03 A9 00 85 FB A9 2A 8168:20 85 FC A0 00 98 91 FB 08	8378:42 86 69 20 7D 8A 60 A2 86 8400:00 8E 15 D0 20 E4 FF FØ E1	8698:20 B6 89 AD B8 92 29 02 D3
B186144       B6       20       M6       D6       20       M6       D6       A0       D6       D6       A0       D6       C5       D7	8170:20 FF 91 A5 FC C9 3F DØ 6E 8178:F4 A5 FB C9 40 DØ EE AD 4C	8408:F0 A2 01 8E 15 D0 C9 4F 0D 8410:D0 03 20 75 8A 60 8D 47 D5	86A8:29 Ø1 DØ Ø3 20 Ø0 8A AD B8 92 BD 86A8:29 Ø1 DØ Ø3 20 ØØ 8A 20 ØB
8198:rB       20       85       84       44       44       40       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80       80	8180:44 Ø3 ØA ØA ØA ØA ØD 43 1E 8188:Ø3 8D 86 92 A9 ØØ 85 FB BE	8418:03 60 20 7E 8E 60 AD 69 61 8420:03 C9 57 FØ 05 A9 57 4C EØ	86B8:D0 05 A9 01 8D 78 69 C9 9F
B1AB:00       F2       AS       FR       CS	8190:A9 04 85 FC AD 86 92 91 28 8198:FB 20 FF 91 A5 FC C9 07 76	8428:2C 84 A9 00 8D 69 03 60 16 8430:20 ED 8E A9 57 8D C4 92 3E	86CØ:AØ DØ Ø5 A9 9F 8D 78 69 18 86C8:AD 79 69 DØ Ø5 A9 Ø1 8D A3
1181:20       65       FC A9       01       10       13       10       1448:60       00       10       00       10       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00       00 </td <td>81AØ:DØ F2 A5 FB C9 E7 DØ EC B9 81A8:20 7D 8A A9 ØØ 85 FB A9 BE</td> <td>8438:60 A0 00 B1 FB 2D 42 03 D0 8440:D0 07 AD 45 03 8D 21 D0 DE</td> <td>86DØ:79 69 C9 C8 DØ Ø5 A9 C7 7Ø 86D8:8D 79 69 AD 78 69 8D 8C 24</td>	81AØ:DØ F2 A5 FB C9 E7 DØ EC B9 81A8:20 7D 8A A9 ØØ 85 FB A9 BE	8438:60 A0 00 B1 FB 2D 42 03 D0 8440:D0 07 AD 45 03 8D 21 D0 DE	86DØ:79 69 C9 C8 DØ Ø5 A9 C7 7Ø 86D8:8D 79 69 AD 78 69 8D 8C 24
B1C9:ED 3F 03 ED 167 D8 A9 C67 G6       B456:A2 67 92 4C 52 84 AB 67 92 DE       B6F1:29 40. P6 08 AA 18 D 06 09 C9 28         B1D6:03 6D 28 DA A9 F5 DD 78 03       B466:192 C9 02 F8 28 C9 01 F0 D7       B708:F1 B0 D7       B678:129 4C 61 E 7A D1 E D0 29 CE       B708:F1 B0 D7       B708:F1 B0 D1 B0 D2 20 C6 52       B478:22 B7 D1 86 09 C5       B478:22 B7 D1 86 00 C5       B478:22 B7 D1 86 07 D4 D1 D0 80 D7       B78:22 B7 D1 86 07 D4 D1 D0 80 D7       B78:22 B7 D1 86 07 D4 D1 D0 80 D7       B78:22 B7 D1 86 07 D4 D1 D0 80 D7       B78:22 B7 D1 86 07 D4 D1 D0 80 D7       B78:22 B7 D1 86 07 D4 D1 D0 80 D7       B78:22 B7 D1 86 07 D4 D1 D0 80 D7       B78:22 B7 D1 86 D7 </td <td>81BØ:20 85 FC A9 Ø1 8D 3E Ø3 1D 81B8:8D 40 Ø3 8D 41 Ø3 A9 ØØ 35</td> <td>8448:60 8D 87 92 AD 42 03 8D 09 8450:88 92 4E 88 92 4E 88 92 06</td> <td>86E0:92 AD 00 D0 8D 02 D0 AD 73 86E8:01 D0 8D 03 D0 AD 10 D0 BA</td>	81BØ:20 85 FC A9 Ø1 8D 3E Ø3 1D 81B8:8D 40 Ø3 8D 41 Ø3 A9 ØØ 35	8448:60 8D 87 92 AD 42 03 8D 09 8450:88 92 4E 88 92 4E 88 92 06	86E0:92 AD 00 D0 8D 02 D0 AD 73 86E8:01 D0 8D 03 D0 AD 10 D0 BA
e110eig3       60       20       60       27       62       80       20       67       87       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       8498159       878       877       877       877       877       877       877       877       8498159       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       877       <	81CØ:8D 3F Ø3 8D 10 DØ A9 CØ 6B 81C8:8D 42 Ø3 AD 44 Ø3 8D 45 EC	8458:AD 88 92 FØ Ø9 4E 87 92 DE 8460:4E 87 92 4C 52 84 AD 87 11	86FØ:29 Ø1 FØ Ø8 AD 10 DØ Ø9 C9 86F8:02 4C Ø1 87 AD 10 DØ 29 2B
112816192       03       08       06       92       06       92       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       05       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72       72	81DØ:Ø3 8D 20 DØ A9 F5 8D F8 Ø3 81D8:Ø7 A9 ØØ 85 FD A9 Ø4 85 46	8468:92 C9 Ø2 FØ 28 C9 Ø1 FØ D7 847Ø:2E A5 FD 18 69 ØØ 85 FD 8F	8700:FD 8D 10 D0 20 6C 89 20 66 8708:7F 8F CE 8C 92 D0 F5 AD CE
11 Pir Fis Ag       00 District for the form of th	81E0:FE A9 64 8D 86 92 20 6C 5E 81E8:89 20 3D 8A CE 86 92 D0 8F	8478:A5 FE 69 D4 85 FE B1 FD 18 8480:29 ØF 8D 87 92 A5 FD 38 6B	8710:00 DØ 8D 04 DØ AD 01 DØ 55 8718:8D 05 DØ AD 10 DØ 29 01 3B
12.00       17       16       4494:0F       8D       67       92       4A       AA       80       80       67       73:8:20       D       AD       79       67       67       73:8:20       D       AD       79       67       67       73:8:20       D       AD       77       87       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       75       77       75       75       75       <	81FØ:F5 A9 ØØ 8D 67 Ø3 AD 9E 73 81F8:3F Ø9 18 8D 9E 3F AD EØ E7	8488:E9 ØØ 85 FD A5 FE E9 D4 E8 8490:85 FE 4C A8 84 B1 FD 29 4Ø	8720:FØ Ø8 AD 10 DØ Ø9 Ø4 4C 5F 8728:2F 87 AD 10 DØ 29 FB 8D 18
B218:00       DC       DD       B8       92       29       16       F6       D       8488:01       92       A9       06       55       DP       6746:100       D0       D0       60       D0       AD	8200:3F 09 18 8D E0 3F A9 01 1B 8208:8D 68 03 60 20 F2 91 AD F1	8498:ØF 8D 87 92 4C A8 84 B1 66 84AØ:FD 4A 4A 4A 4A 8D 87 92 53	8730:10 DØ AD 79 69 8D 8C 92 F5 8738:20 3D 8A 20 7F 8F CE 8C 5E
B220 i B2 C G 6 03 AD 66 03 D0 F4       ABB 67 92 F0 3A B1 FD 4A 4A 50       B750 i 10 D0 29 01 F0 08 AD 10 F2         B220 i B2 C G 6 03 AD 66 03 AD 67 09       B4C0 i 4A 4A CD 87 92 F0 3B A5 28       B758 i 10 D0 29 01 F0 08 AD 10 7         B223 i 03 AD 67 03 AD 67 03 1B       B4C0 i 4A 4A CD 87 92 F0 3B A5 28       B758 i 10 D0 29 01 F0 D0 AD 78 91         B233 i 03 F0 50 AD 67 03 AD 67 03 1B       B4D0 i 69 D4 85 FE B1 FD 29 D1 4B       B768 i 00 90 RC 92 D0 F3 AD 78         B244 i F0 13 A9 BE D9 83 FD 7E       B4D8 i 50 F0 A5 FE D1 A5 FE F2 P4       B778 i 10 D0 29 D1 AD 10 D2 9 D1 A4         B250 i E0 3F 4C 65 2A 9A 08 DF E       B4E8 i 76 0D A5 63 91 FD 4C       B778 i 10 D0 AD 10 D2 9 D1 A4         B256 i E0 3F 4C 65 82 A9 A0 8D FE       B4F8 i 29 F0 AD 45 63 91 FD 4C 6F       B788 i F0 08 D D 10 D0 29 E1 AD 29 01 A4         B266 i F0 0D A9 A0 8D 9B 3F A9 68       B57 FE 10 A5 FE E9 4F       B788 i F0 08 AD 10 D0 29 EF AD 9C         B266 i F0 0D A9 A0 8D 9B 3F A9 68       B500 i 16 55 AD 45 63 AN A0 AA A5 FD 28       B784 i 20 F7 07 87 AD 10 D 22 9 FE AD 9C         B278 i i 0 D 3F AC 7F B2 A9 1A       B508 i 0 aD 30 90 24 CF D 44 A5 FD 28       B784 i 20 AD 77 87 CA D 10 D 22 9 FE AD 9C         B278 i 0 D 3F AC 7F B2 A9 1A       B508 i 0 aD 36 FE C9 67 D 10 60 AS 35       B784 i 20 AD 77 8D C0 44       B784 i 20 AD 77 87 87 AD 10 7 65         B278 i 0 D 3F A0 B8 9D D 3F A0 68       B518 i 18 B 09 01 42 CD 78       B784 i 20 AD 78 65 20 7 78       B784 i 20 AD 78	8210:00 DC 8D B8 92 29 10 F0 D3 8218:08 b9 01 8D 66 03 4C 3D 99	84A8:20 31 92 A9 00 85 FD A9 B6 84B0:04 85 FE B1 FD 29 0F CD 98	8740:92 DØ F5 AD ØØ DØ 8D Ø6 CA 8748:DØ AD Ø1 DØ 8D Ø7 DØ AD 3Ø
B2236:03       FØ       65       AD       67       AD       67       AD       67       AD       AD       67       AD         B238:09       01       BD       67       03       AD       00       AD       01       00       AD       01       00       AD       01       00       29       01       AD       01       00       02       01       AD       02       01       AD       00       29       01       AD       00       02       01       AD       00       02       01       AD       00       01       00       02       01       AD       00       01       00       01       00       02       25       55       67       01       01       00       01       00       01       01       00       01       01       01 <td>8220:82 CE 66 03 AD 66 03 DØ F4</td> <td>84B8:87 92 FØ 3A B1 FD 4A 4A 5Ø 84CØ:4A 4A CD 87 92 FØ 3B A5 28</td> <td>8750:10 DØ 29 Ø1 FØ Ø8 AD 10 E3 8758:DØ Ø9 Ø8 4C 63 87 AD 10 7C</td>	8220:82 CE 66 03 AD 66 03 DØ F4	84B8:87 92 FØ 3A B1 FD 4A 4A 5Ø 84CØ:4A 4A CD 87 92 FØ 3B A5 28	8750:10 DØ 29 Ø1 FØ Ø8 AD 10 E3 8758:DØ Ø9 Ø8 4C 63 87 AD 10 7C
8248; FØ       13       A9       EB       96       37       B3       FB       72       72       76       77       FF       FF       CE       CE       22       20       P5       AD       37         8248; PE       37       A9       7D       BD       DA       37       BD       55       B4E0; FØ       AD       57       25       P4       B778; 7F       BF       CE       BC       22       D0	8230:03 FØ 05 A9 ØØ 4C 3A 82 56	84C8:FD 18 69 00 85 FD A5 FE 72 84D0:69 D4 85 FE B1 FD 29 0F 48	8760:DØ 29 F7 8D 10 DØ AD 78 91 8768:69 8D 8C 92 20 B6 89 20 59
2250:E03F       3F       4C       65       82       A9       A0       B0       D1       B42E3:B       B9       B5       FD       A5       FD       FD <td>8240:F0 13 A9 BE 8D 98 3F 8D 7E</td> <td>84D8:CD 87 92 DØ Ø9 B1 FD 29 3E 84F0 FØ ØD 45 Ø3 91 FD 45 FD 4C</td> <td>8770:7F 8F CE 8C 92 DØ F5 AD 37 8778:00 DØ 8D 08 DØ AD 01 DØ FD</td>	8240:F0 13 A9 BE 8D 98 3F 8D 7E	84D8:CD 87 92 DØ Ø9 B1 FD 29 3E 84F0 FØ ØD 45 Ø3 91 FD 45 FD 4C	8770:7F 8F CE 8C 92 DØ F5 AD 37 8778:00 DØ 8D 08 DØ AD 01 DØ FD
B2268:158       B3       B3       B3       B3       B3       B3       B3       B4       B3       B3       B4       B3       B3       B4       B3       B3       B3       B3       B4       B3	8250:E0 3F 4C 65 82 A9 A0 8D FE	84E8:38 E9 ØØ 85 FD A5 FE E9 4F 84E8:D4 85 FF 4C 16 85 B1 FD 92	8780:8D 09 D0 AD 10 D0 29 01 A4 8788:F0 08 AD 10 D0 09 10 4C DF
8270:05       8D       9D       3F       4C       7F       82       82       85       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81       81	8260:DA 3F 8D 20 3F AD 68 03 26	84F8:29 FØ ØD 45 Ø3 91 FD 4C 6F	8790:97 87 AD 10 D0 29 EF 8D 9C
82 78 :00       80       96       37       80       00       37       80       00       37       80       00       37       80       00       37       80       00       37       80       00       37       80       00       37       80       00       37       80       00       37       80       00       30       80       00       30       80       00       40       80       57       87       80       80       40       40       80       67       80       64       80       47       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40       40	8270:05 8D DD 3F 4C 7F 82 A9 1A	8508:0A 8D 90 92 B1 FD 29 0F 9D 8510:0D 90 92 C FD 84 45 FD 28	87AØ:20 ØØ 8A 20 7F 8F CE 8C 77 87AØ:20 ØØ 8A 20 7F 8F CE 8C 77
8298:19       AD       B8       92       29       04       D0       03       PB       B52       B5	82/8:00 8D 9B 3F 8D DD 3F AD 58 8280:B8 92 29 08 D0 03 20 6C 6B	8518:18 69 Ø1 85 FD A5 FE 69 EF	87BØ:86 A9 46 8D C4 86 A9 56 F8 67BØ:80 A9 46 8D C4 86 A9 56 F8
82A8:29       90       85       80       60       40       83       84       20       A6       85       A5       85       87       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       87       85       87       87       87       85       92       87       87       85       92       87       87       87       85       92       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87       87	8288:89 AD B8 92 29 04 D0 03 FB 8290:20 B6 89 AD B8 92 29 01 C2	8528:FD C9 E8 DØ Ø4 2Ø 3C 92 7A	87CØ:20 A6 85 A5 C6 FØ Ø3 4C EØ 87CØ:38 89 AD 45 Ø3 8D 82 5C
82A8: 7F 8F 69 A 5 C6 09 91 60 93       8549:86 A5 C6 09 56 A9 91 80 C6       87E0:85 72 A9 70 A0 70 09 102 D2         82B0:20 E4 FF C9 44 FØ 64 C9 14       8548:67 Ø3 AD 78 69 8D 95 92 44       87E0:85 Ø3 A9 Ø0 AD Ø0 91 02 D2         82B8:45 FØ 61 C9 41 FØ 69 C9 F7       8558:92 DØ F5 AD 79 69 8D 95 92       87F0:85 Ø3 A9 79 69 8D BE 92 AØ A7         82C0:85 FØ 61 C9 41 FØ 69 C9 F7       8558:92 DØ F5 AD 79 69 8D 95 9C       87F0:92 AD 79 69 8D BE 92 AØ A7         82C0:28 FØ 5C C9 2D FØ 5B C9 EF       8560:92 2Ø 3D 8A 2Ø 7F 8F CE F9       87F8:0Ø B1 FB 2D 42 Ø3 FØ 4Ø Ø7         82D0:2B FØ 5A C9 AØ FØ 71 C9 Ø5       8568:95 92 DØ F5 AD 78 69 8D ØC       8800:CC 42 Ø3 DØ 27 A5 FD 18 D9         82E0:58 FØ 56 C9 4E FØ 55 C9 6Ø       8578:CE 95 92 DØ F5 AD 79 69 72       8810:85 FE B1 FD 29 ØF 8D 97 F1         82E8:46 FØ 5A C9 4F FØ 50 C9 DD       8580:8D 95 92 2Ø ØB 8A 2Ø 7F F5       8818:92 A5 FD 38 E9 ØØ 85 FD 77         82E8:46 FØ 5A C9 4F FØ 50 C9 DD       8580:8D 95 92 DØ F5 AD 79 69 72       8810:85 FE B1 FD 29 ØF 8D 97 F1         82E8:87 FØ 44 C9 1F       8590:8D 67 Ø3 A9 Ø2 8D 66 Ø3 4D       8828:812 24 C 42 88 29 AA FØ Ø7 43         83Ø8:8D FØ 40 C9 88 FØ 44 C9 1F       8598:80 A5 C6 DØ 53 AD ØØ AC 73 860 20 Ø6 88       883:811 FD 29 ØF 4C 42 88 B1 DD         83Ø8:80 FØ 40 C9 88 FØ 3C C9 Ø1       85A0:A9 ØØ 8D 67 Ø3 60 20 Ø6 88       883:81FD 4A 4A 4A 4A 4C 42 88 59         8310:8C FØ 41 C9 42 FØ 3A 20 C8       85A0:A9 ØØ 8D 67 Ø3 AD ØØ C7 43	8298:D0 03 20 00 8A AD B8 92 D9 82A0:29 02 D0 03 20 3D 8A 20 30	8538:60 4C B3 84 20 A6 85 A5 89 8538:C6 DØ 60 20 F2 91 20 56 5D	87DØ:A5 Ø2 8D 8E 92 A5 Ø3 8D 8C 87DØ:A5 Ø2 90 7A 85 Ø2 99 69 22
828:45       FØ       63       C9       43       FØ       62       C9       12       8550:20       6C       89       20       7F       8F       CE       95       27       8718:01       13       16       16       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       05       07       05       05       05       05       07       07       05       8568:95       92       00       F5       AD       78       69       80       06       07       8569       20       07       85       869       06       07       85       88       05       72       08       88       66       06       06       06       06       06       06       06	82A8:7F 8F 60 A5 C6 D0 01 60 93 82B0:20 E4 FF C9 44 F0 64 C9 14	8548:67 Ø3 AD 78 69 8D 95 92 44	87EØ:85 Ø3 A9 ØØ AØ ØØ 91 Ø2 D2 87EØ:85 Ø3 A9 ØØ AØ ØØ 91 Ø2 D2
82C8:20 F0 5C C9 2D F0 5B C9 EF       8560:92 20 3D 8A 20 7F 8F CE F9       87F8:00 B1 F8 2D 42 03 F0 12 05         82D0:2B F0 5A C9 A0 F0 71 C9 05       8568:95 92 D0 F5 AD 78 69 8D 0C       8800:CD 42 03 D0 27 A5 FD 18 D9         82D8:C1 F0 58 C9 53 F0 57 C9 79       8578:CE 95 92 D0 F5 AD 78 69 8D 0C       8800:CD 42 03 D0 27 A5 FD 18 D9         82E0:58 F0 56 C9 4E F0 55 C9 60       8578:CE 95 92 D0 F5 AD 79 69 72       8810:85 FE B1 FD 29 0F 8D 97 F1         82E8:46 F0 5A C9 4F F0 50 C9 DD       8580:8D 95 92 20 0F 5 AD 79 69 72       8818:92 A5 FD 38 E9 00 85 FD 77         82F0:CF F0 4F C9 89 F0 57 C9 29       8588:8F CE 95 92 D0 F5 A9 00 9C       8820:A5 FE E9 D4 85 FE AD 97 69         82F8:86 F0 50 C9 8A F0 4C C9 9E       8590:8D 67 03 A9 02 8D 66 03 4D       8828:92 4C 42 88 29 AA F0 07 43         8300:87 F0 48 C9 8B F0 44 C9 1F       8598:4C 37 85 A9 01 8D 15 D0 1C       8830:B1 FD 29 0F 4C 42 88 B1 DD         8308:8D F0 40 C9 88 F0 3C C9 01       85A8:86 A5 C6 D0 53 AD 00 DC 74       8840:A9 FF 91 02 A5 02 L8 69 47         8310:8C F0 41 C9 42 F0 3A 20 C8       85A8:86 A5 C6 D0 53 AD 00 DC 74       8840:A9 FF 91 02 A5 02 L8 69 47         8320:83 4C BE 83 4C 63 83 4C 4F       85B8:64 8D 66 03 4C 00 86 AD 73       8850:03 CE BD 92 F0 16 A9 FF AA         8320:83 4C BE 83 4C C3 83 4C 4F       85B8:64 8D 66 03 4C 00 86 AD 73       8848:01 85 02 A5 03 69 00 85 19         8320:83 4C BE 83 4C C3 83 4C 4F       85B8:64 8D 66 03 4C 00 86 AD 73	8268:45 FØ 63 C9 43 FØ 62 C9 12 82CØ:85 FØ 61 C9 41 FØ 69 C9 F7	8558:92 DØ F5 AD 79 69 8D 95 9C	87FØ:92 AD 79 69 8D BE 92 AØ A7
82D8:C1 FØ 58 C9 53 FØ 57 C9 79       857Ø:95 92 20 B6 89 20 7F 8F B5       8808:69 00 85 FD A3 FE 69 D4 2F         82E0:58 FØ 56 C9 4E FØ 55 C9 6Ø       8578:CE 95 92 DØ F5 AD 79 69 72       8810:85 FE B1 FD 29 ØF 8D 97 F1         82E8:46 FØ 5A C9 4F FØ 5Ø C9 DD       8580:80 95 92 20 Ø8 A2Ø 7F F5       8818:92 A5 FD 38 E9 ØØ 85 FD 77         82F8:86 FØ 5Ø C9 8A FØ 4C C9 9E       8580:80 67 Ø3 A9 Ø2 8D 66 Ø3 4D       8828:92 4C 42 88 29 AA FØ Ø7 43         83Ø0:87 FØ 48 C9 8B FØ 44 C9 1F       8598:4C 37 85 A9 Ø1 8D 15 DØ 1C       8830:811 FD 29 ØF 4C 42 88 B1 DD         83Ø8:80 FØ 40 C9 88 FØ 3C C9 Ø1       85A0:A9 ØØ 8D 67 Ø3 60 20 Ø6 88       8838:FD 4A 4A 4A 4A 4C 42 88 59         8310:8C FØ 41 C9 42 FØ 3A 20 C8       85A8:86 A5 C6 DØ 53 AD ØØ DC 74       8840:A9 F9 1 Ø2 A5 Ø2 18 69 47         8318:00 CØ 60 4C 57 83 4C 5D DE       85B0:8D B8 92 29 10 Ø Ø8 A9 13       8848:01 85 Ø2 A5 36 36 9 Ø 85 19         83228:69 83 4C 7C 83 4C 63 83 4C 4F       85B8:64 8D 66 Ø3 4C Ø8 8A D       8848:01 85 Ø2 A5 36 36 9 Ø 85 19         8328:69 83 4C 7C 83 4C 62 83 FF       85C0:78 69 18 C9 ØA BØ ØB AD D8       8858:38 ED 42 Ø3 8D A7 92 B1 5B         8330:4C AE 83 4C DA 83 4C DE 9A       85C8:79 69 18 C9 ØA BØ Ø3 2Ø C3       8860:FF 2D A7 92 91 FB 20 6C Ø2	82C8:20 FØ 5C C9 2D FØ 5B C9 EF 82DØ:2B FØ 5A C9 AØ FØ 71 C9 Ø5	8560:92 20 3D 8A 20 7F 8F CE F9 8568:95 92 DØ F5 AD 78 69 8D ØC	8800:CD 42 03 D0 27 A5 FD 18 D9
8228:46       FØ       5A       C9       4F       FØ       5Ø       C9       DD       858Ø:8D       95       92       2Ø       ØØ       8A       2Ø       7F       F5       8818:92       A5       FD       38       E9       ØØ       85       PD       77         82FØ:CF       FØ       4F       C9       89       FØ       57       C9       29       8588:8F       CE       95       92       DØ       F5       A9       ØØ       9C       8820:A5       FE       PD       485       FE       AP       97       69         82F8:86       FØ       5Ø       C9       8A       FØ       4C       C9       9E       8590:8D       67       Ø3       AP       Ø2       8D       66       Ø3       4D       8828:92       4C       42       88       B       DD         83Ø0:87       FØ       48       C9       9E       8598:4C       37       85       AP       Ø1       8D       15       DØ       1C       8830:81       FD       2Ø       ØF       42       88       B       DD         8308:80       FØ       41       C9       42       85<	82D8:C1 FØ 58 C9 53 FØ 57 C9 79 82EØ:58 FØ 56 C9 4E FØ 55 C9 6Ø	8570:95 92 20 B6 89 20 7F 8F B5 8578:CE 95 92 D0 F5 AD 79 69 72	8810:85 FE B1 FD 29 ØF 8D 97 F1
82F8:86       FØ       50       C9       8A       FØ       4C       C9       9E       859Ø:8D       67       Ø3       A9       Ø2       8D       66       Ø3       4D       8828:92       4C       42       88       29       AA       FØ       Ø7       43         83ØØ:87       FØ       48       C9       8E       FØ       44       C9       1F       8598:4C       37       85       A9       Ø1       8D       15       DØ       1C       883Ø:E1       FD       29       ØF       4C       42       88       B       DD       830Ø:E3       FØ       40       C9       85       N       Ø       B0       15       DØ       1C       883Ø:E1       FD       4A       4A       4A       4C       42       88       59         831Ø:8C       FØ       41       C9       42       FØ       3A       20       C8       85A8:86       A5       C6       DØ       53       AD       ØD       DC       74       8848:401       85       92       45       93       69       47       8342:42       42       43       44       4A       4A       42       48	82E8:46 FØ 5A C9 4F FØ 5Ø C9 DD 82FØ:CF FØ 4F C9 89 FØ 57 C9 29	8580:8D 95 92 20 00 8A 20 7F F5 8588:8F CE 95 92 D0 F5 A9 00 9C	820:A5 FE E9 D4 85 FE AD 97 69
83Ø8:8D       FØ       40       C9       88       FØ       3C       C9       Ø1       85AØ:A9       ØØ       8D       67       Ø3       6Ø       2Ø       Ø6       88       8838:FD       4A	82F8:86 FØ 5Ø C9 8A FØ 4C C9 9E 83ØØ:87 FØ 48 C9 8B FØ 44 C9 1F	8590:8D 67 03 A9 02 8D 66 03 4D 8598:4C 37 85 A9 01 8D 15 D0 1C	8828:92 4C 42 88 29 AA FØ Ø/ 43 8830:B1 FD 29 ØF 4C 42 88 B1 DD
8318:00       C0       60       4C       57       83       4C       5D       DE       85B0:8D       B8       92       29       10       D0       08       A9       13       8848:01       85       02       A5       03       69       00       85       19         8320:83       4C       BE       83       4C       63       83       4C       4F       85B8:64       8D       66       03       4C       00       86       AD       73       8850:03       CE       BD       92       F0       16       A9       FF       AA         8328:69       83       4C       7C       83       4C       8C       83       FF       85C0:78       69       18       C9       0A       B0       0B       AD       B858:38       ED       42       03       8D       A7       92       B1       5B         8330:4C       AE       83       4C       DE       9A       B0       03       20       C3       8860:FB       2D       A7       92       91       FB       20       6C       02	83Ø8:8D FØ 4Ø C9 88 FØ 3C C9 Ø1 831Ø:8C FØ 41 C9 42 FØ 3A 2Ø C8	85AØ:A9 ØØ 8D 67 Ø3 6Ø 2Ø Ø6 88 85A8:86 A5 C6 DØ 53 AD ØØ DC 74	8838:FD 4A 4A 4A 4A 4A 4C 42 88 59 8840:A9 FF 91 02 A5 02 18 69 47
8328:69       83       4C       7C       83       4C       8C       83       FF       85CØ:78       69       18       C9       ØA       BØ       ØB       AD       D8       8858:38       ED       42       Ø3       8D       A7       92       B1       5B         833Ø:4C       AE       83       4C       DE       9A       85C8:79       69       18       C9       ØA       BØ       Ø3       2Ø       C3       886Ø:FB       2D       A7       92       91       FB       2Ø       6C       Ø2	8318:00 C0 60 4C 57 83 4C 5D DE 8320:83 4C BE 83 4C 63 83 4C 4F	85BØ:8D B8 92 29 10 DØ Ø8 A9 13 85B8:64 8D 66 Ø3 4C ØØ 86 AD 73	8848:01 85 02 A5 03 69 00 85 19 8850:03 CE BD 92 F0 16 A9 FF AA
	8328:69 83 4C 7C 83 4C 8C 83 FF 8330:4C AE 83 4C DA 83 4C DE 9A	85CØ:78 69 18 C9 ØA BØ ØB AD D8 85C8:79 69 18 C9 ØA BØ Ø3 2Ø C3	8858:38 ED 42 Ø3 8D A7 92 B1 5B 886Ø:FB 2D A7 92 91 FB 2Ø 6C Ø2

	8BØØ:FB 20 FF 91 20 0D 92 A5 36	8D98:8D C3 92 20 00 8A 60 AD 58
8870:BD 92 CE BD 92 FØ Ø6 20 3F	8808:FC C9 DB DØ E4 A5 FB C9 18	8DA0:C1 92 18 C9 F5 90 01 60 35
8878:B6 89 4C 72 88 CE BE 92 87	8B10:E8 DØ DE 20 26 92 20 3C A5	SDAS AA ES AS FB 9D 54 6F ES CD
8880:FØ ØC 20 3D 8A AD 78 69 4A	8818:92 CE 20 D0 AD BE 92 D0 9E	SDBØ: A5 EC OD 54 6E ES AD 41 02
8888:80 BD 92 4C F7 87 AD 79 99	8B20:16 AD 90 65 29 0F 8D 90 47	9000.43 00 54 6F F9 ND 42 43 C2
8890:69 8D BE 92 CE BE 92 FØ 42	8828:65 AD 21 DØ ØÅ ØÅ ØÅ ØÅ 25	0000:00 54 6F F0 AD 2F 02 0D 46
8898:06 20 00 8A 4C 94 88 AD DØ	8830:00 90 65 80 90 65 60 AD FF	ODC0.50 54 OF EO AD 3E 03 9D 40
88A0:8E 92 85 02 AD 8E 92 85 C4	8838:90 65 44 44 44 4A 8D 21 96	ODC0:54 OF LO AD 3F 03 9D 54 77
8848.03 45 02 8D 8E 92 45 03 CA	8840.00 60 A9 01 80 67 03 A5 D2	0DD0:01 E0 AD 40 03 9D 54 0F 3E
8880.80 8F 92 AD 45 03 8D 8D 79	9849.FB 90 90 92 05 FC 90 98 15	ODDSILS AS FD 9D 54 OF LS AS 43
0000.00 01 92 AD 45 05 00 00 70	0040:10 00 9A 92 AD 10 00 00 10 15	8DE0:FE 9D 54 6F 8E CI 92 60 65
00000.00 NF 00 D0 10 D0 20 50 90	8850:92 AD 41 05 8D 9C 92 AD 20	8DE8:A0 00 B1 FB 2D 42 03 D0 93
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88D0:AD 78 69 8D 8D 92 AD 79 E9	8868:92 AD 40 03 8D A0 92 A5 26	8E00:FD A5 FE 69 D4 85 FE B1 68
88D8:69 8D BE 92 A0 00 B1 02 6D	8B70:FD 8D A1 92 A5 FE 8D A2 2E	8E08:FD 29 ØF 8D A5 92 A5 FD E9
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88FØ:02 A5 Ø3 69 ØØ 85 Ø3 CE 4E	8B88:69 Ø3 8D 15 DØ A9 Ø1 8D D4	8E20:AA FØ Ø5 B1 FD 29 ØF 6Ø 9D
88F8:BD 92 FØ Ø6 20 6C 89 4C 1E	8B90:68 03 A9 00 8D C0 92 8D F3	8E28:B1 FD 4A 4A 4A 4A 6Ø A9 71
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8918:20 3D 8A AD 78 69 8D BD F8	8BBØ:3E Ø3 C9 Ø1 DØ Ø3 4C C7 E3	8E48:C9 86 DØ ØF A9 68 85 FB EC
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8028 - PE 02 CE PE 02 FØ Ø6 20 00	8BCØ:A4 92 FØ E6 20 6C 89 A5 C6	8E58:4C 69 8E A9 78 85 FB A9 DD
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8940.67 03 20 01 20 15 D0 20 9D	8BD8:4C 12 8C A9 ØØ 8D C2 92 15	8E70:92 20 B7 FF 8D 48 03 20 89
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0050:05 02 AD OF 92 05 05 A9 AF	88FØ:0A AD 3E Ø3 C9 3F DØ Ø3 6Ø	8588.20 FD 85 20 75 84 60 20 BB
0950 RU 0D CU 00 A9 91 0D C4 4B	88F8:4C 12 8C 20 6C 89 20 E8 01	8F90.FD 8F A9 57 8D C4 92 A9 41
8960:86 A9 C8 8D D3 86 A9 C7 E6	8000 8D CD A4 92 DØ ØC 20 F6 FE	0E00.00 0D 25 02 20 51 01 60 00
8968:8D D/ 86 60 AD 3F 03 F0 70	8008.80 20 6F 8D 20 7F 8F 4C A0	OFAG. 20 10 02 20 21 02 70 16 52
8970:07 AD 3E 03 C9 3F F0 3D D4	8C10.FC 8B AD C0 92 18 CD C1 96	OFA0:20 1B 92 20 31 92 78 A5 53
8978:AD 3E 03 18 69 02 8D 3E 80	PC19:02 PG G2 AC 64 PC NE CG 3E	8EA8:01 29 FC 85 01 A9 00 85 BC
8980:03 AD 3F 03 69 00 8D 3F 3E	9020.02 F0 F0 PD 60 6D 95 FF 70	8EB0:FB A9 A0 85 FC A9 68 85 87
8988:03 AD 42 03 4A 4A C9 00 10	9029-01 PD 60 6D 95 FD C1 PD 70	8EB8:FD A9 42 85 FE A9 40 8D 8C
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8998:8D 42 Ø3 A5 FB 18 69 Ø8 D8	8C30:00 0D 8D 40 03 CA BD 00 A9	8EC8:64 8F A9 00 85 FB A9 E0 81
89AØ:85 FB A5 FC 69 ØØ 85 FC 4D	SC38: OD SD SF 03 CA BD OD OD FE	8ED0:85 FC A9 DØ 8D C5 92 A9 84
89A8:A5 FD 18 69 Ø1 85 FD A5 67	8C40:8D 3E 03 CA BD 60 6D 8D 94	8ED8:E7 8D C6 92 20 64 8F A5 A6
8980 FF 69 00 95 FF 60 30 25 03	8C48+42 M3 CA BD 6M 6D 8D 41 8D	8EE0:01 09 03 85 01 20 26 92 E0
CODD TE CO DU CO TE CU AU SF UA	COTO. 42 DO CH DD CD CD CD HI CD	
89B8:03 DØ Ø7 AD 3E Ø3 C9 Ø1 CF	8C50:03 CA BD 60 6D 85 FC CA A1	8EE8:20 3C 92 58 60 20 1B 92 49
89B8:03 DØ 07 AD 3E 03 C9 01 CF 89C0:FØ 3D AD 3E 03 38 E9 02 04	8C50:03 CA BD 60 6D 85 FC CA A1 8C58:BD 60 6D 85 FB CA 8E CØ 57	8EE8:20 3C 92 58 60 20 1B 92 49 8EF0:20 31 92 EE 20 D0 A9 00 43
89B8:03 DØ 07 AD 3E 03 C9 01 CF 89C8:FØ 3D AD 3E 03 38 E9 02 04 89C8:8D 3E 03 AD 3F 03 E9 00 47	8C50:03 CA BD 60 6D 85 FC CA A1 8C58:BD 60 6D 85 FB CA 8E C0 57 8C60:92 4C AA 8B AE C1 92 D0 56	8EE8:20 3C 92 58 60 20 1B 92 49 8EF0:20 31 92 EE 20 D0 A9 00 43 8EF8:85 FB A9 20 85 FC A9 00 82
Bybling         Bybling <t< td=""><td>8C50:03 CA BD 60 6D 85 FC CA A1 8C58:BD 60 6D 85 FB CA 8E C0 57 8C60:92 4C AA 8B AE C1 92 D0 56 8C68:03 4C AD 8C BD 54 6F 85 38</td><td>8EE8:20         3C         92         58         60         20         1B         92         49           8EF0:20         31         92         EE         20         D0         A9         00         43           8EF8:85         FB         A9         20         85         FC         A9         00         82           8F00:85         FD         A9         A0         85         FE         A9         40         5C</td></t<>	8C50:03 CA BD 60 6D 85 FC CA A1 8C58:BD 60 6D 85 FB CA 8E C0 57 8C60:92 4C AA 8B AE C1 92 D0 56 8C68:03 4C AD 8C BD 54 6F 85 38	8EE8:20         3C         92         58         60         20         1B         92         49           8EF0:20         31         92         EE         20         D0         A9         00         43           8EF8:85         FB         A9         20         85         FC         A9         00         82           8F00:85         FD         A9         A0         85         FE         A9         40         5C
Bybling         Bybling <t< td=""><td>8C50:03 CA BD 60 6D 85 FC CA A1 8C58:BD 60 6D 85 FB CA 8E C0 57 8C60:92 4C AA 8B AE C1 92 D0 56 8C68:03 4C AD 8C BD 54 6F 85 38 8C70:FE CA BD 54 6F 85 FD CA 11</td><td>8EE8:20       3C       92       58       60       20       18       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C</td></t<>	8C50:03 CA BD 60 6D 85 FC CA A1 8C58:BD 60 6D 85 FB CA 8E C0 57 8C60:92 4C AA 8B AE C1 92 D0 56 8C68:03 4C AD 8C BD 54 6F 85 38 8C70:FE CA BD 54 6F 85 FD CA 11	8EE8:20       3C       92       58       60       20       18       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C
Bybling         Bybling <t< td=""><td>8C50:03 CA BD 60 6D 85 FC CA A1 8C58:BD 60 6D 85 FB CA 8E CØ 57 8C60:92 4C AA 8B AE C1 92 D0 56 8C68:03 4C AD 8C BD 54 6F 85 38 8C70:FE CA BD 54 6F 85 FD CA 11 8C78:BD 54 6F 8D 40 03 CA BD AD</td><td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       9C</td></t<>	8C50:03 CA BD 60 6D 85 FC CA A1 8C58:BD 60 6D 85 FB CA 8E CØ 57 8C60:92 4C AA 8B AE C1 92 D0 56 8C68:03 4C AD 8C BD 54 6F 85 38 8C70:FE CA BD 54 6F 85 FD CA 11 8C78:BD 54 6F 8D 40 03 CA BD AD	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       9C
Bybe:         Bybe: <th< td=""><td>8C50:03 CA BD 60 6D 85 FC CA A1 8C58:BD 60 6D 85 FB CA 8E C0 57 8C60:92 4C AA 8B AE C1 92 D0 56 8C68:03 4C AD 8C BD 54 6F 85 38 8C70:FE CA BD 54 6F 85 FD CA 11 8C78:BD 54 6F 8D 40 03 CA BD AD 8C80:54 6F 8D 3F 03 CA BD 54 58</td><td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       40       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       9C         8F18:04       85       FC       A9       00       85       FD       A9       90</td></th<>	8C50:03 CA BD 60 6D 85 FC CA A1 8C58:BD 60 6D 85 FB CA 8E C0 57 8C60:92 4C AA 8B AE C1 92 D0 56 8C68:03 4C AD 8C BD 54 6F 85 38 8C70:FE CA BD 54 6F 85 FD CA 11 8C78:BD 54 6F 8D 40 03 CA BD AD 8C80:54 6F 8D 3F 03 CA BD 54 58	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       40       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       9C         8F18:04       85       FC       A9       00       85       FD       A9       90
89B8:03         D0         07         AD         3E         03         C9         01         CF           89C0:F0         3D         AD         3E         03         C9         01         CF           89C0:F0         3D         AD         3E         03         38         E9         02         04           89C8:8D         3E         03         AD         3F         03         E9         00         47           89D0:8D         3F         03         AD         42         03         0A         AF           89D0:8D         3F         03         AD         42         03         0A         AF           89D8:C9         00         07         04         8D         42         03         60         0B           89E0:A9         03         8D         42         03         A5         FB         38         38           89E8:E9         08         85         FB         A5         FC         E9         00         58           89F0:85         FC         A5         FD         38         E9         00         58	8C50:03 CA BD 60 6D 85 FC CA A1 8C50:03 CA BD 60 6D 85 FC CA A1 8C58:BD 60 6D 85 FB CA 8E CØ 57 8C60:92 4C AA 8B AE C1 92 DØ 56 8C68:03 4C AD 8C BD 54 6F 85 38 8C70:FE CA BD 54 6F 85 FD CA 11 8C78:BD 54 6F 8D 40 03 CA BD AD 8C80:54 6F 8D 3F 03 CA BD 54 58 8C88:6F 8D 3E 03 CA BD 54 6F 1A	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F10:20       64       8F       A9       00       85       FD       A9       90         8F20:E0       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27
89B8:03         D0         07         AD         3E         03         C9         01         CF           89C0:F0         3D         AD         3E         03         C9         01         CF           89C0:F0         3D         AD         3E         03         38         E9         02         04           89C8:8D         3E         03         AD         3F         03         8E         9         04         47           89D0:8D         3F         03         AD         42         03         0A         AF         1           89D8:C9         00         F0         04         8D         42         03         60         0B           89D8:C9         00         F0         04         8D         42         03         60         0B           89E0:A9         03         8D         42         03         A5         FB         38         3E           89E8:E9         08         85         FB         A5         FC         E9         01         85           89F0:85         FC         A5         FD         38         E9         91         85           89F6:	8C50:03 CA BD 60 6D 85 FC CA A1 8C50:03 CA BD 60 6D 85 FC CA A1 8C58:BD 60 6D 85 FB CA 8E CØ 57 8C60:92 4C AA 8B AE C1 92 DØ 56 8C68:03 4C AD 8C BD 54 6F 85 38 8C70:FE CA BD 54 6F 85 FD CA 11 8C78:BD 54 6F 8D 40 Ø3 CA BD AD 8C80:54 6F 8D 3F Ø3 CA BD 54 58 8C88:6F 8D 3E Ø3 CA BD 54 6F 1A 8C90:8D 42 Ø3 CA BD 54 6F 8D B9	8EE8:20       3C       92       58       60       20       18       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       9C         8F10:20       64       8F       A9       00       85       FD       A9       9C         8F18:04       85       FC       A9       00       85       FD       A9       9C         8F10:20       64       8F       A9       00       85       FD       A9       9C         8F20:E0       85       FE       A9       80       85       FD       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27
Byblic         Byblic<	8C50:40:42 8C50:40 CA BD 60 6D 85 FC CA A1 8C58:BD 60 6D 85 FB CA 8E CØ 57 8C60:92 4C AA 8B AE C1 92 DØ 56 8C68:03 4C AD 8C BD 54 6F 85 38 8C70:FE CA BD 54 6F 85 FD CA 11 8C78:BD 54 6F 8D 40 03 CA BD AD 8C80:54 6F 8D 3F 03 CA BD 54 58 8C88:6F 8D 3E 03 CA BD 54 6F 1A 8C90:8D 42 03 CA BD 54 6F 8D B9 8C98:41 03 CA BD 54 6F 85 FC BØ	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F23:A9       07       8D       C6       92       20       64       8F       69
Bybe:         Bybe: <th< td=""><td>8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:92         4C         AA         8B         AE         C1         92         D0         56           8C60:92         4C         AA         8B         AE         C1         92         D0         56           8C60:92         4C         AA         8B         AE         C1         92         D0         56           8C68:03         4C         AD         8C         BD         54         6F         85         70         A1           8C70:FE         CA         BD         54         6F         8D         A0         3C         A         BD         AD           8C70:FE         CA         BD         54         6F         8D         AD         3C         A         BD         AD         AD           8C80:54         6F         8D         3F<!--</td--><td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       9C         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F28:A9       07       8D       C6       92       20       64       8F       69         8F30:A9       07       8D       C6       92       20       64       8F       69         8F30:A9       08       5F       A9       D8       85       FC       40      <t< td=""></t<></td></td></th<>	8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:92         4C         AA         8B         AE         C1         92         D0         56           8C60:92         4C         AA         8B         AE         C1         92         D0         56           8C60:92         4C         AA         8B         AE         C1         92         D0         56           8C68:03         4C         AD         8C         BD         54         6F         85         70         A1           8C70:FE         CA         BD         54         6F         8D         A0         3C         A         BD         AD           8C70:FE         CA         BD         54         6F         8D         AD         3C         A         BD         AD         AD           8C80:54         6F         8D         3F </td <td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       9C         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F28:A9       07       8D       C6       92       20       64       8F       69         8F30:A9       07       8D       C6       92       20       64       8F       69         8F30:A9       08       5F       A9       D8       85       FC       40      <t< td=""></t<></td>	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       9C         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F28:A9       07       8D       C6       92       20       64       8F       69         8F30:A9       07       8D       C6       92       20       64       8F  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89B8:Ø3         DØ         Ø7         AD         3E         Ø3         C9         Ø1         CF           89CØ:FØ         3D         AD         3E         Ø3         C9         Ø1         CF           89CØ:FØ         3D         AD         3E         Ø3         38         E9         Ø2         Ø4           89C8:8D         3E         Ø3         AD         3F         Ø3         E9         Ø4         77           89DØ:8D         3F         Ø3         AD         42         Ø3         ØA         AF         1           89D8:C9         ØØ         FØ         Ø4         8D         42         Ø3         6Ø         ØB           89E8:A9         Ø3         8D         42         Ø3         A5         FB         38         38           89E8:E9         Ø8         85         FB         A5         FC         E9         Ø0         58           89E8:E9         Ø8         85         FB         A5         FC         E9         Ø0         85           89F8:FD         A5         FE         E9         Ø0         85         FE         6Ø         67           8AØ8	8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:02         4C         AA         8B         AE         C1         92         D0         56           8C60:92         4C         AA         8B         AE         C1         92         D0         56           8C68:03         4C         AD         8C         BD         54         6F         85         38           8C70:FE         CA         BD         54         6F         85         FD         CA         11           8C78:BD         54         6F         8D         40         03         CA         BD         AD           8C80:54         6F         8D         3F         03         CA         BD         54         6F         1A           8C90:81         42         03         CA         BD         54         6F         8D         B9           8C90:82         42         03         CA         BD         54         6F         8D         B9	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:8D       C5       92       A9       3F       8D       C6       22       9C         8F10:20       64       8F       A9       00       85       FB       A9       9C         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F38:A9       07       8D       C6       92       20       64       8F       69         8F38:A9       E8       BD       C5       92       A9       D8       8D       F4         8F40:C6       92       20       64       8F       AD       00       D8       BD
Byberre         Color         <	8C50:40:40       AD       BD       60       6D       8D       FC       CA       A1         8C50:40:40       AD       BD       60       6D       85       FC       CA       A1         8C50:40:40       AD       BD       60       6D       85       FC       CA       A1         8C50:40:40       AD       BD       60       6D       85       FC       CA       A1         8C50:40:40       AD       BD       8D       60       8D       54       6F       85       38         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C78:BD       54       6F       8D       40       Ø3       CA       BD       AB       <	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       9C         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       88       BC       C5       92       27         8F38:A9       90       85       FB       A9       B8       5       FC       40       90         8F38:A9       88       BC       5       92       A9       D8       8D       F4         8F40:C6       92       20       64       8F       AD       00       D8
ByB8:03         DØ         OF         DØ         OF         DØ         AD         SF         DØ         DØ         FØ         DØ         SF         DØ         AD         AD         SF         DØ         AD         SF         DØ         AD         SF         DØ         AD         AD <t< td=""><td>8C50:40:40         A         B         60         6D         85         FC         A           8C50:40:40         A         B         60         6D         85         FC         C         A           8C50:40:40         A         B         60         B         FC         C         A         A           8C50:40         A         B         AE         C1         92         D0         56           8C60:92         4C         AA         B         AE         C1         92         D0         56           8C60:92         4C         AA         B         AE         C1         92         D0         56           8C68:03         4C         AD         8C         BD         54         6F         85         FD         CA         11           8C78:8D         54         6F         8D         36         03         CA         BD         54         6F         8D         AB         <t< td=""><td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       9D         8F18:04       85       FC       A9       00       85       FD       A9       9D         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       90       85       FB       A9       B8       5       FC       4D         8F38:A9       90       85       FB       A9       B8       5       FC       4D</td></t<></td></t<>	8C50:40:40         A         B         60         6D         85         FC         A           8C50:40:40         A         B         60         6D         85         FC         C         A           8C50:40:40         A         B         60         B         FC         C         A         A           8C50:40         A         B         AE         C1         92         D0         56           8C60:92         4C         AA         B         AE         C1         92         D0         56           8C60:92         4C         AA         B         AE         C1         92         D0         56           8C68:03         4C         AD         8C         BD         54         6F         85         FD         CA         11           8C78:8D         54         6F         8D         36         03         CA         BD         54         6F         8D         AB         AB <t< td=""><td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       9D         8F18:04       85       FC       A9       00       85       FD       A9       9D         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       90       85       FB       A9       B8       5       FC       4D         8F38:A9       90       85       FB       A9       B8       5       FC       4D</td></t<>	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       9D         8F18:04       85       FC       A9       00       85       FD       A9       9D         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       90       85       FB       A9       B8       5       FC       4D         8F38:A9       90       85       FB       A9       B8       5       FC       4D
ByB8:03         DØ         OF         DØ         AD         SF         DØ         SF         DØ         AD         SF         DØ         SF         DØ         AD         SF         DØ         AD         SF         DØ         AD         SF         DØ         SF         DØ         AD         SF         DØ         DØ <t< td=""><td>8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:92         4C         AA         8B         AE         C1         92         D0         56           8C60:92         4C         AA         8B         AE         C1         92         D0         56           8C60:92         4C         AA         8B         AE         C1         92         D0         56           8C68:03         4C         AD         8C         BD         54         6F         85         38           8C70:FE         CA         BD         54         6F         8D         AB         AD         AD         BC         ABD         AD         BC         AB         AD         AD         BA         B         AD         BD         54         6F         8D         BA         BA         BA         AD         BD         54         6F</td><td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       DØ       A9       ØØ       43         8EF8:85       FB       A9       20       85       FC       A9       ØØ       82         8FØ0:85       FD       A9       AØ       85       FE       A9       40       52         8FØ8:85       FD       A9       AØ       85       FE       A9       40       52         8FØ8:85       FD       A9       AØ       85       FE       A9       40       52         8FØ8:80       C5       92       A9       3F       8D       C6       92       90         8F18:40       85       FC       A9       ØØ       85       FB       A9       90         8F20:EØ       85       FE       A9       E8       8D       C5       92       27         8F28:A9       Ø7       8D       C6       92       20       64       8F       69         8F38:A9       Ø8       SF       FA       B8       B       F4         8F40:C</td></t<>	8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:92         4C         AA         8B         AE         C1         92         D0         56           8C60:92         4C         AA         8B         AE         C1         92         D0         56           8C60:92         4C         AA         8B         AE         C1         92         D0         56           8C68:03         4C         AD         8C         BD         54         6F         85         38           8C70:FE         CA         BD         54         6F         8D         AB         AD         AD         BC         ABD         AD         BC         AB         AD         AD         BA         B         AD         BD         54         6F         8D         BA         BA         BA         AD         BD         54         6F	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       DØ       A9       ØØ       43         8EF8:85       FB       A9       20       85       FC       A9       ØØ       82         8FØ0:85       FD       A9       AØ       85       FE       A9       40       52         8FØ8:85       FD       A9       AØ       85       FE       A9       40       52         8FØ8:85       FD       A9       AØ       85       FE       A9       40       52         8FØ8:80       C5       92       A9       3F       8D       C6       92       90         8F18:40       85       FC       A9       ØØ       85       FB       A9       90         8F20:EØ       85       FE       A9       E8       8D       C5       92       27         8F28:A9       Ø7       8D       C6       92       20       64       8F       69         8F38:A9       Ø8       SF       FA       B8       B       F4         8F40:C
Bybe: FE         Gy         AD         SF         E         Gy         AD         SF         DA           89B8: Ø3         DØ         Ø7         AD         3E         Ø3         C9         Ø1         CF           89CØ: FØ         3D         AD         3E         Ø3         38         E9         Ø2         Ø4           89C8: 8D         3E         Ø3         AD         3F         Ø3         E9         Ø4         77           89DØ: 8D         3F         Ø3         AD         42         Ø3         ØA         AF           89D8: 8D         3E         Ø3         AD         42         Ø3         ØA         AF           89D8: 8D         90         Ø3         BD         42         Ø3         ØA         AF           89D8: 8D         90         80         B2         FØ         AB         SE         FB         38         SE           89E8: FD         A5         FE         B3         BE         SE         BE         SE         BE           89F8: FD         A5         FE         SE         PØ         ØB         SE         FE         6Ø         67	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:02       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       31         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C78:8D       54       6F       8D       34       Ø3       CA       BD       54       6F       8D         8C88:6F       8D       3E       Ø3       CA       BD       54       6F       8D       8E       50         8CA0:6A       BD       54       6F       8D <td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       40       85       FE       A9       40       52         8F00:85       FD       A9       40       85       FE       A9       40       52         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F28:A9       07       8D       C6       92       20       64       8F       69         8F38:A9       E8       BD       C5       92       A9       D8       8D       F4         8F48:29       0F       8D       94       92       AD       10       19      <t< td=""></t<></td>	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       40       85       FE       A9       40       52         8F00:85       FD       A9       40       85       FE       A9       40       52         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F28:A9       07       8D       C6       92       20       64       8F       69         8F38:A9       E8       BD       C5       92       A9       D8       8D       F4         8F48:29       0F       8D       94       92       AD       10       19 <t< td=""></t<>
Byberre         Byberre <t< td=""><td>8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:92         4C         AA         8B         AE         C1         92         D0         56           8C60:92         4C         AA         8B         AE         C1         92         D0         56           8C60:92         4C         AA         8B         AE         C1         92         D0         56           8C68:03         4C         AD         8C         BD         54         6F         85         FD         CA         11           8C78:8D         54         6F         8D         36         CA         BD         54         6F         8D         89           8C88:6F         8D         3E         Ø3         CA         BD         54         6F         8D         89         80         80         92         56           8C88:6D</td><td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF0:20       31       92       EE       20       D0       A9       00       82         8F00:85       FD       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       40       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       90         8F18:40       45       FC       A9       00       85       FB       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F28:A9       07       8D       C6       92       20       64       8F       69         8F30:A9       08       8D       C5       92       A9       B8       D       F4</td></t<>	8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:03         CA         BD         60         6D         85         FC         CA         A1           8C50:92         4C         AA         8B         AE         C1         92         D0         56           8C60:92         4C         AA         8B         AE         C1         92         D0         56           8C60:92         4C         AA         8B         AE         C1         92         D0         56           8C68:03         4C         AD         8C         BD         54         6F         85         FD         CA         11           8C78:8D         54         6F         8D         36         CA         BD         54         6F         8D         89           8C88:6F         8D         3E         Ø3         CA         BD         54         6F         8D         89         80         80         92         56           8C88:6D	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF0:20       31       92       EE       20       D0       A9       00       82         8F00:85       FD       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       40       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       90         8F18:40       45       FC       A9       00       85       FB       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F28:A9       07       8D       C6       92       20       64       8F       69         8F30:A9       08       8D       C5       92       A9       B8       D       F4
Byberre         Color         <	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:02       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       FD       CA       11         8C78:FE       CA       BD       54       6F       85       FD       CA       11         8C78:8D       54       6F       8D       40       03       CA       BD       54       6F       8D         8C88:6F       8D       3E       Ø3       CA       BD       54       6F       8D       89         8C88:6F       8D       3E       Ø3       CA       BD       54       6F       8D       89         8C98:81       43       CA       BD       54       6F       8D       89       80       80       92       56	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       90         8F12:20       64       8F       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F38:A9       90       85       FB       A9       D8       85       FC       40         8F48:29       07       8D       C6       92       A9       D8       BD         8F48:29       07       8D       49       24       D1       10       19         8F50:
ByB8:03         D0         07         AD         3E         03         C9         01         CF           ByB8:03         D0         07         AD         3E         03         C9         01         CF           ByC0:F0         3D         AD         3E         03         38         E9         02         04           ByC0:F0         3D         AD         3E         03         AD         35         03         E9         04         47           ByD0:BD         3F         Ø3         AD         42         Ø3         ØA         AF1           ByD0:BD         3F         Ø3         AD         42         Ø3         ØA         AF1           ByD0:BD         3F         Ø3         AD         42         Ø3         ØA         AF1           ByD0:BD         3F         Ø3         BD         42         Ø3         ØA         ØA           ByB1:ED         Ø3         BD         42         Ø3         AD         45         BB           ByF0:ES         FC         A5         FD         38         E9         Ø1         85         BE         60         FT	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C70:FE       CA       BD       54       6F       8D       AB       AD       D       54       58         8C80:54       6F       8D       3E       AB       AD       54       6F       8D       80       80       46F       1A       80       80       80       80       80	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:85       FD       A9       A0       85       FE       A9       40       5C         8F08:85       FD       A9       A0       85       FE       A9       40       5C         8F08:85       FD       A9       A0       85       FE       A9       90         8F18:40       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       B8       BC       592       27         8F38:A9       88       BC       592       A9       B8       BF       49         8F40:C6       92       20       A6       8F       AD       00       B8       BF         8F48:29 <t< td=""></t<>
ByB8:03         DØ         OF         AD         SF         DØ         SF         DØ         DØ <t< td=""><td>8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:02       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AD       8C       BD       54       6F       8D       AD       AD       AD         8C80:54       6F       8D       3E       Ø3       CA       BD       54       6F       8D       84       BD       94       6F       85       BD       80       82       82       86       82       82       86       86       82       86       82</td><td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       52         8F08:85       FD       A9       A0       85       FE       A9       40       52         8F08:85       FD       A9       A0       85       FE       A9       40       52         8F08:85       FC       20       A3       FF       A9       90       85       FB       A9       90         8F18:40       85       FC       A9       60       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       88       BC       S9       D8       85       FC       40         8F30:A9       68       DC5       92       A9       D8       B5       F4</td></t<>	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:02       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AD       8C       BD       54       6F       8D       AD       AD       AD         8C80:54       6F       8D       3E       Ø3       CA       BD       54       6F       8D       84       BD       94       6F       85       BD       80       82       82       86       82       82       86       86       82       86       82	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       52         8F08:85       FD       A9       A0       85       FE       A9       40       52         8F08:85       FD       A9       A0       85       FE       A9       40       52         8F08:85       FC       20       A3       FF       A9       90       85       FB       A9       90         8F18:40       85       FC       A9       60       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       88       BC       S9       D8       85       FC       40         8F30:A9       68       DC5       92       A9       D8       B5       F4
Bybe:         Bybe: <th< td=""><td>8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       FD       CA       11         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C78:BD       54       6F       8D       36       03       CA       BD       AD       AD         8C80:54       6F       8D       3E       Ø3       CA       BD       54       6F       8D       54         8C88:66       8D       3E       Ø3       CA       BD       54       6F       8D       84       6F       85       FC       BØ         8C88:67       8D       3E       Ø3       CA       BD       54       6F       85       FC</td><td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       40       85       FE       A9       40       52         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F28:A9       07       8D       C6       92       20       64       8F       69         8F30:A9       80       85       FB       A9       D8       85       FC       49         8F48:29       07       8D       C5       92       A9       D8       BD       F4</td></th<>	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       FD       CA       11         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C78:BD       54       6F       8D       36       03       CA       BD       AD       AD         8C80:54       6F       8D       3E       Ø3       CA       BD       54       6F       8D       54         8C88:66       8D       3E       Ø3       CA       BD       54       6F       8D       84       6F       85       FC       BØ         8C88:67       8D       3E       Ø3       CA       BD       54       6F       85       FC	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       40       85       FE       A9       40       52         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F28:A9       07       8D       C6       92       20       64       8F       69         8F30:A9       80       85       FB       A9       D8       85       FC       49         8F48:29       07       8D       C5       92       A9       D8       BD       F4
Bybe:rb         Bybe:rb <t< td=""><td>8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       S18         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C78:BD       54       6F       8D       36       03       CA       BD       54       6F       85         8C88:6F       8D       3E       Ø3       CA       BD       54       6F       85       85         8C88:6F       8D       3E       Ø3       CA       BD       54       6F       85       FC       B0         8C90:8D       42       Ø3       CA       BD       54       6F       85       FC       B0         8C48:61       92       4D       8B</td></t<> <td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       40       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F18:40       85       FC       A9       00       85       FB       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F28:A9       07       8D       C6       92       20       64       8F       69         8F30:A9       08       5       FB       A9       D8       85       FC       40         8F48:29       07       8D       C5       92       A9       D8       BD         8F48:29       07       8D       94       92       AD       11       01       19      <tr< td=""></tr<></td>	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       S18         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C78:BD       54       6F       8D       36       03       CA       BD       54       6F       85         8C88:6F       8D       3E       Ø3       CA       BD       54       6F       85       85         8C88:6F       8D       3E       Ø3       CA       BD       54       6F       85       FC       B0         8C90:8D       42       Ø3       CA       BD       54       6F       85       FC       B0         8C48:61       92       4D       8B	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       40       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F18:40       85       FC       A9       00       85       FB       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F28:A9       07       8D       C6       92       20       64       8F       69         8F30:A9       08       5       FB       A9       D8       85       FC       40         8F48:29       07       8D       C5       92       A9       D8       BD         8F48:29       07       8D       94       92       AD       11       01       19 <tr< td=""></tr<>
ByB8:03         DØ         OF         AD         SF         DØ         SF         DØ         AD         SF         DØ         SF         DØ         AD         SF         DØ         AD         SF         DØ         AD         SF         DØ         AD         AD <t< td=""><td>8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BE       C0       97       8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       FD       CA       11         8C78:FE       CA       BD       54       6F       85       FD       CA       11         8C78:BD       54       6F       8D       46       Ø3       CA       BD       54       6F       8D         8C80:85       FB       D3E       Ø3       CA       BD       54       6F       8D       98         8C90:81       42       Ø3       CA       BD       54       6F       8D       99         8C80:85       FB       AD       9B       92       85       FC       AD       4D         8C80:85       FD       AD       9E       28D       68       Ø3       AD</td></t<> <td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       FB       BC       69       90         8F10:20       64       8F       A9       00       85       FB       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       88       BD       C5       92       A9       B8       BF4         8F40:C6       92       20       64       8F       AD       00       B8       BD         8F48:29       0F       8D       40       A0       A0       40       42       B0       46      &lt;</td>	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BE       C0       97       8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       FD       CA       11         8C78:FE       CA       BD       54       6F       85       FD       CA       11         8C78:BD       54       6F       8D       46       Ø3       CA       BD       54       6F       8D         8C80:85       FB       D3E       Ø3       CA       BD       54       6F       8D       98         8C90:81       42       Ø3       CA       BD       54       6F       8D       99         8C80:85       FB       AD       9B       92       85       FC       AD       4D         8C80:85       FD       AD       9E       28D       68       Ø3       AD	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       FB       BC       69       90         8F10:20       64       8F       A9       00       85       FB       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       88       BD       C5       92       A9       B8       BF4         8F40:C6       92       20       64       8F       AD       00       B8       BD         8F48:29       0F       8D       40       A0       A0       40       42       B0       46      <
ByB8:03         D0         07         AD         3E         03         C9         01         CF           ByB8:03         D0         07         AD         3E         03         C9         01         CF           ByC0:F0         3D         AD         3E         03         38         E9         02         04           ByC0:F0         3D         AD         3E         03         AD         32         03         AD         42         03         60         47           ByD0:BD         3F         Ø3         AD         42         Ø3         60         47           ByD0:BD         3F         Ø3         AD         42         Ø3         60         47           ByD0:BD         3F         Ø3         AD         42         Ø3         60         47           ByD0:BD         3F         Ø3         BD         42         Ø3         60         48           ByB8:FD         Ø3         BD         42         Ø3         AD         42         Ø3         60         58           ByF0:FE         P         Ø8         S         FE         AD         40         31         83 </td <td>8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:02       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C70:FE       CA       BD       54       6F       8D       AD       AD</td> <td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:85       FD       A9       A0       85       FE       A9       40       5C         8F08:85       FD       A9       A0       85       FE       A9       90         8F18:40       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       80       C5       92       27         8F38:A9       85       FE       A9       B8       5       FC       40       90         8F38:A9       90       85       FB       A9       B8       5       FC       40         8F38:A9       98       BD       C5       92       A9       B8       D       44</td>	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:02       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C70:FE       CA       BD       54       6F       8D       AD	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:85       FD       A9       A0       85       FE       A9       40       5C         8F08:85       FD       A9       A0       85       FE       A9       90         8F18:40       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       80       C5       92       27         8F38:A9       85       FE       A9       B8       5       FC       40       90         8F38:A9       90       85       FB       A9       B8       5       FC       40         8F38:A9       98       BD       C5       92       A9       B8       D       44
ByB8:03         D0         07         AD         3E         03         C9         01         CF           ByB8:03         D0         07         AD         3E         03         C9         01         CF           ByC0:F0         3D         AD         3E         03         38         E9         02         04           ByC0:F0         3D         AD         3E         03         AD         35         03         E9         04         47           ByD0:BD         3F         Ø3         AD         42         Ø3         ØA         AF         1           ByD8:C9         ØØ         FØ         Ø4         BD         42         Ø3         ØA         AF           ByD8:C9         ØØ         BD         42         Ø3         AD         42         Ø3         ØA         AF           ByB8:F9         Ø3         BD         42         Ø3         AD         42         Ø3         ØA         AF           ByB8:F5         FC         A5         FD         38         E9         Ø1         85         E6         67         8         ØA         AD         31         BA         AD	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BA       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       AD         8C80:54       6F       8D       3E       Ø3       CA       BD       54       6F       8D       98         8C80:64       8D       3C       AB       D       9A       92       56         8C80:65       FB       AD       9B       92       85       FC       AD       4D	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       52         8F08:8D       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       90         8F12:20       64       8F       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F28:A9       07       8D       C6       92       20       64       8F       69         8F38:A9       88       BC       59       A9       B8       BF       40         8F44:C6       92       20       64       8F       AD       00       B8       BD <t< td=""></t<>
Bybe:         Bybe: <th< td=""><td>8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       FD       CA       11         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C78:BD       54       6F       8D       36       03       CA       BD       AD       B2       86       6F       85       FB       AD       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86</td><td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       52         8F08:85       FD       A9       A0       85       FE       A9       40       52         8F08:85       FD       A9       A0       85       FE       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       80       C5       92       27         8F28:A9       07       80       C6       92       20       64       8F       69         8F38:A9       E8       80       C5       92       A9       D8       BF       49         8F48:29       0F       8D       94       92       AD       10       19       85       85</td></th<>	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       FD       CA       11         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C78:BD       54       6F       8D       36       03       CA       BD       AD       B2       86       6F       85       FB       AD       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86       86	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       52         8F08:85       FD       A9       A0       85       FE       A9       40       52         8F08:85       FD       A9       A0       85       FE       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       80       C5       92       27         8F28:A9       07       80       C6       92       20       64       8F       69         8F38:A9       E8       80       C5       92       A9       D8       BF       49         8F48:29       0F       8D       94       92       AD       10       19       85       85
Bybe: Fb         Co         <	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       FD       CA       11         8C78:ED       54       6F       8D       46       93       CA       BD       AD       B2       88       C6F       85       FD       CA       11         8C78:ED       54       6F       8D       36       GA       BD       54       6F       85       85         8C88:6F       8D       3E       Ø3       CA       BD       54       6F       85       FE       B0       84       6F       85       FC       B0       86       86       86       86       86       86       86       86       86       86       86       86       86       86 <td>8EE8:203C925860201892498EF0:203192EE20D0A900438EF8:85FBA92085FCA900828F00:85FDA9A085FEA9405C8F08:80C592A93F8DC6929C8F10:206487A90085FDA9908F20:E085FEA90085FDA9908F20:E085FEA988BCC592278F28:A9078DC692206487698F30:A90085FBA9D885FC408F30:A90085FBA9D885FC408F30:A90085FBA9D885FC408F30:A90085FBA9D885FC408F30:A90085FBA9D885FC408F40:C69220648FAD00D8BD8F48:29078D40040494928D8F66:91FD20677D00A9428D8F68:91FD20FF912000928D<tr< td=""></tr<></td>	8EE8:203C925860201892498EF0:203192EE20D0A900438EF8:85FBA92085FCA900828F00:85FDA9A085FEA9405C8F08:80C592A93F8DC6929C8F10:206487A90085FDA9908F20:E085FEA90085FDA9908F20:E085FEA988BCC592278F28:A9078DC692206487698F30:A90085FBA9D885FC408F30:A90085FBA9D885FC408F30:A90085FBA9D885FC408F30:A90085FBA9D885FC408F30:A90085FBA9D885FC408F40:C69220648FAD00D8BD8F48:29078D40040494928D8F66:91FD20677D00A9428D8F68:91FD20FF912000928D <tr< td=""></tr<>
ByB8:03         D0         07         AD         3E         03         C9         01         CF           ByB8:03         D0         07         AD         3E         03         C9         01         CF           ByC0:F0         3D         AD         3E         03         38         E9         02         04           ByC0:F0         3D         AD         3E         03         AD         36         E9         04         47           ByD0:BD         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           ByD0:BD         9F         Ø4         BD         42         Ø3         ØA         ØA         F1           ByD0:BD         3F         Ø3         BD         42         Ø3         AD         F3         B3         B           ByB8:FD         Ø3         BD         42         Ø3         AD         F8         B8         BF         B3         BE         90         58         B8         BF         B3         B2         Ø3         AD         41         Ø3         AD         40         A3         B1         BA         B4         B3	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BE       C1       92       D0       56         8C60:92       4C       AA       BE       AC       192       D0       56         8C60:92       4C       AA       BE       AC       192       D0       56         8C60:92       4C       AA       BE       AC       192       D0       56         8C60:92       4C       AA       BE       AD       BC       BD       54       6F       85       38         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C70:FE       CA       BD       54       6F       85       FB       CA       BD       54       6F       1A         8C70:FE       CA       BD       54       6F       85       FE       CA       BD       94       93       CA       BD       46       FE       AD       AD       AD	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       FB       A0       85       FE       A9       90         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:40       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       98       BD       FE       A9       B8       SFC       40         8F38:A9       98       BD       C5       92       A9       A9       B8       BF4         8F48:20       06       A0       A0       A9       49       28       D       68
ByB8:03         D0         07         AD         3E         03         C9         01         CF           ByB8:03         D0         07         AD         3E         03         C9         01         CF           ByC0:F0         3D         AD         3E         03         38         E9         02         04           ByC0:F0         3D         AD         3E         03         AD         42         03         60         47           ByD0:BD         3F         Ø3         AD         42         Ø3         60         48           ByB8:FD         Ø3         BD         42         Ø3         AD         42         Ø3         60         58           ByB8:FD         A5         FE         90         Ø3         55         FE         60         AD         31           BA1	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:02       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C70:FE       CA       BD       54       6F       8D       AD	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       85       FE       A9       B8       5       FC       40       90         8F38:A9       98       BD       C5       92       A9       B8       DF4         8F44:C6       92       20       A6       AF       AD       00       B8       DF4      <
ByB8:03         D0         OF         D0         OF         D0         AD         SF         D4           ByB8:03         D0         07         AD         3E         03         C9         01         CF           ByC0:F0         3D         AD         3E         03         38         E9         02         04           ByC0:F0         3D         AD         3E         03         AD         3E         03         E9         04         47           ByD0:BD         3F         Ø3         AD         42         Ø3         ØA         AF           ByD8:C9         Ø0         FØ         Ø4         BD         42         Ø3         ØA         AF           ByD8:C9         Ø0         BD         42         Ø3         AD         42         Ø3         ØA         AF           ByB8:F9         Ø3         BD         42         Ø3         AD         45         FB         38         BE         BB         58         BF         AD         40         Ø3         CE         FD         ØB         SE         FE         60         AD         31         BA         BA         BB         BD	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:02       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       A1         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C80:54       6F       8D       3E       Ø3       CA       BD       54       6F       8D       99         8C90:81       42       Ø3       CA       BD       54       6F       85       FC       AD       4D         8C88:91       92       8D       46       83 <td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:8D       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F28:A9       07       BD       C6       92       20       64       8F       69         8F38:A9       B8       BC       S9       D8       8D       F4         8F40:C6       92       20       64       8F       A0       00       B8       BD         8F48:</td>	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:8D       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F28:A9       07       BD       C6       92       20       64       8F       69         8F38:A9       B8       BC       S9       D8       8D       F4         8F40:C6       92       20       64       8F       A0       00       B8       BD         8F48:
Bybe:         Bybe:         D         D         D         F         D         AD         SF         D         D         F         D         AD         SF         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D <thd< th="">         D         D         <!--</td--><td>8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BA       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       FD       CA       11         8C78:ED       54       6F       8D       36       AB       AD       AD</td><td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:8D       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F28:A9       07       8D       C6       92       20       64       8F       69         8F48:29       07       8D       C6       92       A0       D1       D8       BF         8F48:29       0F       8D       04       04       04       B1       B      <tr< td=""></tr<></td></thd<>	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BA       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       FD       CA       11         8C78:ED       54       6F       8D       36       AB       AD	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:8D       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FB       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       8D       C5       92       27         8F28:A9       07       8D       C6       92       20       64       8F       69         8F48:29       07       8D       C6       92       A0       D1       D8       BF         8F48:29       0F       8D       04       04       04       B1       B <tr< td=""></tr<>
ByB8:03         D0         OF         D0         AD         3E         03         C9         01         CF           ByB8:03         D0         07         AD         3E         03         C9         01         CF           ByC0:F0         3D         AD         3E         03         38         E9         02         04           ByC0:F0         3D         AD         3F         03         AD         20         3         AA         F1           ByD0:BD         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           ByD0:BD         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           ByD0:BD         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           ByD0:BD         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           ByD0:BD         Ø3         D1         Ø3         AD         F1         Ø3         AD         F1         Ø3         AD         F1         Ø3         D1         F3         F5         F3         F5	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AB       BA       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       FD       CA       11         8C78:BD       54       6F       8D       36       AB       AD       AD       AB       AD       AD       AB       AD	8EE8:203C925860201892498EF0:203192EE20D0A900438EF8:85FBA92085FCA900828F00:85FDA9A085FEA9405C8F08:80C592A93F8DC6929C8F10:206485FCA90085FDA9908F20:E085FEA9E88DC592278F28:A9078DC692206485FC4D8F30:A90085FBA9D885FC4D8F30:A90085FBA9D885FC4D8F30:A90085FBA9D885FC4D8F30:A90085FBA9D885FC4D8F30:A90085FBA9D885FC4D8F40:C69220648FAD00D8BD8F48:29078D64470090288F60:CE20D064A000B1FB738F68:91FD20D7D700A902A38F68:91FD20D7D700A902A3 </td
ByB8:03         D0         OF         D0         AD         SF         D0         D3         FE         O0         AD         SF         D4           B9B8:03         D0         07         AD         3E         03         C9         01         CF           B9C0:F0         3D         AD         3E         03         3B         E9         00         47           B9D0:BD         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           B9D0:BD         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           B9D0:BD         90         F0         Ø4         BD         42         Ø3         ØA         ØA         F1           B9D0:BD         3F         Ø3         BD         42         Ø3         AD         42         Ø3         ØA         ØA         F1           B9D0:BD         3F         Ø3         BD         42         Ø3         AD         F1         ØB         ØB         SE         FB         ØB         SE         BB         B9         B3         BD         ØB         SE         F2         ØB	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AD       8C       AD       8C       C0       57         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       78         8C80:54       6F       8D       3F       Ø3       CA       BD       54       6F       1A         8C90:81       42       Ø3       CA       BD       54       6F       85       FC       BD       46       FS       FC       BD       46       FS       FC       BD       80       80       AD       92       56         8C48:61       92       4C       AA       BB	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:40       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       86       BD       C5       92       A9       B8       BF4         8F40:C6       92       20       A6       BF       AD       00       B8       BD         8F48:29       0F       BD       40       AD       AD       40       B8       BD       AD
ByB8:03         D0         OF         D0         AD         SF         D3         E         03         C9         01         CF           89C8:8D         3E         Ø3         AD         42         Ø3         ØA         AF         F1           89D8:8D         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           89D8:8D         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           89D8:8D         Ø3         8D         42         Ø3         AD         42         Ø3         ØA         ØA         F1           89E8:8D         Ø3         8D         42         Ø3         AD         42         Ø3         ØA         F3         BB         BB         BB         BB         BB         BB         AD         41         Ø3         AD         41 <td< td=""><td>8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:02       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C80:54       6F       8D       3F       Ø3       CA       BD       54       6F       1A         8C90:84       43       CA       BD       54       6F       85       FC       B0         8C40:64       67       85       FB       AD       98       92       85       FC       AD       4D         8C68:85       FB       AD       98       92       8D</td></td<> <td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       B8       BC       5       92       27         8F38:A9       B8       BD       C5       92       A9       B8       FC       4D         8F38:A9       B8       DC       5       92       A9       B8       BF       4D         8F44:29       ØF       BD       40       D       B8       D       B       BD</td>	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:02       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C80:54       6F       8D       3F       Ø3       CA       BD       54       6F       1A         8C90:84       43       CA       BD       54       6F       85       FC       B0         8C40:64       67       85       FB       AD       98       92       85       FC       AD       4D         8C68:85       FB       AD       98       92       8D	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       B8       BC       5       92       27         8F38:A9       B8       BD       C5       92       A9       B8       FC       4D         8F38:A9       B8       DC       5       92       A9       B8       BF       4D         8F44:29       ØF       BD       40       D       B8       D       B       BD
ByB8:03         D0         OF         D0         OF         D0         AD         SF         D4         D3         FE         O0         AD         SF         D4         D3         FE         O0         AD         SF         D4           B9C0:F0         3D         AD         3E         Ø3         AD         3E         Ø3         E9         Ø4           B9C0:BD         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           B9D8:BD         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           B9D8:E9         Ø8         SFB         AD         42         Ø3         ØA         ØA         F1           B9D8:E9         Ø8         SFB         AD         FC         E9         ØØ         SE         B8           B9E8:FD         AD         FE         E9         ØØ         85         FE         6Ø         AD         31           BA00:AD         4Ø         Ø3         CP         ØI         F0         35         CE         FD         ØB         SE         FE         6Ø         AD         31	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:02       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       A         8C80:54       6F       8D       3F       Ø3       CA       BD       54       6F       8D       B         8C80:54       6F       8D       3E       Ø3       CA       BD       54       6F       8D       BP         8C80:54       6B       D       54       6F       85       FB       CA       BE       50         8CA0:65       FB       AD       9B	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:8D       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:40       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       B8       BD       C5       92       27         8F38:A9       85       FB       A9       B8       BD       C5       92       27         8F38:A9       85       BD       A9       28       B0       BD       F4         8F40:C6       92       20       64       8F       AD       00       BB       BD <t< td=""></t<>
ByB8:Ø3         DØ         ØF         ØF <t< td=""><td>8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AD       8D       60       6D       85       FC       CA       A1         8C50:02       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       FD       CA       11         8C78:8D       54       6F       8D       36       GA       BD       54       6F       8D         8C88:6F       8D       3E       Ø3       CA       BD       54       6F       8D       80         8C88:6F       8D       3E       Ø3       CA       BD       54       6F       8D       80         8C40:6A       BD       40       3A       D       92       85       FC       AD       4D         8C68:9C       92</td><td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       22       A9       B8       BC       66       92       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       E8       BD       C5       92       A9       D8       BD       F4         8F40:C6       92       20       64       8F       AD       00       D8       BD         8F48:29       0F       BD       40       A0       A0       00       94       92</td></t<>	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AD       8D       60       6D       85       FC       CA       A1         8C50:02       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:03       4C       AD       8C       BD       54       6F       85       FD       CA       11         8C78:8D       54       6F       8D       36       GA       BD       54       6F       8D         8C88:6F       8D       3E       Ø3       CA       BD       54       6F       8D       80         8C88:6F       8D       3E       Ø3       CA       BD       54       6F       8D       80         8C40:6A       BD       40       3A       D       92       85       FC       AD       4D         8C68:9C       92	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       22       A9       B8       BC       66       92       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       E8       BD       C5       92       A9       D8       BD       F4         8F40:C6       92       20       64       8F       AD       00       D8       BD         8F48:29       0F       BD       40       A0       A0       00       94       92
ByB8:03         D0         D7         AD         3E         03         C9         01         CF           ByB8:03         D0         07         AD         3E         03         C9         01         CF           ByC0:F0         3D         AD         3E         03         38         E9         02         04           ByC0:F0         3D         AD         3F         03         AD         20         3         AF         13           ByD0:BD         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           ByD0:BD         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           ByD0:BD         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           ByD0:BD         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           ByD0:SD         FC         FD         SB         F5         F6         60         F5         SB         SE         F5         F5         F5         F5         F5         F5         F5         F5         F5	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       AD       8C       AD       8C       C0       57         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8C       AD       8C       BD       54       6F       85       SE         8C80:54       6F       8D       3E       Ø3       CA       BD       54       6F       1A         8C90:84       Ø3       CA       BD       54       6F       85       FC       BØ         8C80:61       92       4C       AA       8B       AD       9A       92       56         8C80:85       FD       AD       92       8D       3F       Ø3 <td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A3       FB       A0       66       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       80       C5       92       27         8F38:A9       E8       80       C5       92       A9       B8       BF4         8F44:29       06       60       A0       00       B8       BD         8F48:29       06       A0       00       A1       B8       B0       B5       FC       40         8F38</td>	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A3       FB       A0       66       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:04       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       80       C5       92       27         8F38:A9       E8       80       C5       92       A9       B8       BF4         8F44:29       06       60       A0       00       B8       BD         8F48:29       06       A0       00       A1       B8       B0       B5       FC       40         8F38
ByB8:03         D0         OF         D0         AD         SF         D0         D3         FE         O0         AD         SF         D4           B9B8:03         D0         D7         AD         3E         Ø3         C9         Ø1         CF           B9C0:F0         3D         AD         3E         Ø3         AD         3E         Ø3         E9         Ø4           B9C8:BD         3F         Ø3         AD         42         Ø3         ØA         ØA         F1           B9D8:BD         GØ         FØ         Ø4         BD         42         Ø3         ØA         ØA           B9D8:ED         Ø8         SF         FB         AD         42         Ø3         ØA         ØA           B9E8:FD         Ø3         ED         90         AD         3E         E9         ØI         85         BB           B9F8:FD         A5         FE         E9         ØØ         85         FE         6Ø         AD         31           BA10:608         B0         41         Ø3         AD         30         2Ø         AD         31           BA16:608         B0	8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:03       CA       BD       60       6D       85       FC       CA       A1         8C50:02       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C60:92       4C       AA       8B       AE       C1       92       D0       56         8C68:65       BD       54       6F       85       FD       CA       11         8C70:FE       CA       BD       54       6F       85       FD       CA       11         8C70:FE       CA       BD       54       6F       85       FB       AD       90       3C       AB       AD	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:40       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       86       BD       C5       92       A9       B8       FC       4D         8F38:A9       90       85       FB       A9       B8       BF       4D         8F48:29       06       A0       A0       B8       BD       F4         8F440:C6 <td< td=""></td<>
ByB8:03         D0         OF         AD         3E         03         C9         01         CF           ByB8:03         D0         07         AD         3E         03         C9         01         CF           ByC0:F0         3D         AD         3E         03         38         E9         02         04           ByC0:F0         3D         AD         3E         03         AD         42         03         60         47           ByD0:BD         3F         Ø3         AD         42         Ø3         60         48           ByB8:FD         AS         FB         AS         FB         38         58         B           ByF0:FC         AS         FD         38         E9         91         85         FC         60         AS         58           BA08:FC <td< td=""><td>8C50:02       AD       BD       60       BD       FC       CA         8C50:02       AC       AD       BC       60       BD       FC       CA       AI         8C50:92       4C       AA       BB       AE       C1       92       D0       56         8C60:92       4C       AA       BB       AE       C1       92       D0       56         8C60:92       4C       AA       BB       AE       C1       92       D0       56         8C60:92       4C       AA       BB       AE       C1       92       D0       56         8C60:92       4C       AA       BB       AE       C1       92       D0       56         8C80:54       6F       BD       3F       Ø3       CA       BD       54       6F       BD         8C90:84       43       CA       BD       54       6F       85       FC       BØ         8C40:65       FB       AD       9B       92       85       FC       AD       4D         8C68:91       92       8D       40       Ø3       AD       9D       92       76      <t< td=""><td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:40       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       88       BD       C5       92       A9       B8       FC       4D         8F38:A9       FB       BD       C6       92       A9       A8       BD         8F48:29       ØF       BD       40       ØB       B1       FB       FA       D0       D0</td></t<></td></td<>	8C50:02       AD       BD       60       BD       FC       CA         8C50:02       AC       AD       BC       60       BD       FC       CA       AI         8C50:92       4C       AA       BB       AE       C1       92       D0       56         8C60:92       4C       AA       BB       AE       C1       92       D0       56         8C60:92       4C       AA       BB       AE       C1       92       D0       56         8C60:92       4C       AA       BB       AE       C1       92       D0       56         8C60:92       4C       AA       BB       AE       C1       92       D0       56         8C80:54       6F       BD       3F       Ø3       CA       BD       54       6F       BD         8C90:84       43       CA       BD       54       6F       85       FC       BØ         8C40:65       FB       AD       9B       92       85       FC       AD       4D         8C68:91       92       8D       40       Ø3       AD       9D       92       76 <t< td=""><td>8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:40       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       88       BD       C5       92       A9       B8       FC       4D         8F38:A9       FB       BD       C6       92       A9       A8       BD         8F48:29       ØF       BD       40       ØB       B1       FB       FA       D0       D0</td></t<>	8EE8:20       3C       92       58       60       20       1B       92       49         8EF0:20       31       92       EE       20       D0       A9       00       43         8EF8:85       FB       A9       20       85       FC       A9       00       82         8F00:85       FD       A9       A0       85       FE       A9       40       5C         8F08:80       C5       92       A9       3F       8D       C6       92       9C         8F10:20       64       8F       A9       00       85       FD       A9       90         8F18:40       85       FC       A9       00       85       FD       A9       90         8F20:E0       85       FE       A9       E8       BD       C5       92       27         8F38:A9       88       BD       C5       92       A9       B8       FC       4D         8F38:A9       FB       BD       C6       92       A9       A8       BD         8F48:29       ØF       BD       40       ØB       B1       FB       FA       D0       D0

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9030:89 20 8B 90 20 3D 8A 20 C3	Color Pad 2.0	C288:20 91 B3 A2 00 BD 9C CE 22
9Ø38:8B 9Ø 2Ø B6 89 2Ø 8B 9Ø 27		C290:95 69 E8 E0 05 D0 F6 A5 65
9040:20 3D 8A 20 8B 90 20 B6 A9	CØØØ:C9 4C FØ 14 C9 52 FØ 13 65	C2AØ:ØF BC AC 5D CE A9 ØØ 2Ø 85
9050:8B 90 20 B6 89 20 8B 90 3F	C008:C9 54 F0 12 C9 49 F0 11 29	C2A8:91 B3 20 2B BA A2 00 B5 B0
9058:AD AE 92 85 FB AD AF 92 2F	CØ18:4C 27 CØ 4C 3Ø CØ 4C 39 BC	C2BØ:61 9D AB CE E8 EØ Ø5 DØ 56
9060:85 FC AD B0 92 85 FD AD 98	CØ20:CØ 4C 3D CØ 4C 46 CØ A9 6F	C2CØ:BA A2 ØØ BD BØ CE 95 69 7D
9068:BI 92 85 FE AD B2 92 8D 92 9070.41 03 AD B3 92 8D 42 03 36	CØ28:00 8D 53 CE 20 4E C6 60 8C	C2C8:E8 EØ Ø5 DØ F6 A5 61 20 D9
9078:AD B4 92 8D 3E 03 AD B5 D7	C030:A9 01 8D 53 CE 20 4E C6 08	C2DØ:6A B8 20 71 BF A2 00 B5 13
9080:92 8D 3F 03 AD B6 92 8D 61	CØ4Ø:9A CE 2Ø 4F CØ 6Ø A9 5A FØ	C2D8:61 9D B5 CE E8 E0 05 D0 BF
9088:40 03 60 A0 00 20 47 92 42	CØ48:8D 9A CE 2Ø 4F CØ 6Ø 2Ø 71	C2E8:AØ Ø1 A9 ØØ 2Ø 91 B3 A2 85
9090: AD 68 03 D0 03 4C EI 91 AE	CØ5Ø:A6 85 A5 C6 FØ Ø3 4C 48 1C	C2FØ:00 B5 61 9D A6 CE E8 EØ ØD
90A0:4C E1 91 20 31 92 A5 FD B1	CØ58:C6 A9 ØØ 8D 5A CE 20 56 25	C2F8:05 DØ F6 A2 ØØ BD A6 CE 51
90A8:18 69 00 85 FD A5 FE 69 76	CØ68:20 E4 FF C9 2B FØ Ø7 C9 C4	C300:95 61 BD AB CE 95 69 E8 A5
90B0:D4 85 FE B1 FD 8D 87 92 60	CØ70:2D FØ 15 4C 9A CØ EE 5A 3C	C308:E0 05 D0 F1 20 14 BB 20 05
9088:20 3C 92 AD 87 92 29 0F 0E	CØ78:CE AD 5A CE C9 5B DØ Ø5 67	C318:00 20 91 B3 20 2B BA 20 58
90C8:0F CD 45 03 D0 10 A9 AA 82	CØ80:A9 5A 8D 5A CE 4C 5E C0 E9	C320:0F BC A0 AE A9 A8 20 A2 30
90D0:8D 87 92 4C C4 91 A9 FF 71	CØ90:DØ Ø5 A9 ØØ 8D 5A CE 4C BØ	C328:BB 20 14 BB 20 58 BC 20 CF
90D8:8D 87 92 4C C4 91 B1 FD 87	CØ98:5E CØ 18 C9 30 BØ Ø3 4C AF	C330:AA BI 8C /D CE 8D /E CE 5B
90E0:4A 4A 4A 4A CD 45 03 D0 02	CØAØ:AA CØ 18 C9 3A BØ Ø3 4C 2E	C340:CE 8D 90 CE 20 F3 C5 AD 9B
90F0:91 20 31 92 A5 FB 85 FD 58	CØA8:AD CØ 4C 48 C6 A2 ØØ 8E 8E	C348:8D CE C9 Ø2 FØ 17 C9 Ø3 1E
90F8:A5 FC 85 FE AD 41 03 8D D2	COBO:5A CE 38 E9 30 AA E0 00 A0	C350:F0 27 C9 04 F0 37 AD 7D D0
9100:87 92 A9 00 8D 88 92 8D 02	CØCØ:8D 5A CE CA 4C B6 CØ 4C 31	C358:CE 8D 91 CE AD 7E CE 8D 5C
91Ø8:89 92 8D 8A 92 8D 8B 92 63	CØC8:5E CØ A5 FB 8D 65 CE A5 63	C360:92 CE 4C 9E C3 A9 B4 38 BE
9110:CE 8/ 92 F0 10 A5 FD 38 29	CØDØ:FC 8D 66 CE A5 FD 8D 67 95	C370:ED 7E CE 8D 92 CE 4C 9E 48
9118:E9 Ø1 85 FD A5 FE E9 ØØ FD	CØD8:CE A5 FE 8D 68 CE AD 3E FB	C378:C3 A9 B4 18 6D 7D CE 8D FØ
9128:87 92 29 Ø3 FØ ØB C9 Ø2 52	CØE8:6A CE AD 4Ø Ø3 8D 6B CE Ø1	C380:91 CE A9 00 6D 7E CE 8D 4A
9130:FØ 15 C9 Ø1 FØ 17 EE 8B A7	CØFØ:AD 42 Ø3 8D 6D CE AD 41 56	C388:92 CE 4C 9E C3 A9 68 38 4E
9138:92 4E 87 92 4E 87 92 AD B5	CØF8:03 8D 6F CE AD 78 69 4A A6	C398 ED 7E CE 8D 91 CE AD 91 26
9140:87 92 FØ ØF 4C 2A 91 EE F7	C100:8D 5B CE C9 00 F0 0B 8D FE	C3AØ:CE 18 6D 5A CE 8D 91 CE 87
9148:88 92 4C 39 91 EE 89 92 SF 9150:4C 39 91 EE 8A 92 AD 8A 8D	C110:D0 F8 AD 79 69 4A 8D 5D 74	C3A8:AD 92 CE 69 00 8D 92 CE 46
9158:92 C9 Ø8 FØ 1Ø A5 FD 18 72	C118:CE C9 ØØ FØ 33 8D FC CD 1C	C3BØ:AD 91 CE 8D 8F CE AD 92 CB
9160:69 01 85 FD A5 FE 69 00 05	C120:20 3D 8A CE FC CD DØ F8 FA	C3E8:CE 8D 90 CE 20 F3 C5 A9 10
9168:85 FE 4C 25 91 20 3C 92 02	C128:AC 5D CE A9 00 20 91 B3 25	C3C8:02 FØ 1D C9 Ø3 FØ 2F C9 D1
9178-11 CD 88 92 18 CD 89 92 BD CA	C138:91 B3 20 28 BA 20 0F BC 59	C3DØ:04 FØ 3F C9 Ø5 FØ 51 AD 57
9180:29 FØ ØD 45 Ø3 91 FD 4C 11	C140:A0 5A A9 00 20 91 B3 20 AE	C3D8:91 CE 8D 7F CE A9 Ø1 8D 33
9188:CE 90 AD 89 92 18 CD 8B A1	C148:14 BB 20 AA B1 8C 5D CE BC	C3E0:83 CE 8D 87 CE 4C 39 C4 E0
9190:92 90 1B 20 31 92 A5 FD A3	C150:A5 FB 8D 71 CE A5 FC 8D 03	C3FØ:CE A9 ØØ 8D 83 CE A9 Ø1 CE
9198:18 69 00 85 FD A5 FE 69 68	C160:FE 8D 74 CE AD 3E Ø3 8D 3C	C3F8:8D 87 CE 4C 39 C4 AD 91 91
91A8:20 3C 92 4C D6 90 B1 FD 5C	C168:75 CE AD 3F Ø3 8D 76 CE ØE	C400:CE 38 E9 B4 8D 7F CE A9 39
91BØ:29 ØF 8D 88 92 AD 45 Ø3 3F	C170:AD 40 03 8D 77 CE AD 42 A8	C408:00 8D 83 CE 8D 87 CE 4C C6
9188:ØA ØA ØA ØA ØD 88 92 91 86	C178:03 8D 79 CE AD 41 03 8D 03	C410:39 C4 A9 68 38 ED 91 CE 6E C418.8D 7F CE A9 Ø1 8D 83 CE DØ
91CØ:FD 4C E9 90 AD 42 03 2D E5	C180:78 CE AD AE A9 A8 20 A2 47	C420:A9 00 8D 87 CE 4C 39 C4 87
9108:87 92 80 87 92 A9 FF 36 F1 9108:ED 42 03 8D 88 92 B1 FB A2	C190:20 91 B3 20 14 BB A2 00 D5	C428:AD 91 CE 38 E9 68 8D 7F D5
91D8:2D 88 92 ØD 87 92 91 FB 7D	C198:B5 61 9D 9C CE E8 EØ Ø5 AD	C430:CE A9 01 8D 83 CE 8D 87 7E
91EØ:6Ø A9 FF 38 ED 42 Ø3 8D 2E	CIAØ:DØ F6 AC 5D CE A9 ØØ 2Ø F2	C438:CE AC 7F CE A9 00 20 91 50
91E8:87 92 B1 FB 2D 87 92 4C 63	C1A8:91 B3 20 0F BC AC 58 CE F4	C448 E8 E0 05 D0 E6 A5 61 20 5D
91F8:88 DØ FD CA DØ F7 6Ø A5 CD	C1B8:20 58 BC A2 00 B5 61 9D 5B	C450:2B BA 20 64 E2 A2 00 BD C7
9200:FB 18 69 01 85 FB A5 FC CA	C1CØ:A1 CE E8 EØ Ø5 DØ F6 A9 F6	C458:B5 CE 95 69 E8 EØ Ø5 DØ 5F
9208:69 00 85 FC 60 A5 FD 18 10	C1C8:00 8D 5F CE A9 00 8D 60 51	C460:F6 A5 61 20 28 BA 20 AA 2C
9210:69 01 85 FD A5 FE 69 00 B6	CID8:4C B9 C5 AD 5F CE 8D 8F 65	C470:00 20 91 B3 A2 00 BD 9C 9C
9220:A5 FC 8D BA 92 60 AD B9 DF	C1EØ:CE AD 60 CE 8D 90 CE 20 9C	C478:CE 95 69 E8 EØ Ø5 DØ F6 3E
9228:92 85 FB AD BA 92 85 FC 7A	C1E8:F3 C5 AD 8D CE C9 Ø2 FØ F8	C480:A5 61 20 2B BA 20 6B E2 FB
9230:60 A5 FD 8D BB 92 A5 FE F9	C1FØ:15 C9 Ø3 FØ 1D C9 Ø4 FØ E9	C488:A2 ØØ BD B5 CE 95 69 E8 FE
9238:8D BC 92 60 AD BB 92 85 B2	C200.8D 91 CE 4C 33 C2 A9 B4 FB	C498:BA 20 ØF BC AØ 5A A9 ØØ F6
9248:70 Ø3 C9 57 FØ Ø5 C9 58 9C	C208:38 ED 5F CE 8D 91 CE 4C 9A	C4A0:20 91 B3 20 28 BA 20 ØF AA
9250:FØ 1B 60 CE 71 03 DØ 14 FA	C210:33 C2 AD 5F CE 38 E9 B4 6B	C4A8:BC AØ 75 A9 ØØ 2Ø 91 B3 59
9258:A9 ØA 8D 71 Ø3 EE 45 Ø3 FE	C218:8D 91 CE 4C 33 C2 A9 68 C7	C480:20 14 BB 20 AA B1 8C 85 83
9260:AD 45 03 C9 10 D0 05 A9 22	C228:38 ED 5F CE 8D 91 CE 4C B2 C228:33 C2 AD 5F CE 38 E9 68 37	C4CØ:CE 85 FC AD 73 CE 85 FD 6D
9270:DØ ØF AD 46 Ø3 4A 4A 4A FB	C230:8D 91 CE AC 91 CE A9 00 A0	C4C8:AD 74 CE 85 FE AD 75 CE EØ
9278:8D 71 Ø3 A9 Ø1 8D 68 Ø3 CD	C238:20 91 B3 A2 00 BD 9C CE D1	C4DØ:8D 3E Ø3 AD 76 CE 8D 3F 35
9280:60 A9 00 4C 7D 92 00 00 3B	C240:95 69 E8 EØ Ø5 DØ F6 A5 15	C4D8:03 AD 77 CE 8D 40 03 AD 4C
9288:00 00 00 00 00 00 00 00 AD	C248:61 20 28 BA 20 64 E2 20 10 C250:0F BC AC 58 CE A9 00 20 15	C4E8:8D 41 Ø3 AD 81 CE FØ 13 Ø1
9298.00 00 00 00 00 00 00 00 00 B5	C258:91 B3 20 28 BA A2 00 B5 60	C4FØ:AD 83 CE DØ Ø6 20 B6 89 CØ
92A0:00 00 00 00 00 00 00 00 C5	C260:61 9D A6 CE E8 EØ Ø5 DØ 65	C4F8:4C FE C4 20 6C 89 CE 81 AB
92A8:00 00 00 00 00 00 00 00 CD	C268:F6 20 2B BC 8D 89 CE 20 F2	C500:CE DØ ED AD 85 CE FØ 13 1C
92B0:00 00 00 00 00 00 00 00 00 D5	C270:0F BC A5 61 20 2B BA A2 3D	C510:4C 16 C5 20 00 8A CE 85 4F
9288:00 00 00 00 00 00 00 00 DD	C280:05 DØ F6 AC 91 CE A9 ØØ 81	C518:CE DØ ED AD 5F CE DØ 3A E9

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C2824:20         CA34:64         C         CA34:64         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C <th>C520:AD 60 CE D0 35 A5 FB 8D 47</th> <th>C7B8: 3A CE 85 FE AD 3B CE 8D 3F</th> <th>CA50:CE AD 51 CE FØ Ø6 20 ØØ AF</th>	C520:AD 60 CE D0 35 A5 FB 8D 47	C7B8: 3A CE 85 FE AD 3B CE 8D 3F	CA50:CE AD 51 CE FØ Ø6 20 ØØ AF
Construction         Construction<	C528:2E CE A5 FC 8D 2F CE A5 6F	C7CØ: 3E Ø3 AD 3C CE 8D 3F Ø3 D7	CA58:8A 4C 5F CA 20 3D 8A AD 97
cr3sts; P2         P0         33         C         A0         A0         A1         A1         A1         A1         C         A1         A1         C         A1         A1         A1         C         A1         A1 <td< td=""><td>C538 CE AD 3E Ø3 8D 32 CE AD ØF</td><td>C7C8:AD 3D CE 8D 40 03 AD 3F D9</td><td>CA60:44 CE DØ Ø3 4C 99 C9 AD 20</td></td<>	C538 CE AD 3E Ø3 8D 32 CE AD ØF	C7C8:AD 3D CE 8D 40 03 AD 3F D9	CA60:44 CE DØ Ø3 4C 99 C9 AD 20
C4546 60         34         C         A         C         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P        P         P         P<	C540:3F Ø3 8D 33 CE AD 40 Ø3 C1	C7D8:42 Ø3 A9 Ø1 8D 41 CE 2Ø BE	CA70 CE AD 49 CE 6D 45 CE 8D 9A
C559       C559       C5       C569       C5       C569       C569 <td< td=""><td>C548:8D 34 CE AD 42 Ø3 8D 36 CB</td><td>C7EØ:10 C8 AD 42 CE 29 Ø8 DØ 8Ø</td><td>CA78:49 CE CD 47 CE FØ Ø7 C9 A6</td></td<>	C548:8D 34 CE AD 42 Ø3 8D 36 CB	C7EØ:10 C8 AD 42 CE 29 Ø8 DØ 8Ø	CA78:49 CE CD 47 CE FØ Ø7 C9 A6
233419         C1         C1 <td< td=""><td>C550:CE AD 41 03 8D 35 CE 4C 32</td><td>C7E8:03 20 6C 89 AD 42 CE 29 65</td><td>CA80:00 DØ ØF 4C 99 C9 AD 48 88</td></td<>	C550:CE AD 41 03 8D 35 CE 4C 32	C7E8:03 20 6C 89 AD 42 CE 29 65	CA80:00 DØ ØF 4C 99 C9 AD 48 88
Construct         Construct <thconstruct< th=""> <thconstruct< th=""> <thc< td=""><td>C558:98 C5 AD 2E CE 8D 37 CE 24</td><td>C7FØ:04 DØ Ø3 20 B6 89 AD 42 92</td><td>CA88:CE 18 CD 46 CE BØ Ø3 4C 35</td></thc<></thconstruct<></thconstruct<>	C558:98 C5 AD 2E CE 8D 37 CE 24	C7FØ:04 DØ Ø3 20 B6 89 AD 42 92	CA88:CE 18 CD 46 CE BØ Ø3 4C 35
c75761AD       32       02       36       02       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96       96	C560 AD 2F CE 8D 38 CE AD 30 C9	C7F8:CE 29 01 D0 03 20 00 8A 8A	CA90:99 C9 EE 4C CE DØ Ø3 EE B6
c77a.b3       C2       b3       C2       b3       C2       b3       b3       b2       b3	C570:3A CE AD 32 CE 8D 3B CE 97	C808:3D 8A 20 7F 8F 4C B4 C6 B4	CAA0:6C 89 4C A8 CA 20 B6 89 B0
C5884 (C)         B)         D         C         B)         C         C         B)         B)         B)         B)         C         C         B)         C         C         B)         C         C         B)         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C	C578:AD 33 CE 8D 3C CE AD 34 Ø7	C810:AD 10 D0 29 01 F0 02 A9 A2	CAA8:AD 48 CE 38 ED 46 CE 8D 38
CBBBHAB         CBB	C580:CE 8D 3D CE AD 36 CE 8D DC	C818:03 8D 10 D0 AD 00 D0 8D 3A	CABØ:48 CE AD 49 CE E9 ØØ 8D 14
System         State         State <t< td=""><td>C588:40 CE AD 35 CE 8D 3F CE EA</td><td>C820:02 DØ AD 01 DØ 8D 03 DØ 40</td><td>CAB8:49 CE 4C 99 C9 AD 41 CE 20</td></t<>	C588:40 CE AD 35 CE 8D 3F CE EA	C820:02 DØ AD 01 DØ 8D 03 DØ 40	CAB8:49 CE 4C 99 C9 AD 41 CE 20
C5504:65       CC       67       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60	C590:A9 00 8D 41 CE 20 2F C8 D4	C828:60 A9 01 8D 15 D0 60 20 1A	CAC0:FØ Ø3 4C FA CA AD 2E CE Ø1
C3A8:06         C2: 00         00         08         AD         5F         C2: 00         C3: 00 <t< td=""><td>C5AØ:5F CE AD 6Ø CE 69 ØØ 8D F4</td><td>C838:15 DØ 8D 43 CE 49 ØØ 8D 19</td><td>CADØ: 30 CE 85 ED AD 31 CE 85 18</td></t<>	C5AØ:5F CE AD 6Ø CE 69 ØØ 8D F4	C838:15 DØ 8D 43 CE 49 ØØ 8D 19	CADØ: 30 CE 85 ED AD 31 CE 85 18
C5B8 (CL 18 (2) 9 GC 18 (2) A (2) 1A (2) A         CA40 (7) B (3) (2) C (2) A (2) C (2) C (2) A (2) C (2) A (2) C (2) A (2) C (2) C (2) C (2) C (2) A (2) C (2) C (2) A (2) C (2) A (2) C (2) A (2) C (2) C (2) C (2) C (2) A (2) C (2) C (2) A (2) C (2) C (2) C (2) A (2) C (2)	C5A8:60 CE C9 01 D0 08 AD 5F C2	C840:15 DØ AD 41 CE FØ 35 A5 A4	CAD8:FE AD 32 CE 8D 3E Ø3 AD A5
CB381:C1         AD         65         CE         FD         AD         65         CE         FD         AD         FD         CB38:CE         FD         CB38:CE         AF         FD         BD         AD         CE         AD         AD         CE         AD         CE         AD         AD         CE         AD         CE         AD         AD         CE         AD         AD         CE         AD         AD         CE         AD	C5BØ:CE 18 C9 6C BØ Ø3 4C D1 A5	C848:FB 8D 37 CE A5 FC 8D 38 83	CAEØ:33 CE 8D 3F Ø3 AD 34 CE 6F
Carbon Los         Carbon	C5B8:C1 AD 65 CE 85 FB AD 66 Ø8	C850:CE A5 FD 8D 39 CE A5 FE 9A	CAE8:8D 40 03 AD 36 CE 8D 42 DA
Comparison         Comparison <thcomparison< th="">         Comparison         Comparis</thcomparison<>	C5C0:CE 85 FC AD 67 CE 85 FD 0F	C858:8D 3A CE AD 3E Ø3 8D 3B 48	CAFØ:03 AD 35 CE 8D 41 Ø3 4C CA
c550:d5 CC       c273:d5 CC <td>C5D0:8D 3E 03 AD 6A CE 8D 3F D6</td> <td>C860:CE AD 3F 03 8D 3C CE AD 85</td> <td>CAF8:20 CB AD 37 CE 85 FB AD F2 CB00:38 CE 85 FC AD 39 CE 85 5D</td>	C5D0:8D 3E 03 AD 6A CE 8D 3F D6	C860:CE AD 3F 03 8D 3C CE AD 85	CAF8:20 CB AD 37 CE 85 FB AD F2 CB00:38 CE 85 FC AD 39 CE 85 5D
C5E8:160         C6         C6         C678:162         C77         C658:162         C678:162         C678:162         C678:162         C77         C658:162         C678:162         C77         C658:162         C678:162         C77         C658:162         C77         C658:162         C77         C678:162         C77         C77:172         C678:162	C5D8:03 AD 6B CE 8D 40 03 AD CC	C870.8D 40 CF AD 41 03 8D 3F FD	CBØ8:FD AD 3A CE 85 FE AD 3B FC
C5B8:46       C5B       <	C5EØ:6D CE 8D 42 Ø3 AD 6F CE 29	C878:CE 4C AE C8 A5 FB 8D 2E 4D	CB10:CE 8D 3E 03 AD 3C CE 8D F3
CFF847AA         GF         CB         D8         CB         D8         CE         AB         FP         BD         AI         CB         <	C5E8:8D 41 Ø3 A9 1E 8D 15 DØ A8	C880:CE A5 FC 8D 2F CE A5 FD 59	CB18:3F Ø3 AD 3D CE 8D 4Ø Ø3 C9
Catagrado         Catagrado <t< td=""><td>C5FØ:4C 59 CØ AD 90 CE DØ 10 5D</td><td>C888:8D 30 CE A5 FE 8D 31 CE 80</td><td>CB20:AD 40 CE 8D 42 03 AD 3F 0A</td></t<>	C5FØ:4C 59 CØ AD 90 CE DØ 10 5D	C888:8D 30 CE A5 FE 8D 31 CE 80	CB20:AD 40 CE 8D 42 03 AD 3F 0A
c c c c c c c c c c c c c c c c c c c	C600.19 01 8D 8D CF 4C 47 C6 21	C890:AD 3E 03 8D 32 CE AD 3F 29	CB28:CE 8D 41 03 AD 43 CE 8D 88
Ci61e:10       Ci61e:10       Ci61e:10       Ci62e:10       Ci62e:10 <td< td=""><td>C608:AD 90 CE D0 10 AD 8F CE 9C</td><td>C898:03 8D 33 CE AD 40 03 8D 64</td><td>CB38:A9 01 8D 54 CE A5 3F 8D F4</td></td<>	C608:AD 90 CE D0 10 AD 8F CE 9C	C898:03 8D 33 CE AD 40 03 8D 64	CB38:A9 01 8D 54 CE A5 3F 8D F4
C618:80       C6 4 C 47 C 6 AD 90 CE FA       CBB8:00 B AD 87 CE 18 C 9 83 FA       CB88:00 B AD 87 CE 18 C 9 83 FA       CB88:00 B AD 87 CE 18 C 9 83 FA       CB88:00 B AD 87 CE 18 C 9 83 FA       CB88:00 B AD 87 CE 18 C 9 83 FA       CB88:00 B AD 87 CE 18 C 9 83 FA       CB88:00 B AD 87 CE 18 C 9 83 FA       CB88:00 B AD 87 CE 18 C 9 83 FA       CB88:00 B AD 87 CE 18 C 9 83 FA       CB88:00 B AD 87 CE 18 C 9 83 FA       CB88:00 AD 87 CE 18 C 9 83 FA       CB88:00 AD 87 CE 18 C 9 83 FA       CB88:00 AD 87 CE 18 C 9 83 FA       CB88:00 AD 87 CE 18 C 9 83 CE 80 FA       CB88:00 AD 87 CE 18 C 9 83 CE 80 FA       CB88:00 AD 87 CE 18 C 9 83 CE 80 FA       CB88:00 AD 87 CE 18 C 9 83 CE 80 FA       CB88:00 AD 87 CE 18 C 9 83 CE 80 FA       CB88:00 AD 87 CE 18 C 9 83 CE 80 FA       CB88:00 AD 87 CE 18 C 9 83 CE 80 FA       CB88:00 AD 80 CE 64 AD 80 CE 64 AD 80 CE 74 FA       CB88:00 AD 87 CE 18 C 9 83 CE 80 FA       CB88:00 AD 81 CE 80 FA       CB	C610:18 C9 B4 BØ Ø8 A9 Ø2 8D 36	C8A8:AD 41 03 8D 35 CF AD 34 0F	CB40:FC CD A5 40 8D FD CD AD 30
C6228180       B8 AD       B7 CS       L8 C9       B0 CF       C638180       B0 D       C4 C8       C648180       B0 AP       B1 B       C638180       B0 AP       B1 B       C628180       B1 AP       B1 B       C638180       B0 AP       B1 B       C638180       B0 AP       B1 B       C638180       B0 AP       B1 CF       AP       B1 B       C638180       B1 D       C638180       B0 AP       B1 CF       AP       B1 AP       B1 AP       C1 CF       C1 AP       C386187       B0 B       B1 AP       B1 AP       B1 AP       C1 AF       C386187       B1 AP       B1 AP       B1 AP       C1 AF       C386187       B1 AP       B1 AP <td>C618:8D CE 4C 47 C6 AD 90 CE FA</td> <td>C8BØ:CE 18 CD 3D CE BØ 12 A9 44</td> <td>CB48:69 Ø3 8D Ø6 CE A9 ØØ 8D 12</td>	C618:8D CE 4C 47 C6 AD 90 CE FA	C8BØ:CE 18 CD 3D CE BØ 12 A9 44	CB48:69 Ø3 8D Ø6 CE A9 ØØ 8D 12
Cacade 110         Cacade	C620:FØ Ø8 AD 8F CE 18 C9 ØE 4F	C8B8:00 8D 51 CE AD 3D CE 38 FC	CB 50:69 03 A2 40 9D 80 03 CA 75
Casage 7, Casag	C628:B0 08 A9 03 8D 8D CE 4C 02	C8C0:ED 34 CE 8D 46 CE 4C D8 E7	CB58:DØ FA A9 ØE 8D F9 Ø7 A9 39
C6444.7       C6 A9       B0       DD       C60       A9       C60       A9       C60       A9       C60       A9       C60       A9       C60       C60       A9	C638:BØ Ø8 A9 Ø4 8D 8D CE 4C 22	C8C8:C8 A9 Ø1 8D 51 CE AD 34 77	CB68:27 DØ 8D 28 DØ 40 03 AD 52
C644:P3 Ø (1 BD 15 DØ 6Ø 20 ØG 3C       CEB20:C3 Ø1 FØ 27 4C BØ 4D 6D 50       CB78:TP BF AD 6G 33 PØ 05 A9 TE         C658:BA AD 27 DØ BD 27 DØ 20 10 C8 DA 35 F2       CEB70:A9 01 BD 52 CE BD 38 CE BØ AD 18 DB       CB88:BA 30 DF 7C AS 50       CB79:A9 01 BD 52 CE BD 30 CE BD 37 CE AS 58         C666:FC BD 2F CE BD 37 CE AS 58       CB79:A9 01 BD 52 CE BD 38 CE BØ AD 45 CE AD 18       CB99:AD 10 Ø2 20 AD 01 00 80 00 AD 85         C674:FD 8D 37 CE AS 58       CB79:A9 01 BD 52 CE BD 33 CE BD 32 CE CE BG CAB 4C 23 CP AD 60 BD 52 CE 60       CBA81:G3 8D 10 DØ 22 F EP 01 10 EE 54 CE AC 18 EP 130         C674:FD 8D 31 CE 8D 33 CE 8D 33 CE BD 32 C2 C2 02 (91 AD 32 CE B3 CE BD 3C EE DS 10 (8 EE 54 CE AC 18 EP 14       CEBA12:CE 95 FD 81 10 EE 54 CE AD 16         C690:E2 AD 42 Ø3 3B 32 CE 8D 33 CE BD 32 C2 C2 02 (91 AD 52 CE AD 2E CE B5 FE AD 97       CB881:54 CE 4C CE CB 05 A5 A1 69         C693:E3 DC AD 42 Ø3 3B D3 CE ED 32 C2 02 (91 AD 2F CE B5 FC AD 30 CE 55       CB00:160 CD 99 170 10 C9 11 A3         C630:E3 DC AD 42 Ø3 3D 34 CE BD 12 C938:E3 FD AD 31 CE B5 FE AD 97       CB08:FA CE C2 F0 16 B0 42 C3 A1 69         C630:E3 DC AD 42 Ø3 3D 36 CE DB C2 930:AD 33 CE 8D 42 Ø3 AD 34 CE 20 CB08:FØ 1A C 96 FØ A0 C9 0D 69       CG68:FG AD 40 C9 AD C9 00 69       C938:F3 DAD 31 CE BD 40 AD A5       CB88:F9 A1 A2 AC A0 CC 4C FF CB 80         C640:E3 AD 30 CE AD 42 Ø3 AD 36 CE DB 42 Ø3 AD 34 CE BD 42 Ø3 AD A5       CB88:F9 A1 AC 96 6F Ø AC 69 00 C9       C696:E0 AD CE ED 42 CA AD 53       CB88:F9 A1 AC 96 6F Ø AC 69 00 C9       C699:C2 A 9 13       C660:E0 AD C2 FD 41 AD 50 CE AD	C640:47 C6 A9 Ø5 8D 8D CE 60 49	C8D8:AD 33 CF CD 30 CF FG G7 CA	CB70:15 DØ A9 ØØ 8D 67 Ø3 20 2C
C658:166       AD       27       D8       AD       27       D8       D15       D2       D2       D2       D2       D2       D2       D2       D2       D2 <tdd< td=""><td>C648:A9 Ø1 8D 15 DØ 6Ø 2Ø Ø6 3C</td><td>C8EØ:C9 Ø1 FØ 27 4C FØ C8 AD 8D</td><td>CB78:7F 8F AD 68 Ø3 FØ Ø5 A9 7F</td></tdd<>	C648:A9 Ø1 8D 15 DØ 6Ø 2Ø Ø6 3C	C8EØ:C9 Ø1 FØ 27 4C FØ C8 AD 8D	CB78:7F 8F AD 68 Ø3 FØ Ø5 A9 7F
C658133       BD       15       D0       20       10       C8       AS       P       03       AD       90       D0       BD       25       CE       AD       00       D0       97       03       AD       90       D0       BD       05       D0       D0       BD       00       D0	C650:86 AD 27 DØ 8D 28 DØ A9 D6	C8E8:32 CE 18 CD 3B CE BØ 1B B8	CB80:1F 4C 86 CB A9 18 8D 9C AD
Corontine         Carbon 24         Carbon 33         Carbon 33 <thcarbon 34<="" th=""> <thcarbon 34<="" th=""> <thc< td=""><td>C658:03 8D 15 DØ 20 10 C8 A5 F2</td><td>C8FØ:A9 Ø1 8D 52 CE AD 3B CE EØ</td><td>CB88:03 8D 9F 03 AD 00 D0 8D C5</td></thc<></thcarbon></thcarbon>	C658:03 8D 15 DØ 20 10 C8 A5 F2	C8FØ:A9 Ø1 8D 52 CE AD 3B CE EØ	CB88:03 8D 9F 03 AD 00 D0 8D C5
G670:ED       Da	C668 FC 8D 2F CF 8D 38 CF 15 38	C8F8:38 ED 32 CE 8D 44 CE AD 1E	CB90:02 DØ AD Ø1 DØ 8D Ø3 DØ B6
C678:FE BD 31 CE BD 3A CE AD 9C       C936:AD 32       CE 35 ED 36       CB36:FE AD 33       CE BO 36       CE AC       C916:AA 32       CE AS       C916:AA 32       CE BS       C916:AA 32       CE BS       C916:AA 32       CE BS       C916:AA 32       CE AS       C916:AA 32       C100:AA CE 54       CE DS       D83:AA 24       D10:A	C670:FD 8D 30 CE 8D 39 CE A5 E7	C900:3C CE ED 33 CE 8D 45 CE 5C	CBA0:03 8D 10 D0 29 01 F0 02 A9 31
C688:3E       03       BD       32       CE       BD       C2	C678:FE 8D 31 CE 8D 3A CE AD 9C	C910:AD 32 CE 38 ED 38 CE 8D EB	CBA8:CE C9 5E DØ 10 EE 54 CE A6
C66843AD       J ⁶ 03       CE       BD       34       CE       CE       CE       BS       FE       34       CE	C680:3E Ø3 8D 32 CE 8D 3B CE B4	C918:44 CE AD 33 CE ED 3C CE DF	CBBØ:A2 14 EC 54 CE DØ 14 8E F1
C699:3D       C298:AD       2928:AD       293:AD       AD       AS       CEB 28:F       CEB 2	C688:AD 3F Ø3 8D 33 CE 8D 3C 22	C920:8D 45 CE AD 2E CE 85 FB 34	CBB8:54 CE 4C CB CB C9 5F DØ 89
C6A3:BD       CB       D3       CE       D3       C238:B3       CE       B3       C238:B3       CE       B3       B5       C398:B3       CE       B3       B5       C398:B3       CE       B3       B5       C398:B3       CE       B3       B5       C398:B3       CE       B3       B3       CC       B3       B3       CC       B3       B3       CC       B3       B3       CC       B3       CB       C3       CB       B3       CB       B3       CB       CB       B3       CB	C699:CE AD 40 03 8D 34 CE 8D 91	C928:AD 2F CE 85 FC AD 30 CE 5E	CBC0:0A CE 54 CE DØ 05 A2 01 69
CGAB:CE       B)       B)       CE       A)       CBB:B       B)       A)       CBB:B       CCBB:B       CBB:B	C6A0.8D 40 CE AD 41 03 8D 35 CE DB	C930:85 FD AD 31 CE 85 FE AD 07	CBC8:8E 54 CE C9 85 D0 03 4C F4
GGB6.03       8D       41       CE       20       F0	C6A8:CE 8D 3F CE A9 ØØ 8D 67 A5	C940:8D 3F 03 AD 34 CF 8D 40 DD	CBD8:FØ 1C C9 1D FØ 1B C9 9D 2Ø
C6B8:77       Ø2       Ø2       C2       AC       DØ       Ø9       BD       44       CBEB:FØ       Ø3       CC	C6B0:03 8D 41 CE 20 F2 91 AD D5	C948:03 AD 36 CE 8D 42 03 AD A5	CBEØ:FØ 1A C9 86 FØ ØA C9 ØD 69
C6C62:02       E4       FF       4C       4C       4C       4D       4C       EB       4D       4C       4D	C6B8:77 Ø2 FØ ØD C9 4C DØ Ø6 98	C950:35 CE 8D 41 03 A9 00 8D 44	CBE8:FØ Ø3 4C AØ CC 4C FF CB BØ
Cobe:10       AD       BD       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D	C6C0:20 E4 FF 4C FF C6 4C 29 39	C958:48 CE 8D 49 CE 8D 47 CE 14	CBFØ:4C 1C CC 4C 2E CC 4C 49 9A
Cobbit12       Cobbit12 <td< td=""><td>C6D0 10 F0 08 A9 01 8D 66 03 4C</td><td>C960:8D 4D CE 8D 4A CE 8D 4B B4</td><td>CG66.10 8D 55 CF 26 B6 89 CF 13</td></td<>	C6D0 10 F0 08 A9 01 8D 66 03 4C	C960:8D 4D CE 8D 4A CE 8D 4B B4	CG66.10 8D 55 CF 26 B6 89 CF 13
C6EØ:4C       E2       C7       A9       64       BD       66       Ø       C978:44       CE       6A       BD       44       CE       AD       A5       Ø       CC10:CE       20       B6       B9       CE       55       CE       D0       C2         C6E81:20       2F       CB       AD       53       CE       D0       Ø       C9       P       D0       B       CC10:CE       20       D6       B0	C6D8:4C E2 C7 CE 66 Ø3 FØ Ø3 4F	C970:45 CE 18 6A 8D 45 CE AD 2E	CC08:55 CE D0 F8 A9 A0 8D 55 E9
C6E8:20       2F       C8 AD       53       CE       DØ       CC       PØ       CPØØ:CE       DØ       11       AD       44       CE       18       CD       Ø8       CC18:FE       4C       QC       AD       68       Ø3       FØ       3D         C6FØ:A9       Ø1       85       C6       AV       CC       AV       AD       ØB       CQ20:88       A9       Ø0       BD       50       46       CC20:88       A9       Ø0       BD       50       CC20:88       A9       Ø0       BD       50       CC20:88       A9       Ø0       BD       50       46       CC20:88       A9       Ø0       BD       57       CE       AP       ØA       BD       57       CE       AP       ØA       BD       57       CE       AP       ØA       BD       57       CE       AP       AA       BD       SA       CC30:CE       AD       CC30:CE       AD       AD       CC48:AS       AD	C6EØ:4C E2 C7 A9 64 8D 66 Ø3 ØA	C978:44 CE 6A 8D 44 CE AD 45 Ø6	CC10:CE 20 B6 89 CE 55 CE DØ C2
C66F8:80       4C       C6       A9       4C       A8       A9	C6E8:20 2F C8 AD 53 CE DØ ØC C9	C980:CE DØ 11 AD 44 CE 18 CD Ø8	CC18:F8 4C 49 CC AD 68 Ø3 FØ 3D
C700:102       C4	C6FØ:A9 Ø1 85 C6 A9 4C 8D 77 C1	C988:46 CE BØ Ø8 A9 Ø1 8D 5Ø 46	CC20:08 A9 00 8D 68 03 4C 77 60
C708:FB       BD       37       CE       A5       C6       A5       A5       CC       F0       B5       A5       CC       D5       C24         C708:FB       BD       37       CE       A5       FE       58       A4       C       CA08:A9       B1       B0       AA       CE       B0       B3       CC38:CE       20       Ø8       AC       E5       CE       A9       BA       B4       CC40:F8       CE       20       Ø8       AC       E5       CC40:F8       CE       57       CE       D0       EE       CC40:F8       CE       57       CE       D0       EE       CC40:F8       CE       57       CE       D0       EE       CC40:F0       BD       CC40:F8       CE       57       CE       A9       B8       CC40:F0       BD       AC       CE       CC40:F8       CE       57       CE       A0       AC       CE       CC40:F8       CE       A7       A8       AC       CE       A0       A8       CC60:F8       AD       AC       CE       A0       A8       CC60:F8       AC       F8       CE       A7       A8       AC       CF       A0       AC	C700:41 CE DØ Ø3 4C 76 C7 A5 9F	C990:CE 4C 99 C9 A9 00 8D 50 27	CC28:CB A9 01 4C 23 CC AD 54 F2
C710:CE A5 FD 8D 39 CE A5 FE 58       C9A8:AD 4D CE CD 45 CE DØ ØD 31       CC40:F8 CE 57 CE DØ EE 4C 77 34         C710:CE AD 3F Ø3 8D 3C CE AD 43       C9B8:AD 4C CE CD 44 CE DØ Ø5 E8       CC48:CB AD 54 CE 8D 57 CE AP 8B         C720:CE AD 3F Ø3 8D 3C CE AD 43       C9B8:AD 40 CE CD 44 CE DØ Ø5 E8       CC50:ØA 8D 55 CE 2Ø 3B AC CE C3         C730:8D 3F CE AD 42 Ø3 8D 40 84       C9C90:CD 46 CE DØ Ø3 4C BD CA AD 4E CE 5Ø       CC50:ØA 8D 55 CE 2Ø 3B AC CE 8D 1A         C730:8D 3F CE AD 42 Ø3 8D 40 84       C9C90:CD 46 CE PØ Ø3 4C BD CA AD A8       CC68:56 CE A9 Ø8 8D 55 CE 2Ø 16         C740:CE 85 FC AD 30 CE 85 FD AD 22 CE 6F CAD 32 CE 6F       C9D8:40 CE FØ Ø3 4C 4E CA EE B6       CC70:6C 89 CE 55 CE DØ F8 CE 4C C7         C740:CB 85 FC AD 30 CE 85 FD AD 32 CE ØF       C9E96:4C CE DØ Ø3 EE 4D CE AD 9Ø       C78:56 CE DØ EE 2Ø 6C 89 4C ØC         C750:8D 3E Ø3 AD 33 CE 8D 3F AØ       C9E96:4C CE DØ Ø3 4C 99 C9 AD 48 CE BF       CC88:A9 Ø8 8D 55 CE 2Ø B6 89 ED       CC78:56 CE DØ F8 CE 56 CE 4C C78:56 CE DØ F8 CE 56 CE 4C         C768:8D 42 Ø3 AD 33 CE 8D 3F AØ       C9F9:F5 C9 2Ø B6 89 AD 46 CE BF       CC88:A9 Ø8 8D 55 CE 2Ø B6 89 ED       CC98:Ø CE 55 CE DØ F8 CE 56 CE 4C C77:CB FD         C770:20 10 C8 4C E2 C7 A5 FB 6F       CAØ9:18 6D 46 CE 8D 48 CE 18       C90 E 80 Ø2 C7 7 CB FD       CAØ9:18 C9 55 BØ Ø2 D6 C9 2Ø EA B8       CC98:03 4C CA CC 38 E9 40 C77 CB FD         C770:20 10 C8 4C E2 C7 A5 FB 6F       CA18:4C 99 C9 AD 48 CE 18 CD 9       CCA8:18 C9 5B BØ ØD C9 4Ø BØ F7       <	C708:FB 8D 37 CE A5 FC 8D 38 41	C910:10 01 8D 41 CF 8D 4B CF 81	CC38:CE 20 00 8A CE 55 CE D0 24
C718:8D       3A       CE       AD       3E       Ø3       8D       3B       Ø6       C9BØ:AD       4C       CE       CD       Ø5       EB       CC48:CB       AD       54       CE       8D       57       CE       A9       BB         C728:40       Ø3       BD       3C       CE       AD       41       Ø3       DØ       CSBB:A9       Ø1       BD       4A       CE       AD       4E       CE       50       CC58:55       CE       DØ       F8       CE       AD       4C       CE       AD       AD </td <td>C710:CE A5 FD 8D 39 CE A5 FE 58</td> <td>C9A8:AD 4D CE CD 45 CE DØ ØD 31</td> <td>CC40:F8 CE 57 CE DØ EE 4C 77 34</td>	C710:CE A5 FD 8D 39 CE A5 FE 58	C9A8:AD 4D CE CD 45 CE DØ ØD 31	CC40:F8 CE 57 CE DØ EE 4C 77 34
C728:CE AD 3F Ø3 8D 3C CE AD 43       C9B8:A9 Ø1 8D 4A CE AD 4E CE 5Ø       CC58:ØA 8D 55 CE 2Ø 3D 8A CE C3         C728:4Ø Ø3 8D 3D CE AD 41 Ø3 DØ       C9C0:CD 46 CE DØ Ø5 A9 Ø1 8D 12       CC58:55 CE DØ F8 CE 57 CE DØ 3C         C738:8D 3F CE AD 42 Ø3 8D 40 84       C9C8:4B CE AD 4A CE FØ Ø8 AD Ø8       CC68:55 CE DØ F8 CE 57 CE DØ F8 CE 57         C740:CE 85 FC AD 30 CE 85 FD D8       C9D8:50 CE FØ Ø3 4C 4E CA EE B6       CC70:6C 89 CE 55 CE DØ F8 CE 4C 7C         C740:CE 85 FC AD 33 CE 8D 3F AØ       C9B8:52 CE FØ Ø6 2Ø 6C 89 4C E9       CC78:56 CE DØ E8 2Ø 6C 89 4C E9         C758:Ø3 AD 34 CE 8D 4Ø Ø3 AD 69       C9P8:52 CE FØ Ø6 2Ø 6C 89 4C E9       CC88:A9 Ø8 8D 55 CE 2Ø B6 89 AD         C766:35 CE 8D 41 Ø3 AD 36 CE ØE       C9P8:DØ Ø3 4C 99 C9 AD 48 CE BF       CC88:A9 Ø8 8D 55 CE 2Ø B6 89 AD         C766:35 CE 8D 41 Ø3 AD 36 CE ØE       C9P8:DØ Ø3 4C 99 C9 AD 48 CE AD 88       CC98:DE 2Ø B6 89 AD         C766:35 CE AD 42 Ø3 A9 ØØ 8D 41 CE D1       CAØ0:18 6D 46 CE 8D 48 CE AD 88       CC98:DE 2Ø B6 89 4C 77 CB FD         C778:8D 2E CE A5 FC 8D 2F CE D9       CA10:45 CE FØ Ø7 C9 ØØ DØ ØF 89       CC88:A9 Ø8 D5 CE 2Ø B6 89 4C 77 CB FD         C778:8D 2E CE A5 FC 8D 2F CE D9       CA10:45 CE FØ Ø3 4C 90 C9 AD 48 CE D20       CC88:A9 Ø8 Ø3 4C 77 CB FD         C778:8D 2F CE AD 3Ø CE A5 FE 8D AF       CA82:42 CE 69 Ø8 AD 49 CE CD 2Ø       CC88:18 C9 5B Ø0 D C9 4Ø BØ F7         C788:31 CE AD 38 03 32 CE 7F       CA20:44 CE BØ Ø3 4C 99 C9 EE 1D	C718:8D 3A CE AD 3E Ø3 8D 3B Ø6	C9BØ:AD 4C CE CD 44 CE DØ Ø5 E8	CC48:CB AD 54 CE 8D 57 CE A9 BB
C736:4D       36       CD       A1       03       D0       C9C0:CD       A6       CE       D0       05       A9       01       BD       12       CC58:55       CE       D0       F8       CE       S7       CE       D0       3C         C736:8D       3F       CE       A2       Ø3       BD       40       84       C9C8:4B       CE       AA       CE       F0       Ø8       AD       Ø8       CC60:EE       4C       77       CB       AD       54       CE       8D       1A         C740:CE       85       FC       AD       30       CE       85       FD       D8       C9D0:4B       CE       F0       Ø3       4C       4E       CA       AD       AS       CC66:56       CE       AO       8D       40       C       AC       E       D90       CC68:55       CE       D0       F8       CE       20       16         C740:CE       85       FE       AD       32       CE       ØF       C9D0:4C       CE       D0       GC70:55       CE       D0       BE       20       BC       6C       C78:66       CE       D0       AC       CF	C720:CE AD 3F 03 8D 3C CE AD 43	C9B8:A9 Ø1 8D 4A CE AD 4E CE 5Ø	CC50:0A 8D 55 CE 20 3D 8A CE C3
C738:CE       AD       2E       CE       AE       FF       AD       4A       CE       FF       FF       CF       AD       AF       CE       FF       FF       FF       AD       AF       CE       FF       FF       FF       AD       AF       CE       FF       FF       FF       AD       AF       CE       FF       CF       AD       AF       CE       AF       CF       AF       CF       AF       CF       AF       CF       AF       CF       AF       CF       CC       CC	C720:40 05 8D 5D CE AD 41 05 D0	C9CØ:CD 46 CE DØ Ø5 A9 Ø1 8D 12	CC58:55 CE DØ F8 CE 57 CE DØ 3C
C740:CE       85       FC       AD       30       CE       85       FD       DB       C9DB:50       CE       F0       Ø3       4C       4E       CA       EE       B6       CC70:6C       89       CE       55       CE       DØ       FB       C4       CC         C748:AD       31       CE       85       FE       AD       32       CE       ØF       C9E0:4C       CE       DØ       Ø3       EE       4D       CA       DØ       CC78:56       CE       DØ       EE       20       6C       89       4C       4E       CA       EE       B6       C778:6C       89       CE       55       CE       DØ       FB       CE       4C       ØC         C758:8D       3A       AD       34       CE       8D       4Ø       AD       66       CE       ØE       AD       4C       EE       CA       EE       B6       89       AD       4C       EE       B6       AD	C738:CE AD 2E CE 85 FB AD 2F F3	C9DØ:4B CE FØ Ø3 4C BD CA AD A8	CC68:56 CE A9 08 8D 55 CE 20 16
C748:AD 31       CE 85       FE AD 32       CE ØF       C9EØ:4C       CE DØ Ø3       EE 4D       CE AD 9Ø       CC78:56       CE DØ EE 2Ø       6C 89 4C       ØC         C759:8D       3E Ø3       AD 33       CE 8D 3F AØ       C9EØ:4C       CE DØ Ø3       EE 4D       CE AD 9Ø       CC78:56       CE DØ EE 2Ø       6C 89 4C       ØC         C758:03       AD 34       CE 8D 4Ø Ø3       AD 69       C9FØ:F5       C9 2Ø       B6 89 AD 46       CE BF       CC88:A9 Ø8       BD 55       CE 2Ø       B6 89 ED         C768:3D       ZØ AP ØØ       AD 36       CE ØE       C9FØ:F5       C9 2Ø       B6 89 AD 46       CE BF       CC88:A9 Ø8       BD 55       CE 2Ø       B6 89 ED         C768:3D 42       Ø3 AP ØØ       AD 41       CE D1       CAØØ:18 6D 46       CE 8D 48       CE AD 8B       CC98:DØ EE 2Ø B6 89 4C       77       CB FD         C778:2D 12       CR 45       CE A5       FC 8D 2F       CAØ8:49       CE 69 ØØ 8D 49       CE CD 2Ø       CCA8:18 C9 5B BØ ØD C9 4Ø BØ F7         C780:35       FD 8D 3Ø       CE A5       FE 8D AF       CA18:4C 99 C9 AD 48 CE 18 CD C9       CCA8:18 C9 5B BØ ØD C9 4Ø BØ F7         C780:31       CE AD 3E Ø3 8D 32       CE 7F       CA20:44 CE BØ Ø3 4C 99 C9 EE 1D       CCB8:CA C	C740:CE 85 FC AD 30 CE 85 FD D8	C9D8:50 CE FØ Ø3 4C 4E CA EE B6	CC70:6C 89 CE 55 CE DØ E8 CE 4C
C750:8D       3E       Ø3       AD       33       CE       8D       3F       AØ       C9E8:52       CE       FØ       Ø6       2Ø       6C       89       4C       E9       CC8Ø:77       CE       AD       54       CE       8D       56       CE       EE         C758:03       AD       34       CE       8D       4Ø       Ø3       AD       69       C9FØ:F5       C9       2Ø       B6       89       AD       46       CE       BF       CC88:A9       Ø8       BD       55       CE       2Ø       B6       89       AD       46       CE       BE       CC88:A9       Ø8       BD       56       CE       EE       C       C768:A2       Ø3       AD       36       CE       ØE       AD       36       CE       2Ø       B6       89       AD       46       CE       BD       47       CE       CC       CC88:A9       Ø8       BD       57       CE       2Ø       B6       89       AD       48       CE       AD       BE       CC707:20       10       CS       AS       FF       CA       FF       CA       AB       CA       CE       AD       AD	C748:AD 31 CE 85 FE AD 32 CE ØF	C9EØ:4C CE DØ Ø3 EE 4D CE AD 9Ø	CC78:56 CE DØ EE 20 6C 89 4C ØC
C758:03       AD       34       CE       8D       40       03       AD       69       C970:F5       C9       20       B6       89       AD       46       CE       BF       CC88:A9       08       8D       55       CE       20       B6       89       AD       46       CE       BF       CC760:35       CE       80       AD       36       CE       0E       C9F8:D0       03       4C       99       C9       AD       48       CE       3D       CC90:CE       55       CE       D0       F8       CE       4C         C768:8D       42       03       A9       00       8D       41       CE       D1       CA00:18       6D       46       CE       AD       4B       CC90:CE       55       CE       D0       F8       CE       4C       CC       AD       AD <td>C750:8D 3E Ø3 AD 33 CE 8D 3F AØ</td> <td>C9E8:52 CE FØ Ø6 2Ø 6C 89 4C E9</td> <td>CC80:77 CB AD 54 CE 8D 56 CE EB</td>	C750:8D 3E Ø3 AD 33 CE 8D 3F AØ	C9E8:52 CE FØ Ø6 2Ø 6C 89 4C E9	CC80:77 CB AD 54 CE 8D 56 CE EB
C768:8D       42       Ø3       A9       Ø0       8D       41       Ø3       A9       Ø0       8D       41       CF98:D0       G2       G298:D0       G2       G298:D0       F8       CE       56       CE       42       Ø3       A9       Ø0       8D       41       CE       D1       CAØ0:18       6D       46       CE       8D       48       CE       AB       B8       CC98:D0       EE       20       B6       89       4C       77       CB       FD         C770:20       10       C8       4C       E2       C7       A5       FB       FF       CAØ8:49       CE       69       Ø0       8D       49       CC       D2       CCAØ:18       C9       20       BØ       93       4C       77       CB       CF       CAØ8:49       CE       69       Ø0       BP       CCAØ:18       C9       20       BØ       Ø3       4C       96       Ø       AB       CCAØ:18       C9       CA       Ø8       AF       CAA8:18       CA       AB       CCA8:18       C9       C1       BØ       Ø3       4C       AB         C788:31       CE       AD       38	C758:03 AD 34 CE 8D 40 03 AD 69	C9FØ:F5 C9 2Ø B6 89 AD 46 CE BF	CC88:A9 Ø8 8D 55 CE 2Ø B6 89 ED
C770:20       10       C8       4C       E2       C7       A5       FB       GF       CA08:49       CE       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60       60	C768:8D 42 03 A9 00 8D 41 CF D1	CA00:18 6D 46 CF 8D 49 CF 3D 6D	CC90:CE 55 CE DØ F8 CE 56 CE 4C
C778:8D       2E       CE       A5       FC       8D       2F       CE       D9       CA10:45       CE       FØ       07       C9       00       0F       F9       CCA8:18       C9       5B       00       C7       40       B0       F7         C780:A5       FD       8D       30       CE       A5       FE       8D       AF       CA10:45       CE       F0       07       C9       00       0F       89       CCA8:18       C9       5B       00       C9       40       B0       F7         C780:A5       FD       8D       30       CE       A5       FE       8D       AF       CA18:4C       99       C9       AD       48       CE       18       CD       C2       CCB0:03       4C       CC       38       C4       40       AC       3B         C780:AD       3F       Ø3       8D       32       CE       7F       CA20:44       CE       B0       Ø3       4C       AD       CCB8:CA       CC       18       C9       D8       Ø3       4C       AD         C790:AD       3F       Ø3       BD       33       CE       AD       40	C770:20 10 C8 4C E2 C7 A5 FB 6F	CAØ8:49 CE 69 ØØ 8D 49 CE CD 20	CCA0:18 C9 20 B0 03 4C 77 CB FD
C78Ø:A5 FD 8D 3Ø CE A5 FE 8D AF       CA18:4C 99 C9 AD 48 CE 18 CD C9       CCBØ:Ø3 4C CA CC 38 E9 4Ø 4C 3B         C788:31 CE AD 3E Ø3 8D 32 CE 7F       CA2Ø:44 CE BØ Ø3 4C 99 C9 EE 1D       CCB8:CA CC 18 C9 C1 BØ Ø3 4C AD         C79Ø:AD 3F Ø3 8D 33 CE AD 4Ø 7Ø       CA28:4E CE AD 51 CE FØ Ø6 2Ø C9       CCCØ:77 CB 18 C9 DB BØ D6 38 3Ø         C798:Ø3 8D 34 CE AD 41 Ø3 8D 86       CA3Ø:ØØ 8A 4C 38 CA 2Ø 3D 8A 51       CCCØ:77 CB 18 C9 DE BØ D5 CE D4         C7AØ:35 CE AD 42 Ø3 8D 36 CE E1       CA3Ø:ØØ 8A 4C 38 CA 2Ø 3D 8A 51       CCCØ:A9 ØØ 85 3F A9 D8 85 4Ø DF         C7AØ:35 CE AD 42 Ø3 8D 36 CE E1       CA40:48 CE AD 49 CE ED 45 CE 7F       CCD8:A5 3F 18 69 Ø8 85 3F A5 29         C7BØ:85 FC AD 39 CE 85 FD AD C1       CA48:8D 49 CE 4C 99 C9 EE 4E B5       CCEØ:4Ø 69 ØØ 85 4Ø CE 55 CE Ø4	C778:8D 2E CE A5 FC 8D 2F CE D9	CA10:45 CE FØ Ø7 C9 ØØ DØ ØF 89	CCA8:18 C9 5B BØ ØD C9 4Ø BØ F7
C788:31       CE AD       3E       Ø3       8D       32       CE       7F       CA2Ø:44       CE       BØ       Ø3       4C       99       C9       EE       1D       CCB8:CA       CC       18       C9       C1       BØ       Ø3       4C       AD         C79Ø:AD       3F       Ø3       BD       33       CE       AD       4Ø       7Ø       CA28:4E       CE       AD       51       CE       FØ       Ø6       2Ø       CCCØ:77       CB       18       C9       DE       BØ       D6       38       3Ø         C7AØ:35       CE       AD       41       Ø3       BD       80       CC3Ø:0Ø       8A       C2       3B       CA28:4E       CE       AD       CC3Ø:0Ø       AS       SC       CCCØ:77       CB       18       C9       DB       BØ       D5       CE       D4         C7AØ:35       CE       AD       42       Ø3       8D       36       CE       CA3Ø:4D       AB       CE       AB       ED       44       CE       8D       BF       CCDØ:A9       Ø8       S5       AP       D8       5       4Ø       DF       CCDØ:A9       Ø8	C780:A5 FD 8D 30 CE A5 FE 8D AF	CA18:4C 99 C9 AD 48 CE 18 CD C9	CCBØ: Ø3 4C CA CC 38 E9 4Ø 4C 3B
C799:AD       37       C5       8D       33       CE       AD       40       70       CA28:4E       CE       AD       51       CE       FØ       Ø6       20       C9       CCCØ:77       CB       18       C9       DB       BØ       D6       38       30         C798:Ø3       8D       34       CE       AD       41       Ø3       8D       86       CA30:Ø0       8A       4C       38       CA       20       3D       8A       51       CCC8:E9       80       8D       56       CE       8D       55       CE       D4         C7A0:35       CE       AD       42       Ø3       8D       36       CE       A1       48       CE       38       ED       44       CE       8D       BF       CCD0:A9       Ø0       85       3F       A9       D8       40       DF         C7A0:35       CE       8D       38       CE       AD       48       CE       AD       49       CE       ED       45       CE       7F       CCD0:A9       Ø0       85       3F       A9       D8       57       A9       D8       53       F A5       29 <td>C788:31 CE AD 3E Ø3 8D 32 CE 7F</td> <td>CA20:44 CE BØ Ø3 4C 99 C9 EE 1D</td> <td>CCB8:CA CC 18 C9 C1 BØ Ø3 4C AD</td>	C788:31 CE AD 3E Ø3 8D 32 CE 7F	CA20:44 CE BØ Ø3 4C 99 C9 EE 1D	CCB8:CA CC 18 C9 C1 BØ Ø3 4C AD
C7AØ:35 CE AD 42 Ø3 8D 36 CE E1       CA3Ø:90 8A 4C 38 CA 20 3D 8A 51       CCC8:E9 80 8D 58 CE 8D 55 CE D4         C7AØ:35 CE AD 42 Ø3 8D 36 CE E1       CA38:AD 48 CE 38 ED 44 CE 8D BF       CCDØ:A9 ØØ 85 3F A9 D8 85 4Ø DF         C7A8:AD 37 CE 85 FB AD 38 CE E4       CA4Ø:48 CE AD 49 CE ED 45 CE 7F       CCD8:A5 3F 18 69 Ø8 85 3F A5 29         C7BØ:85 FC AD 39 CE 85 FD AD C1       CA48:8D 49 CE 4C 99 C9 EE 4E B5       CCE0:4Ø 69 ØØ 85 4Ø CE 55 CE Ø4	C798:03 8D 34 CF AD 41 02 9D 96	CA28:4E CE AD 51 CE FØ Ø6 20 C9	CCC0:77 CB 18 C9 DB BØ D6 38 30
C7A8:AD 37 CE 85 FB AD 38 CE E4 CA40:48 CE AD 49 CE ED 45 CE 7F CCD8:A5 3F 18 69 08 85 40 CF C7B0:85 FC AD 39 CE 85 FD AD C1 CA48:8D 49 CE 4C 99 C9 EE 4E B5 CCE0:40 69 00 85 40 CE 55 CE 04	C7AØ:35 CE AD 42 Ø3 8D 36 CE EL	CA38:AD 48 CE 38 ED 44 CE 80 PE	CCD0+49 00 85 3F 49 D9 95 40 DF
C7BØ:85 FC AD 39 CE 85 FD AD C1   CA48:8D 49 CE 4C 99 C9 EE 4E B5   CCEØ:4Ø 69 ØØ 85 4Ø CE 55 CE Ø4	C7A8:AD 37 CE 85 FB AD 38 CE E4	CA40:48 CE AD 49 CE ED 45 CE 7F	CCD8:A5 3F 18 69 Ø8 85 3F A5 29
	C7BØ:85 FC AD 39 CE 85 FD AD C1	CA48:8D 49 CE 4C 99 C9 EE 4E B5	CCE0:40 69 00 85 40 CE 55 CE 04

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9030:89 20 8B 90 20 3D 8A 20 C3	Color Pad 2.0	C288:20 91 B3 A2 00 BD 9C CE 22
9038:8B 90 20 B6 89 20 8B 90 27		C290:95 69 E8 E0 05 D0 F6 A5 65 C298:61 20 2B BA 20 6B E2 20 7C
9048:89 20 8B 90 20 3D 8A 20 DB	CØØØ:C9 4C FØ 14 C9 52 FØ 13 65	C2AØ:ØF BC AC 5D CE A9 ØØ 2Ø 85
9050:8B 90 20 B6 89 20 8B 90 3F	CØ10:C9 51 FØ 10 20 EØ 92 60 F3	C2A8:91 B3 20 2B BA A2 00 B5 B0
9058:AD AE 92 85 FB AD AF 92 2F	CØ18:4C 27 CØ 4C 3Ø CØ 4C 39 BC	C2B8:F6 20 ØF BC A5 61 20 2B 8D
9068:B1 92 85 FE AD B2 92 8D 92	CØ20:CØ 4C 3D CØ 4C 46 CØ A9 6F	C2CØ:BA A2 ØØ BD BØ CE 95 69 7D
9070:41 03 AD B3 92 8D 42 03 36	CØ3Ø:A9 Ø1 8D 53 CE 2Ø 4E C6 Ø8	C2C8:E8 EØ Ø5 DØ F6 A5 61 20 D9 C2DØ:6A B8 20 71 BF A2 ØØ B5 13
9078:AD B4 92 8D 3E 03 AD B5 D7	CØ38:6Ø 2Ø 38 CB 6Ø A9 Ø5 8D F6	C2D8:61 9D B5 CE E8 EØ Ø5 DØ BF
9088:40 03 60 A0 00 20 47 92 42	C040:9A CE 20 4F C0 60 A9 5A F0 C048:8D 9A CE 20 4F C0 60 20 71	C2EØ:F6 AD 89 CE C9 ØØ DØ 13 6E
9090:AD 68 03 D0 03 4C E1 91 AE	CØ5Ø:A6 85 A5 C6 FØ Ø3 4C 48 1C	C2F0:00 B5 61 9D A6 CE E8 E0 0D
9098:AD 45 03 CD 21 D0 D0 05 10 90A0:4C E1 91 20 31 92 A5 FD B1	CØ58:C6 A9 ØØ 8D 5A CE 2Ø 56 25	C2F8:05 DØ F6 A2 ØØ BD A6 CE 51
90A8:18 69 00 85 FD A5 FE 69 76	CØ68:20 E4 FF C9 2B FØ Ø7 C9 C4	C300:95 61 BD AB CE 95 69 E8 A5
90B0:D4 85 FE B1 FD 8D 87 92 60	CØ70:2D FØ 15 4C 9A CØ EE 5A 3C	C310:0E E3 20 0F BC A0 B4 A9 08
90C0:CD 45 03 F0 11 B1 FD 29 FD	CØ78:CE AD 5A CE C9 5B DØ 05 67 CØ80:A9 5A 8D 5A CE 4C 5E CØ E9	C318:00 20 91 B3 20 2B BA 20 58
90C8:0F CD 45 03 D0 10 A9 AA 82	CØ88:CE 5A CE AD 5A CE C9 FF 5E	C320:0F BC A0 AE A9 A8 20 A2 30 C328-BB 20 14 BB 20 58 BC 20 CF
90D0:8D 87 92 4C C4 91 A9 FF 71 90D8:8D 87 92 4C C4 91 B1 FD 87	CØ90:DØ Ø5 A9 ØØ 8D 5A CE 4C BØ	C330:AA B1 8C 7D CE 8D 7E CE 5B
90E0:4A 4A 4A 4A CD 45 03 D0 02	CØ98:5E CØ 18 C9 30 BØ Ø3 4C AF CØAØ:AA CØ 18 C9 3A BØ Ø3 4C 2E	C338:AD 5F CE 8D 8F CE AD 60 94
90E8:08 A9 55 8D 87 92 4C C4 DF	CØA8:AD CØ 4C 48 C6 A2 ØØ 8E 8E	C340 CE 8D 90 CE 20 F3 C5 AD 95 C348:8D CE C9 02 F0 17 C9 03 1E
90F8:A5 FC 85 FE AD 41 03 8D D2	CØBØ:5A CE 38 E9 3Ø AA EØ ØØ A6	C350:FØ 27 C9 Ø4 FØ 37 AD 7D DØ
9100:87 92 A9 00 8D 88 92 8D 02	CØCØ:8D 5A CE CA 4C B6 CØ 4C 31	C358:CE 8D 91 CE AD 7E CE 8D 5C
91Ø8:89 92 8D 8A 92 8D 8B 92 63	CØC8:5E CØ A5 FB 8D 65 CE A5 63	C360:92 CE 4C 9E C3 A9 B4 38 BE C368:ED 7D CE 8D 91 CE A9 00 14
9110:CE 8/ 92 F0 10 A5 FD 56 29	CØDØ:FC 8D 66 CE A5 FD 8D 67 95	C370:ED 7E CE 8D 92 CE 4C 9E 48
9120:85 FE 4C 10 91 B1 FD 8D 2D	CØEØ:03 8D 69 CE AD 3F Ø3 8D 5F	C378:C3 A9 B4 18 6D 7D CE 8D FØ
9128:87 92 29 Ø3 FØ ØB C9 Ø2 52	CØE8:6A CE AD 40 03 8D 6B CE 01	C380:91 CE A9 00 6D /E CE 8D 4A
9130:FØ 15 C9 Ø1 FØ 17 EE 8B A7	CØFØ:AD 42 Ø3 8D 6D CE AD 41 56 CØF8:Ø3 8D 6F CE AD 78 69 4A A6	C390:ED 7D CE 8D 91 CE A9 01 3D
9140:87 92 FØ ØF 4C 2A 91 EE F7	C100:8D 5B CE C9 00 F0 0B 8D FE	C398:ED 7E CE 8D 92 CE AD 91 26
9148:88 92 4C 39 91 EE 89 92 5F	C108:FC CD 20 6C 89 CE FC CD 97	C3A8:AD 92 CE 69 ØØ 8D 92 CE 46
9158:92 C9 Ø8 FØ 1Ø A5 FD 18 72	C118:CE C9 ØØ FØ 33 8D FC CD 1C	C3BØ:AD 91 CE 8D 8F CE AD 92 CB
9160:69 Ø1 85 FD A5 FE 69 ØØ Ø5	C120:20 3D 8A CE FC CD DØ F8 FA	C3B8:CE 8D 90 CE 20 F3 C5 A9 10
9168:85 FE 4C 25 91 20 3C 92 02	C128:AC 5D CE A9 00 20 91 B3 25	C3C8:02 FØ 1D C9 Ø3 FØ 2F C9 D1
9178:11 CD 8B 92 BØ 15 B1 FD 6D	C138:91 B3 20 2B BA 20 0F BC 59	C3DØ:04 FØ 3F C9 Ø5 FØ 51 AD 57
9180:29 FØ ØD 45 03 91 FD 4C 11	C140:A0 5A A9 00 20 91 B3 20 AE	C3E0:83 CE 8D 7F CE A9 01 8D 55 C3E0:83 CE 8D 87 CE 4C 39 C4 E6
9188:CE 90 AD 89 92 18 CD 88 A1	C148:14 BB 20 AA BI 8C 5D CE BC C150:A5 FB 8D 71 CE A5 FC 8D 03	C3E8:A9 B4 38 ED 91 CE 8D 7F BA
9198:18 69 ØØ 85 FD A5 FE 69 68	C158:72 CE A5 FD 8D 73 CE A5 DA	C3FØ:CE A9 ØØ 8D 83 CE A9 Ø1 CE
91AØ:D4 85 FE AD 45 Ø3 91 FD A1	C160:FE 8D 74 CE AD 3E Ø3 8D 3C	C400 CE 38 E9 B4 8D 7F CE A9 39
9180:20 JC 92 4C DO 90 B1 FD JC 91B0:29 ØF 8D 88 92 AD 45 Ø3 3F	C170:AD 40 03 8D 77 CE AD 42 A8	C408:00 8D 83 CE 8D 87 CE 4C C6
91B8:ØA ØA ØA ØA ØD 88 92 91 86	C178:03 8D 79 CE AD 41 03 8D 03	C410:39 C4 A9 68 38 ED 91 CE 8E
91CØ:FD 4C E9 90 AD 42 03 2D E5	C188:7B CE AØ AE A9 A8 20 A2 47 C188:BB 20 ØF BC AØ B4 A9 ØØ CA	C420:A9 00 8D 87 CE 4C 39 C4 87
91DØ:ED 42 Ø3 8D 88 92 B1 FB A2	C190:20 91 B3 20 14 BB A2 00 D5	C428:AD 91 CE 38 E9 68 8D 7F D5
91D8:2D 88 92 ØD 87 92 91 FB 7D	C198:B5 61 9D 9C CE E8 EØ Ø5 AD	C430:CE A9 01 8D 83 CE 8D 87 7E
91E0:60 A9 FF 38 ED 42 03 8D 2E 91E8:87 92 B1 FB 2D 87 92 4C 63	CIA8:91 B3 20 ØF BC AC 5B CE F4	C440:B3 A2 00 BD 9C CE 95 69 DC
91FØ:DE 91 AE 46 Ø3 AC 46 Ø3 7C	C1BØ:A9 ØØ 2Ø 91 B3 2Ø 53 B8 A3	C448:E8 EØ Ø5 DØ F6 A5 61 2Ø 5D
91F8:88 DØ FD CA DØ F7 6Ø A5 CD	C1B8:20 58 BC A2 00 B5 61 9D 5B	C450:2B BA 20 64 E2 A2 00 BD C7 C458:B5 CE 95 69 E8 E0 05 D0 5F
9208:69 00 85 FC 60 A5 FD 18 10	C1C8:00 8D 5F CE A9 00 8D 60 51	C460:F6 A5 61 20 2B BA 20 AA 2C
9210:69 01 85 FD A5 FE 69 00 B6	C1D0:CE A5 C6 F0 06 20 E4 FF 87	C468:B1 8C 81 CE AC 7F CE A9 B5
9218:85 FE 60 A5 FB 8D B9 92 42 9220:A5 FC 8D BA 92 60 AD B9 DF	C1EØ:CE AD 6Ø CE 8D 9Ø CE 2Ø 9C	C478:CE 95 69 E8 EØ Ø5 DØ F6 3E
9228:92 85 FB AD BA 92 85 FC 7A	C1E8:F3 C5 AD 8D CE C9 02 F0 F8	C480:A5 61 20 2B BA 20 6B E2 FB
9230:60 A5 FD 8D BB 92 A5 FE F9	C1FØ:15 C9 Ø3 FØ 1D C9 Ø4 FØ E9 C1F8:25 C9 Ø5 FØ 2D AD 5F CF DF	C488:A2 00 BD B5 CE 95 69 E8 FE C490:E0 05 D0 F6 A5 61 20 28 73
9240:FD AD BC 92 85 FE 60 AD 27	C200:8D 91 CE 4C 33 C2 A9 B4 FB	C498:BA 20 ØF BC AØ 5A A9 ØØ F6
9248:70 03 C9 57 F0 05 C9 58 9C	C208:38 ED 5F CE 8D 91 CE 4C 9A	C4AØ:2Ø 91 B3 2Ø 2B BA 2Ø ØF AA
9250:FØ 1B 60 CE 71 Ø3 DØ 14 FA 9258:A9 ØA 8D 71 Ø3 FE 45 Ø3 FE	C210:33 C2 AD 5F CE 38 E9 B4 6B C218:8D 91 CE 4C 33 C2 A9 68 C7	C4BØ:20 14 BB 20 AA B1 8C 85 83
9260:AD 45 03 C9 10 D0 05 A9 22	C220:38 ED 5F CE 8D 91 CE 4C B2	C4B8:CE AD 71 CE 85 FB AD 72 1A
9268:00 8D 45 03 60 CE 71 03 ED	C228:33 C2 AD 5F CE 38 E9 68 37	C4C0:CE 85 FC AD 73 CE 85 FD 6D C4C8:AD 74 CE 85 FE AD 75 CE EØ
9278:8D 71 Ø3 A9 Ø1 8D 68 Ø3 CD	C238:20 91 B3 A2 00 BD 9C CE D1	C4D0:8D 3E 03 AD 76 CE 8D 3F 35
9280:60 A9 00 4C 7D 92 00 00 3B	C240:95 69 E8 EØ Ø5 DØ F6 A5 15	C4D8:03 AD 77 CE 8D 40 03 AD 4C
9288:00 00 00 00 00 00 00 00 00 AD	C248:01 20 28 BA 20 64 E2 20 10 C250:0F BC AC 5B CE A9 00 20 15	C4E8:8D 41 Ø3 AD 81 CE FØ 13 Ø1
9298:00 00 00 00 00 00 00 00 BD	C258:91 B3 20 2B BA A2 00 B5 60	C4FØ:AD 83 CE DØ Ø6 20 B6 89 CØ
92A0:00 00 00 00 00 00 00 00 00 C5	C260:61 9D A6 CE E8 EØ Ø5 DØ 65	C4F8:4C FE C4 20 6C 89 CE 81 AB
9288:00 00 00 00 00 00 00 00 00 CD	C270:0F BC A5 61 20 2B BA A2 3D	C508:AD 87 CE DØ Ø6 20 3D 8A E8
92B8:00 00 00 00 00 00 00 00 00 DD	C278:00 B5 61 9D B0 CE E8 E0 E4	C510:4C 16 C5 20 00 8A CE 85 4F
92CØ:00 00 00 00 00 00 00 00 E5	C280:05 D0 F6 AC 91 CE A9 00 81	C518:CE DØ ED AD 5F CE DØ 3A E9

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C520:AD 60 CE D0 35 A5 FB 8D 47	C7B8: 3A CE 85 FE AD 3B CE 8D 3F	CA50:CE AD 51 CE FØ Ø6 20 ØØ AF
C528:2E CE A5 FC 8D 2F CE A5 6F	C7CØ:3E Ø3 AD 3C CE 8D 3F Ø3 D7	CA58:8A 4C 5F CA 20 3D 8A AD 97
C530:FD 8D 30 CE A5 FE 8D 31 86	C7C8:AD 3D CE 8D 40 03 AD 3F D9	CA60:44 CE DØ Ø3 4C 99 C9 AD 2Ø
C538:CE AD 3E 03 8D 32 CE AD 0F	C7DØ:CE 8D 41 Ø3 AD 4Ø CE 8D 1D	CA68:48 CE 18 6D 44 CE 8D 48 7Ø
C540:3F 03 8D 33 CE AD 40 03 CI	C7D8:42 Ø3 A9 Ø1 8D 41 CE 2Ø BE	CA70:CE AD 49 CE 6D 45 CE 8D 9A
C550 CE AD 41 03 8D 35 CE 4C 32	C7E0:10 C8 AD 42 CE 29 08 D0 80	CA78:49 CE CD 47 CE FØ Ø7 C9 A6
C558:98 C5 AD 2E CE 8D 37 CE 24	C7E0:03 20 6C 89 AD 42 CE 29 65	CA80:00 D0 0F 4C 99 C9 AD 48 88
C560:AD 2F CE 8D 38 CE AD 30 C9	C7F8:CE 29 01 D0 03 20 00 84 84	CA00:CE 18 CD 40 CE B0 03 4C 35
C568:CE 8D 39 CE AD 31 CE 8D 30	C800:AD 42 CE 29 02 D0 03 20 DE	CA98:4D CE AD 52 CE EØ Ø6 20 C9
C570:3A CE AD 32 CE 8D 3B CE 97	C808:3D 8A 20 7F 8F 4C B4 C6 B4	CAAØ: 6C 89 4C A8 CA 20 B6 89 B0
C578:AD 33 CE 8D 3C CE AD 34 Ø7	C810:AD 10 D0 29 01 F0 02 A9 A2	CAA8:AD 48 CE 38 ED 46 CE 8D 38
C580:CE 8D 3D CE AD 36 CE 8D DC	C818:03 8D 10 D0 AD 00 D0 8D 3A	CABØ:48 CE AD 49 CE E9 ØØ 8D 14
C588:40 CE AD 35 CE 8D 3F CE EA	C820:02 DØ AD Ø1 DØ 8D Ø3 DØ 4Ø	CAB8:49 CE 4C 99 C9 AD 41 CE 20
C590:A9 00 8D 41 CE 20 2F C8 D4	C828:60 A9 01 8D 15 D0 60 20 1A	CACØ:FØ Ø3 4C FA CA AD 2E CE Ø1
C510.5F CF 10 60 CF 69 00 8D F4	C830: /F 8F A9 01 8D 67 03 AD 68	CAC8:85 FB AD 2F CE 85 FC AD FC
C5A8:60 CE C9 01 D0 08 AD 5F C2	C838:15 D0 8D 43 CE A9 00 8D 19	CAD0:30 CE 85 FD AD 31 CE 85 18
C5BØ:CE 18 C9 6C BØ Ø3 4C D1 A5	C848-FB 8D 37 CF A5 FC 8D 39 93	CAPSIFE AD 32 CE 8D 3E 03 AD AS
C5B8:C1 AD 65 CE 85 FB AD 66 Ø8	C850 CE A5 FD 8D 39 CE A5 FE 9A	CAE8:8D 40 03 AD 36 CE 8D 42 DA
C5CØ:CE 85 FC AD 67 CE 85 FD ØF	C858:8D 3A CE AD 3E Ø3 8D 3B 48	CAFØ: Ø3 AD 35 CE 8D 41 Ø3 4C CA
C5C8:AD 68 CE 85 FE AD 69 CE C7	C860:CE AD 3F Ø3 8D 3C CE AD 85	CAF8:2C CB AD 37 CE 85 FB AD F2
C5DØ:8D 3E Ø3 AD 6A CE 8D 3F D6	C868:40 03 8D 3D CE AD 42 03 15	CB00:38 CE 85 FC AD 39 CE 85 5D
C5D8:03 AD 6B CE 8D 40 03 AD CC	C870:8D 40 CE AD 41 03 8D 3F FD	CBØ8:FD AD 3A CE 85 FE AD 3B FC
C5EØ:6D CE 8D 42 Ø3 AD 6F CE 29	C878:CE 4C AE C8 A5 FB 8D 2E 4D	CB10:CE 8D 3E 03 AD 3C CE 8D F3
C5E8:8D 41 Ø3 A9 1E 8D 15 DØ A8	C880:CE A5 FC 8D 2F CE A5 FD 59	CB18:3F Ø3 AD 3D CE 8D 4Ø Ø3 C9
C5F0:4C 59 C0 AD 90 CE D0 10 5D	C888:8D 30 CE A5 FE 8D 31 CE 80	CB20:AD 40 CE 8D 42 03 AD 3F 0A
CORBIAD BE CE 18 C9 5A BO 08 BB	C890:AD 3E 03 8D 32 CE AD 3F 29	CB 28:CE 8D 41 Ø3 AD 43 CE 8D 88
C608:AD 90 CE D0 10 AD 8E CE 9C	C898:03 8D 33 CE AD 40 03 8D 64	CB30:15 DØ A9 00 8D 67 03 60 2C
C610:18 C9 B4 BØ Ø8 A9 Ø2 8D 36	C8A0:34 CE AD 42 Ø3 8D 36 CE 63	CB40.FC CD A5 40 8D FD CD AD 30
C618:8D CE 4C 47 C6 AD 90 CE FA	C8A8:AD 41 03 8D 35 CE AD 34 0F	CB48:69 03 8D 06 CE A9 00 8D 12
C620:FØ Ø8 AD 8F CE 18 C9 ØE 4F	C888:00 9D 51 CE AD 3D CE 30 DC	CB50:69 03 A2 40 9D 80 03 CA 75
C628:BØ Ø8 A9 Ø3 8D 8D CE 4C Ø2	C8C0:ED 34 CE 8D 46 CE 4C D8 E7	CB58:DØ FA A9 ØE 8D F9 Ø7 A9 39
C630:47 C6 AD 8F CE 18 C9 68 94	C8C8:C8 A9 Ø1 8D 51 CE AD 34 77	CB60:EØ 8D 9D Ø3 8D AØ Ø3 AD 52
C638:BØ Ø8 A9 Ø4 8D 8D CE 4C 22	C8DØ:CE 38 ED 3D CE 8D 46 CE 71	CB68:27 DØ 8D 28 DØ A9 Ø2 8D BA
C640:47 C6 A9 05 8D 8D CE 60 49	C8D8:AD 33 CE CD 3C CE FØ Ø7 CA	CB70:15 DØ A9 ØØ 8D 67 Ø3 2Ø 2C
C648:A9 01 80 15 D0 60 20 06 3C	C8E0:C9 01 F0 27 4C F0 C8 AD 8D	CB78:7F 8F AD 68 Ø3 FØ Ø5 A9 7F
C650:86 AD 27 D0 8D 28 D0 A9 D6	C8E8:32 CE 18 CD 3B CE BØ 1B B8	CB80:1F 4C 86 CB A9 18 8D 9C AD
C660.FB 8D 2F CE 8D 37 CE A5 8F	C8FØ:A9 Ø1 8D 52 CE AD 3B CE EØ	CB88:03 8D 9F 03 AD 00 D0 8D C5
C668:FC 8D 2F CE 8D 38 CE A5 38	C8F8:38 ED 32 CE 8D 44 CE AD 1E	CB90:02 D0 AD 01 D0 8D 03 D0 B6
C670:FD 8D 30 CE 8D 39 CE A5 E7	C900:3C CE ED 33 CE 8D 45 CE 5C	CBA0:03 8D 10 D0 20 E4 EE E0 B1
C678:FE 8D 31 CE 8D 3A CE AD 9C	C910:4C 23 C9 A9 00 8D 52 CE 08	CBA8:CE C9 5E DØ 10 EE 54 CE A6
C680:3E 03 8D 32 CE 8D 3B CE B4	C918:44 CE AD 33 CE ED 3C CE DE	CBBØ:A2 14 EC 54 CE DØ 14 8E F1
C688:AD 3F Ø3 8D 33 CE 8D 3C 22	C920:8D 45 CE AD 2E CE 85 FB 34	CBB8:54 CE 4C CB CB C9 5F DØ 89
C690:CE AD 40 03 8D 34 CE 8D 91	C928:AD 2F CE 85 FC AD 30 CE 5E	CBC0:0A CE 54 CE D0 05 A2 01 69
C698:3D CE AD 42 Ø3 8D 36 CE DB	C930:85 FD AD 31 CE 85 FE AD 07	CBC8:8E 54 CE C9 85 DØ Ø3 4C F4
C6A0:8D 40 CE AD 41 03 8D 35 20	C938:32 CE 8D 3E Ø3 AD 33 CE 32	CBDØ:D6 CD C9 91 FØ 1D C9 11 3A
C6A8:CE 8D 3F CE A9 00 8D 67 A5	C940:8D 3F 03 AD 34 CE 8D 40 DD	CBD8:FØ 1C C9 1D FØ 1B C9 9D 2Ø
C6B0:03 8D 41 CE 20 F2 91 AD D5	C948:03 AD 36 CE 8D 42 03 AD A5	CBEØ:FØ 1A C9 86 FØ ØA C9 ØD 69
C6C0.20 F4 FF 4C FF C6 4C 29 39	C950:35 CE 8D 41 03 A9 00 8D 44	CBEB:FD D3 4C AD CC 4C FF CB BD
C6C8:C8 AD 00 DC 8D 42 CF 29 30	C958:48 CE 8D 49 CE 8D 47 CE 14	CBF8:CC 4C 64 CC 4C 82 CC 49 13
C6DØ:10 FØ Ø8 A9 Ø1 8D 66 Ø3 4C	C968:CE 8D 4C CE 8D 4E CE AD 2E	CC00:A0 8D 55 CE 20 86 89 CE A2
C6D8:4C E2 C7 CE 66 Ø3 FØ Ø3 4F	C970:45 CE 18 6A 8D 45 CE AD DØ	CCØ8:55 CE DØ F8 A9 AØ 8D 55 E9
C6EØ:4C E2 C7 A9 64 8D 66 Ø3 ØA	C978:44 CE 6A 8D 44 CE AD 45 Ø6	CC10:CE 20 B6 89 CE 55 CE DØ C2
C6E8:20 2F C8 AD 53 CE DØ ØC C9	C980:CE DØ 11 AD 44 CE 18 CD Ø8	CC18:F8 4C 49 CC AD 68 Ø3 FØ 3D
C6FØ:A9 Ø1 85 C6 A9 4C 8D 77 C1	C988:46 CE BØ Ø8 A9 Ø1 8D 5Ø 46	CC20:08 A9 00 8D 68 03 4C 77 60
COF8:02 4C C6 C6 4C E2 C7 AD ØB	C990:CE 4C 99 C9 A9 00 8D 50 27	CC28:CB A9 Ø1 4C 23 CC AD 54 F2
C700:41 CE DØ Ø3 4C 76 C7 A5 9F	C998:CE 20 7F 8F A5 C6 F0 08 B6	CC30:CE 8D 57 CE A9 ØA 8D 55 52
C710:CE A5 FD 8D 39 CE A5 FE 59	CHAN AN NI BD 44 CE 8D 4B CE BI	CCJOICE ZU DU BA CE 55 CE DU 24
C718:8D 3A CE AD 3E 03 8D 3B 06	CONG.AD AD OF OF AF OF DO TO CE DI	CC40.E8 CE 57 CE DO EE 40 77 24
C720:CE AD 3F 03 8D 3C CE AD 43	C9A8:AD 4D CE CD 45 CE DØ ØD 31	CC40:F8 CE 57 CE DØ EE 4C 77 34 CC48:CB AD 54 CE 8D 57 CE A9 BB
C728:40 03 8D 3D CE AD 41 03 D0	C9A8:AD 4D CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ Ø5 E8 C9B8:A9 Ø1 8D 4A CE AD 4E CE EØ	CC40:F8 CE 57 CE D0 EE 4C 77 34 CC48:CB AD 54 CE 8D 57 CE A9 BB CC50:0A 8D 55 CE 20 3D 8A CE C3
	C9A8:AD 4D CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ Ø5 E8 C9B8:A9 Ø1 8D 4A CE AD 4E CE 5Ø C9CØ:CD 46 CE DØ Ø5 A9 Ø1 8D 12	CC40:F8 CE 57 CE D0 EE 4C 77 34 CC48:CB AD 54 CE 8D 57 CE A9 BB CC50:0A 8D 55 CE 20 3D 8A CE C3 CC58:55 CE D0 F8 CE 57 CE D0 3C
C73Ø:8D 3F CE AD 42 Ø3 8D 4Ø 84	C9A8:AD 4D CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ Ø5 E8 C9B8:A9 Ø1 8D 4A CE AD 4E CE 5Ø C9CØ:CD 46 CE DØ Ø5 A9 Ø1 8D 12 C9C8:4B CE AD 4A CE FØ Ø8 AD Ø8	CC40:F8       CE       57       CE       DØ       EE       4C       77       34         CC48:CB       AD       54       CE       8D       57       CE       A9       BB         CC50:ØA       8D       55       CE       2Ø       3D       8A       CE       C3         CC58:55       CE       DØ       F8       CE       57       CE       DØ       3C         CC60:EE       4C       77       CB       AD       54       CE       8D       1A
C73Ø:8D 3F CE AD 42 Ø3 8D 4Ø 84 C738:CE AD 2E CE 85 FB AD 2F F3	C9A8:AD 4D CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ Ø5 E8 C9B8:A9 Ø1 8D 4A CE AD 4E CE 5Ø C9CØ:CD 46 CE DØ Ø5 A9 Ø1 8D 12 C9C8:4B CE AD 4A CE FØ Ø8 AD Ø8 C9DØ:4B CE FØ Ø3 4C BD CA AD A8	CC40:F8         CE         57         CE         DØ         EE         4C         77         34           CC48:CB         AD         54         CE         8D         57         CE         A9         BB           CC50:ØA         8D         55         CE         2Ø         3D         8A         CE         C3           CC58:55         CE         DØ         F8         CE         57         CE         DØ         3C           CC60:EE         4C         77         CB         AD         54         CE         8D         1A           CC68:56         CE         A9         88         S5         CE         2Ø         16
C73Ø:8D 3F CE AD 42 Ø3 8D 4Ø 84 C738:CE AD 2E CE 85 FB AD 2F F3 C74Ø:CE 85 FC AD 3Ø CE 85 FD D8	C9A8:AD 4D CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ Ø5 E8 C9B8:A9 Ø1 8D 4A CE AD 4E CE 5Ø C9CØ:CD 46 CE DØ Ø5 A9 Ø1 8D 12 C9C8:4B CE AD 4A CE FØ Ø8 AD Ø8 C9DØ:4B CE FØ Ø3 4C 8D CA AD A8 C9D8:5Ø CE FØ Ø3 4C 4E CA EE B6	CC40:F8 CE 57 CE D0 EE 4C 77 34 CC48:CB AD 54 CE 8D 57 CE A9 BB CC50:0A 8D 55 CE 20 3D 8A CE C3 CC58:55 CE D0 F8 CE 57 CE D0 3C CC60:EE 4C 77 CB AD 54 CE 8D 1A CC68:56 CE A9 08 8D 55 CE 20 16 CC70:6C 89 CE 55 CE D0 F8 CE 4C
C73Ø:8D 3F CE AD 42 Ø3 8D 4Ø 84 C738:CE AD 2E CE 85 FB AD 2F F3 C74Ø:CE 85 FC AD 3Ø CE 85 FD D8 C748:AD 31 CE 85 FE AD 32 CE ØF	C9A8:AD       4D       CE       CD       45       CE       DØ       ØD       31         C9BØ:AD       4C       CE       CD       45       CE       DØ       ØD       31         C9BØ:AD       4C       CE       CD       44       CE       DØ       ØD       31         C9BØ:AD       4C       CE       CD       44       CE       DØ       ØD       31         C9DØ:AD       4C       CE       CD       44       CE       DØ       ØD       12         C9CØ:CD       46       CE       DØ       ØD       AD       12         C9CØ:CD       46       CE       DØ       ØD       AD       08         C9DØ:4B       CE       FØ       Ø3       4C       BD       CA       AD       A8         C9DØ:4B       CE       FØ       Ø3       4C       4E       CA       AE       BE         C9D8:50       CE       FØ       Ø3       4C       4E       CA       AE       BE         C9EØ:4C       CE       DØ       Ø3       EE       4D       CE       AD       90	CC40:F8         CE         57         CE         DØ         EE         4C         77         34           CC48:CB         AD         54         CE         8D         57         CE         A9         BB           CC50:ØA         8D         55         CE         2Ø         3D         8A         CE         C3           CC58:55         CE         DØ         F8         CE         57         CE         DØ         3C           CC60:EE         4C         77         CB         AD         54         CE         8D         1A           CC68:56         CE         A9         8B         55         CE         2Ø         16           CC70:6C         89         CE         55         CE         DØ         F8         CE         4C           CC78:56         CE         DØ         EE         2Ø         6C         89         4C         ØC
C73Ø:8D 3F CE AD 42 Ø3 8D 4Ø 84 C738:CE AD 2E CE 85 FB AD 2F F3 C74Ø:CE 85 FC AD 3Ø CE 85 FD D8 C748:AD 31 CE 85 FE AD 32 CE ØF C75Ø:8D 3E Ø3 AD 33 CE 8D 3F AØ	C9A8:AD 4D CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ Ø5 E8 C9B8:A9 Ø1 8D 4A CE AD 4E CE 5Ø C9CØ:CD 46 CE DØ Ø5 A9 Ø1 8D 12 C9C8:4B CE AD 4A CE FØ Ø8 AD Ø8 C9DØ:4B CE FØ Ø3 4C BD CA AD A8 C9DØ:4B CE FØ Ø3 4C 4E CA EE B6 C9EØ:4C CE DØ Ø3 EE 4D CE AD 9Ø C9E8:52 CE FØ Ø6 2Ø 6C 89 4C E9	CC4Ø:F8       CE       57       CE       DØ       EE       4C       77       34         CC48:CB       AD       54       CE       8D       57       CE       A9       BB         CC50:ØA       8D       55       CE       2Ø       3D       8A       CE       C3         CC58:55       CE       DØ       F8       CE       57       CE       DØ       3C         CC60:EE       4C       77       CB       AD       54       CE       8D       1A         CC68:56       CE       A9       8B       D       55       CE       2Ø       16         CC70:6C       89       CE       55       CE       DØ       F8       CE       4C         CC78:56       CE       DØ       EE       2Ø       6C       89       4C       ØC         CC78:56       CE       DØ       EE       2Ø       6C       89       4C       ØC         CC8Ø:77       CB       AD       54       CE       8D       56       CE       EB
C73Ø:8D 3F CE AD 42 Ø3 8D 4Ø 84 C738:CE AD 2E CE 85 FB AD 2F F3 C74Ø:CE 85 FC AD 3Ø CE 85 FD D8 C748:AD 31 CE 85 FE AD 32 CE ØF C75Ø:8D 3E Ø3 AD 33 CE 8D 3F AØ C758:Ø3 AD 34 CE 8D 4Ø Ø3 AD 69	C9A8:AD 4D CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ Ø5 E8 C9B8:A9 Ø1 8D 4A CE AD 4E CE 5Ø C9CØ:CD 46 CE DØ Ø5 A9 Ø1 8D 12 C9C8:4B CE AD 4A CE FØ Ø8 AD Ø8 C9DØ:4B CE FØ Ø3 4C BD CA AD A8 C9DØ:4B CE FØ Ø3 4C 4E CA EE B6 C9EØ:4C CE DØ Ø3 EE 4D CE AD 9Ø C9E8:52 CE FØ Ø6 2Ø 6C 89 4C E9 C9FØ:F5 C9 2Ø B6 89 AD 46 CE BF	CC4Ø:F8 CE 57 CE DØ EE 4C 77 34 CC48:CB AD 54 CE 8D 57 CE A9 BB CC5Ø:ØA 8D 55 CE 2Ø 3D 8A CE C3 CC58:55 CE DØ F8 CE 57 CE DØ 3C CC6Ø:EE 4C 77 CB AD 54 CE 8D 1A CC68:56 CE A9 Ø8 8D 55 CE 2Ø 16 CC7Ø:6C 89 CE 55 CE DØ F8 CE 4C CC78:56 CE DØ EE 2Ø 6C 89 4C ØC CC8Ø:77 CB AD 54 CE 8D 56 CE EB CC88:A9 Ø8 8D 55 CE 2Ø B6 89 ED
C73Ø:8D 3F CE AD 42 Ø3 8D 4Ø 84 C738:CE AD 2E CE 85 FB AD 2F F3 C74Ø:CE 85 FC AD 3Ø CE 85 FD D8 C748:AD 31 CE 85 FE AD 32 CE ØF C75Ø:8D 3E Ø3 AD 33 CE 8D 3F AØ C758:Ø3 AD 34 CE 8D 4Ø Ø3 AD 69 C76Ø:35 CE 8D 41 Ø3 AD 36 CE ØE	C9A8:AD 4D CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ Ø5 E8 C9B8:A9 Ø1 8D 4A CE AD 4E CE 5Ø C9CØ:CD 46 CE DØ Ø5 A9 Ø1 8D 12 C9C8:4B CE AD 4A CE FØ Ø8 AD Ø8 C9DØ:4B CE FØ Ø3 4C BD CA AD A8 C9D8:5Ø CE FØ Ø3 4C 4E CA EE B6 C9EØ:4C CE DØ Ø3 EE 4D CE AD 9Ø C9E8:52 CE FØ Ø6 2Ø 6C 89 4C E9 C9FØ:F5 C9 2Ø B6 89 AD 46 CE BF C9FØ:DØ Ø3 4C 99 C9 AD 48 CE 3D	CC4Ø:F8 CE 57 CE DØ EE 4C 77 34 CC48:CB AD 54 CE 8D 57 CE A9 BB CC5Ø:ØA 8D 55 CE 2Ø 3D 8A CE C3 CC58:55 CE DØ F8 CE 57 CE DØ 3C CC6Ø:EE 4C 77 CB AD 54 CE 8D 1A CC68:56 CE A9 Ø8 8D 55 CE 2Ø 16 CC7Ø:6C 89 CE 55 CE DØ F8 CE 4C CC78:56 CE DØ EE 2Ø 6C 89 4C ØC CC8Ø:77 CB AD 54 CE 8D 56 CE EB CC88:A9 Ø8 8D 55 CE 2Ø B6 89 ED CC9Ø:CE 55 CE DØ F8 CE 56 CE 4C
C730:8D 3F CE AD 42 03 8D 40 84 C738:CE AD 2E CE 85 FB AD 2F F3 C740:CE 85 FC AD 30 CE 85 FD D8 C748:AD 31 CE 85 FE AD 32 CE 0F C750:8D 3E 03 AD 33 CE 8D 3F A0 C758:03 AD 34 CE 8D 40 03 AD 69 C760:35 CE 8D 41 03 AD 36 CE 0E C760:8D 42 03 A9 00 8D 41 CE D1 C770:20 10 C8 4C F2 C7 A5 FB 6F	C9A8:AD 4D CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ Ø5 E8 C9B8:A9 Ø1 8D 4A CE AD 4E CE 5Ø C9CØ:CD 46 CE DØ Ø5 A9 Ø1 8D 12 C9C8:4B CE AD 4A CE FØ Ø8 AD Ø8 C9DØ:4B CE FØ Ø3 4C BD CA AD A8 C9DØ:5Ø CE FØ Ø3 4C 4E CA EE B6 C9EØ:4C CE DØ Ø3 EE 4D CE AD 9Ø C9E8:52 CE FØ Ø6 2Ø 6C 89 4C E9 C9FØ:F5 C9 2Ø B6 89 AD 46 CE BF C9FØ:DØ 34 C 99 C9 AD 48 CE 3D CAØØ:18 6D 46 CE 8D 48 CE AD 88 CAØØ:18 6D 46 CE 8D 48 CE AD 88	CC4Ø:F8 CE 57 CE DØ EE 4C 77 34 CC48:CB AD 54 CE 8D 57 CE A9 BB CC5Ø:ØA 8D 55 CE 2Ø 3D 8A CE C3 CC58:55 CE DØ F8 CE 57 CE DØ 3C CC6Ø:EE 4C 77 CB AD 54 CE 8D 1A CC68:56 CE A9 Ø8 8D 55 CE 2Ø 16 CC7Ø:6C 89 CE 55 CE DØ F8 CE 4C CC78:66 CE DØ EE 2Ø 6C 89 4C ØC CC8Ø:77 CB AD 54 CE 8D 56 CE EB CC8Ø:A9 Ø8 8D 55 CE 2Ø B6 89 ED CC9Ø:CE 55 CE DØ F8 CE 56 CE 4C CC98:DØ EE 2Ø B6 89 4C 77 CB FD
C730:8D 3F CE AD 42 03 8D 40 84 C738:CE AD 2E CE 85 FB AD 2F F3 C740:CE 85 FC AD 30 CE 85 FD D8 C748:AD 31 CE 85 FE AD 32 CE 0F C750:8D 3E 03 AD 33 CE 8D 3F A0 C758:03 AD 34 CE 8D 40 03 AD 69 C760:35 CE 8D 41 03 AD 36 CE 0E C768:8D 42 03 A9 00 8D 41 CE D1 C770:20 10 C8 4C E2 C7 A5 FB 6F C778:8D 2E CE A5 FC 8D 2F CF D9	C9A8:AD 4D CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ Ø5 E8 C9B8:A9 Ø1 8D 4A CE AD 4E CE 5Ø C9CØ:CD 46 CE DØ Ø5 A9 Ø1 8D 12 C9C8:4B CE AD 4A CE FØ Ø8 AD Ø8 C9DØ:4B CE FØ Ø3 4C BD CA AD A8 C9D8:5Ø CE FØ Ø3 4C 4E CA EE B6 C9EØ:4C CE DØ Ø3 EE 4D CE AD 9Ø C9E8:52 CE FØ Ø6 2Ø 6C 89 4C E9 C9FØ:F5 C9 2Ø B6 89 AD 46 CE BF C9F8:DØ Ø3 4C 99 C9 AD 48 CE 3D CAØØ:18 6D 46 CE 8D 48 CE AD 88 CAØ8:49 CE 69 ØØ 8D 49 CE CD 2Ø CAIØ:45 CE FØ Ø7 00 00 00 00 00 00 00 00 00 00 00 00 00	CC4Ø:F8 CE 57 CE DØ EE 4C 77 34 CC48:CB AD 54 CE 8D 57 CE A9 BB CC5Ø:ØA 8D 55 CE 2Ø 3D 8A CE C3 CC58:55 CE DØ F8 CE 57 CE DØ 3C CC6Ø:EE 4C 77 CB AD 54 CE 8D 1A CC68:56 CE A9 Ø8 8D 55 CE 2Ø 16 CC7Ø:6C 89 CE 55 CE DØ F8 CE 4C CC78:66 CE DØ EE 2Ø 6C 89 4C ØC CC8Ø:77 CB AD 54 CE 8D 56 CE EB CC8Ø:A9 Ø8 8D 55 CE 2Ø B6 89 ED CC9Ø:CE 55 CE DØ F8 CE 56 CE 4C CC98:DØ EE 2Ø B6 89 4C 77 CB FD CCAØ:18 C9 2Ø BØ Ø3 4C 77 CB CB
C730:8D 3F CE AD 42 03 8D 40 84 C738:CE AD 2E CE 85 FB AD 2F F3 C740:CE 85 FC AD 30 CE 85 FD D8 C748:AD 31 CE 85 FE AD 32 CE 0F C750:8D 3E 03 AD 33 CE 8D 3F A0 C758:03 AD 34 CE 8D 40 03 AD 69 C760:35 CE 8D 41 03 AD 36 CE 0E C768:8D 42 03 A9 00 8D 41 CE D1 C770:20 10 C8 4C E2 C7 A5 FB 6F C778:8D 2E CE A5 FC 8D 2F CE D9 C780:A5 FD 8D 30 CE A5 FE 8D AF	C9A8:AD 4D CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ Ø5 E8 C9B8:A9 Ø1 8D 4A CE AD 4E CE 5Ø C9CØ:CD 46 CE DØ Ø5 A9 Ø1 8D 12 C9C8:4B CE AD 4A CE FØ Ø8 AD Ø8 C9DØ:4B CE FØ Ø3 4C BD CA AD A8 C9DØ:4B CE FØ Ø3 4C 4E CA EE B6 C9EØ:4C CE DØ Ø3 EE 4D CE AD 9Ø C9E8:52 CE FØ Ø6 2Ø 6C 89 4C E9 C9FØ:F5 C9 2Ø B6 89 AD 46 CE BF C9F8:DØ Ø3 4C 99 C9 AD 48 CE AD 88 CAØ8:49 CE 69 ØØ 8D 49 CE CD 2Ø CAI8:45 CE FØ Ø7 C9 ØØ DØ ØF 89 CAI8:4C 99 C9 AD 48 CE 18 CD	CC40:F8 CE 57 CE D0 EE 4C 77 34 CC48:CB AD 54 CE 8D 57 CE A9 BB CC50:0A 8D 55 CE 20 3D 8A CE C3 CC58:55 CE D0 F8 CE 57 CE D0 3C CC60:EE 4C 77 CB AD 54 CE 8D 1A CC68:56 CE A9 08 8D 55 CE 20 16 CC70:6C 89 CE 55 CE D0 F8 CE 4C CC78:56 CE D0 EE 20 6C 89 4C 0C CC80:77 CB AD 54 CE 8D 56 CE EB CC80:A77 CB AD 54 CE 8D 56 CE EB CC80:A77 CB AD 54 CE 8D 56 CE EB CC80:A77 CB AD 54 CE 8D 56 CE EB CC90:CE 55 CE D0 F8 CE 56 CE 4C CC98:D0 EE 20 B6 89 4C 77 CB FD CCA0:18 C9 20 B0 03 4C 77 CB CB CCA0:18 C9 55 B0 0D C9 40 B0 F7
C730:8D 3F CE AD 42 03 8D 40 84 C738:CE AD 2E CE 85 FB AD 2F F3 C740:CE 85 FC AD 30 CE 85 FD D8 C748:AD 31 CE 85 FE AD 32 CE 0F C750:8D 3E 03 AD 33 CE 8D 3F A0 C758:03 AD 34 CE 8D 40 03 AD 69 C760:35 CE 8D 41 03 AD 36 CE 0E C768:8D 42 03 A9 00 8D 41 CE D1 C770:20 10 C8 4C E2 C7 A5 FB 6F C778:8D 2E CE A5 FC 8D 2F CE D9 C780:A5 FD 8D 30 CE A5 FE 8D AF C788:31 CE AD 3E 03 8D 32 CE 7F	C9A8:AD 4D CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ Ø5 E8 C9B8:A9 Ø1 8D 4A CE AD 4E CE 5Ø C9CØ:CD 46 CE DØ Ø5 A9 Ø1 8D 12 C9C8:4B CE AD 4A CE FØ Ø8 AD Ø8 C9DØ:4B CE FØ Ø3 4C BD CA AD A8 C9DØ:5Ø CE FØ Ø3 4C 4E CA EE B6 C9EØ:4C CE DØ Ø3 EE 4D CE AD 9Ø C9EØ:52 CE FØ Ø6 2Ø 6C 89 4C E9 C9FØ:F5 C9 2Ø B6 89 AD 46 CE BF C9F8:DØ Ø3 4C 99 C9 AD 48 CE 3D CAØØ:18 6D 46 CE 8D 48 CE AD 88 CAØ8:49 CE 69 ØØ 8D 49 CE CD 2Ø CAI0:45 CE FØ Ø7 C9 ØD ØØ ØF 89 CAI0:44 CE BØ Ø3 4C 99 C9 EE 1D	CC40:F8 CE 57 CE D0 EE 4C 77 34 CC48:CB AD 54 CE 8D 57 CE A9 BB CC50:0A 8D 55 CE 20 3D 8A CE C3 CC58:55 CE D0 F8 CE 57 CE D0 3C CC60:EE 4C 77 CB AD 54 CE 8D 1A CC68:56 CE A9 08 8D 55 CE 20 16 CC70:6C 89 CE 55 CE D0 F8 CE 4C CC78:56 CE D0 EE 20 6C 89 4C 0C CC80:77 CB AD 54 CE 8D 56 CE EB CC80:A9 08 8D 55 CE 20 B6 89 ED CC90:CE 55 CE D0 F8 CE 56 CE 4C CC98:D0 EE 20 B6 89 4C 77 CB 4D CC98:D0 EE 20 B6 89 4C 77 CB CB CCA0:18 C9 20 B0 03 4C 77 CB CB CCA0:18 C9 55 B0 0D C9 40 B0 F7 CCB0:03 4C CA CC 38 E9 40 4C 3B CC88:CA CC 18 C9 C1 B0 03 4C AD
C730:8D 3F CE AD 42 03 8D 40 84 C738:CE AD 2E CE 85 FB AD 2F F3 C740:CE 85 FC AD 30 CE 85 FD D8 C748:AD 31 CE 85 FE AD 32 CE 0F C750:8D 3E 03 AD 33 CE 8D 3F A0 C758:03 AD 34 CE 8D 40 03 AD 69 C760:35 CE 8D 41 03 AD 36 CE 0E C768:8D 42 03 A9 00 8D 41 CE D1 C770:20 10 C8 4C E2 C7 A5 FB 6F C778:8D 2E CE A5 FC 8D 2F CE D9 C780:A5 FD 8D 30 CE A5 FE 8D AF C788:31 CE AD 3E 03 8D 32 CE 7F C780:AD 3F 03 8D 33 CE AD 40 70	C9A8:AD 4D CE CD 45 CE DØ ØD 31 C9BØ:AD 4C CE CD 44 CE DØ Ø5 E8 C9B8:A9 Ø1 8D 4A CE AD 4E CE 5Ø C9CØ:CD 46 CE DØ Ø5 A9 Ø1 8D 12 C9C8:4B CE AD 4A CE FØ Ø8 AD Ø8 C9DØ:4B CE FØ Ø3 4C BD CA AD A8 C9DØ:4B CE FØ Ø3 4C 4E CA EE B6 C9EØ:4C CE DØ Ø3 EE 4D CE AD 9Ø C9E8:52 CE FØ Ø3 4C 4E CA EE B6 C9EØ:4C CE DØ Ø3 EE 4D CE AD 9Ø C9E8:52 CE FØ Ø6 2Ø 6C 89 4C E9 C9FØ:F5 C9 2Ø B6 89 AD 46 CE BF C9F8:DØ Ø3 4C 99 C9 AD 48 CE 3D CAØØ:18 6D 46 CE 8D 48 CE AD 88 CAØ8:49 CE 69 ØØ 8D 49 CE CD 2Ø CA10:45 CE FØ Ø7 C9 ØØ DØ ØF 89 CA10:45 CE FØ Ø7 C9 ØØ DØ ØF 89 CA10:44 CE BØ Ø3 4C 99 C9 E1 D CA28:44 CE BØ Ø3 4C 99 C9 E1 D	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
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CCE8: DØ EE AD 54 CE 8D 57 CE CB	9388:3F A9 D8 85 40 A9 E8 8D 35	9620:8D 91 9C 4C 44 96 20 3D CA
CCFØ:8D 59 CE A9 Ø8 8D 55 CE ØC	9390:B3 9C A9 DB 8D B4 9C 20 44	9628:8A A9 Ø1 8D B2 9C AD Ø3 64
CCF8:20 00 8A CE 55 CE DØ F8 61	9398:22 98 A5 FD 18 69 18 85 A7	9630:DØ 18 69 Ø8 8D Ø3 DØ A5 39
CDØØ:CE 57 CE DØ EE AD 54 CE 65	93AØ:FD A5 FE 69 75 85 FE A9 10	9638:3F 18 69 28 85 3F A5 40 6F
CDØ8:8D 57 CE CE 57 CE FØ Ø6 E4	93A8:E8 8D 09 88 8D 1D 88 8D D0	9640:69 00 85 40 4C 29 95 C9 D2
CD10:20 3D 8A 4C 0B CD A9 08 0C	93B0:AA 90 8D 9A 91 A9 03 8D 73	9656 AL F6 27 C9 44 F6 2C C9 E3
CD18:80 55 CE AD 54 CE 80 56 D5	9388:0F 88 60 23 88 60 80 10 90 03	9658:45 FØ 3B C9 91 FØ 3D C9 FC
CD28 DC 29 FE 8D 0E DC A5 01 65	93C8-20 DF 93 A9 A9 8D 11 94 3F	9660:11 FØ 39 C9 1D FØ 35 C9 F6
CD30:29 FB 85 01 B1 3F 8D 58 1E	93DØ:20 56 86 A5 C6 FØ Ø8 A9 7C	9668:9D FØ 31 4C 4D 97 20 69 FD
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CD40:0E DC 09 01 8D 0E DC A9 53	93EØ:FB 8D 93 9C A5 FC 8D 94 76	9678:29 95 20 AE 83 8D 28 D0 02
CD48:80 8D 40 CE AD 58 CE 2D 16	93E8:9C A5 FD 8D 95 9C A5 FE C9	9680:4C 29 95 20 57 83 A9 60 4F
CD50:40 CE FØ ØD A9 Ø1 8D 67 82	93FØ:8D 96 9C AD 41 Ø3 8D 97 BB	9688:8D 7F 82 20 65 82 A9 AD E4
CD58:03 20 7F 8F A9 00 8D 67 36	93F8:9C AD 42 Ø3 8D 98 9C AD Ø8	9690:8D 7F 82 4C 29 95 20 5D 86
CD60:03 20 6C 89 CE 56 CE D0 E9	9400:3E 03 8D 99 9C AD 3F 03 71	9698:83 4C 86 96 8D 70 9C 20 5C
CD68:E3 AD 54 CE 8D 56 CE 4E 8A	9408:8D 9A 9C AD 40 03 8D 9B DI	96A0:EF 97 A9 03 80 6F 9C AD 22
CD70:40 CE D0 D8 CE 59 CE D0 D1	9410:9C A9 00 8D 67 05 A9 B1 17	9688:70 9C C9 91 F0 0E C9 11 ED
CD78: DE AD 54 CE 8D 59 CE CE 5C	9420.20 Ch 87 20 33 81 A9 91 83	9688:89 4C CB 96 20 00 8A 4C 03
CD88:54 CE 8D 56 CE A9 08 8D D3	9428:8D 64 88 A9 A5 8D A9 88 1C	96CØ:CB 96 2Ø 3D 8A 4C CB 96 Ø5
CD90:40 CE 20 B6 89 CE 40 CE 46	9430:A9 02 8D 15 DØ A9 FF 8D 6C	96C8:20 6C 89 CE 6F 9C DØ D7 A6
CD98:DØ F8 CE 56 CE DØ EE 20 D1	9438:F9 Ø7 AD 27 DØ 8D 28 DØ 26	96DØ:A9 ØØ 8D B1 9C 4C D3 93 FØ
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CDA8:CE 57 CE DØ ØC AD 54 CE F6	9448:A9 ØØ 85 41 A9 Ø4 85 42 B5	96EØ:A9 Ø3 8D B2 9C A5 FB 8D 81
CDBØ:8D 57 CE E6 3F DØ Ø2 E6 59	9450:AØ ØØ A9 AØ 91 41 C8 91 BD	96E8:9D 9C A5 FC 8D 9E 9C A5 56
CDB8:40 4C 24 CD 20 6C 89 20 CE	9458:41 88 A5 41 18 69 ØØ 85 F8	96FØ:FD 8D 9F 9C A5 FE 8D AØ 23
CDCØ: 3D 8A AD 54 CE 8D 57 CE C2	9460:41 A5 42 69 D4 85 42 B1 65	96F8:9C AI 41 Ø3 8D A1 9C AD 12
CDC8:CE 57 CE FØ Ø6 20 ØØ 8A C5	9468:3F C9 FF DØ Ø3 AD 21 DØ 92	9700:42 03 8D A2 9C AD 3E 03 08
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CDD8:8D 15 DØ AD FC CD 85 3F DE	94/8:38 E9 FE 85 41 A5 42 E9 /F	9710:9C AD 40 03 8D A5 9C A5 13
CDEØ:AD FD CD 85 40 AD 06 CE 78	9480:D3 85 42 A5 3F 18 69 61 C5	9718:3F 8D A6 9C A5 40 8D A7 D9
CDE8:8D 69 03 60 00 00 00 00 00 00	9488:85 31 A5 40 69 00 65 40 53	9720:9C AD 02 D0 8D A8 9C AD 4C
	9498 DØ B8 AD B1 9C C9 57 FØ D4	9728:03 DØ 8D A9 9C AD 90 9C B2
	9410:25 A9 15 8D 02 D0 A9 2C 15	9730:8D AA 9C AD 91 9C 8D AB 05
CE08:00 00 00 00 00 00 00 00 A5	94A8:8D Ø3 DØ AD 1Ø DØ 29 FD 62	9740.57 8D B1 9C 20 8B 90 20 FE
CE10:00 00 00 00 00 00 00 00 AD	94BØ:8D 10 DØ A9 01 8D 90 9C 55	9748: EF 97 4C DF 93 A9 18 85 D5
CE18:00 00 00 00 00 00 00 00 B5	94B8:8D 91 9C A9 ØØ 85 3F A9 79	9750:3F A9 79 85 40 A9 00 85 3F
CE20:00 00 00 00 00 00 00 00 BD	94CØ:04 85 40 4C 29 95 AD 9D B2	9758:41 A9 Ø4 85 42 A9 ØØ 8D B1
CE28:00 00 00 00 A4 B0 00 00 AD	94C8:9C 85 FB AD 9E 9C 85 FC 6B	9760:B3 9C A9 7D 8D B4 9C 20 36
CE30:00 00 00 00 00 00 00 00 CD	94DØ:AD 9F 9C 85 FD AD AØ 9C 29	9768:22 98 A9 ØØ 85 41 A9 D8 61
CE38:00 00 00 00 00 00 00 00 D5	94D8:85 FE AD A1 9C 8D 41 Ø3 F4	9770:85 42 A9 E8 8D B3 9C A9 D4
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CE48:00 00 00 00 00 00 00 00 E5	94E8:9C 8D 3E Ø3 AD A4 9C 8D 82	9780:00 8D 09 88 8D 1D 88 8D 3C
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CE58:00 00 00 00 00 00 00 00 F5	94F8:AD A6 9C 85 3F AD A7 9C 2B	9/90:0F 88 8D 23 88 8D 80 90 89
	9509:85 40 AD AO 9C 8D 03 D0 AD AA 42	9798:8D AØ 91 20 EF 97 A5 FD 12
CE08:00 00 00 00 00 00 00 00 00 00	9510.9C 8D 90 9C AD AB 9C 8D AB	97A0:38 E9 18 85 FD A5 FE E9 50
CE78:00 00 00 00 00 00 00 00 16	9518:91 9C AD AC 9C 8D 10 D0 BF	9780:AD 5F 9C 65 40 AD 60 9C 90
CE80:00 00 00 00 00 00 00 00 1E	9520:29 02 FØ 05 A9 FE 8D F9 2D	9788:85 41 AD 61 9C 85 42 A9 EF
CE88:00 00 00 00 00 00 00 00 26	9528:07 A2 73 8A A8 88 DØ FD 9D	97CØ:00 8D 67 03 A9 00 8D B1 8A
CE90:00 00 00 00 00 00 00 00 2E	9530:CA DØ F9 A5 C6 FØ ØA 20 BC	97C8:9C A9 Ø1 8D 15 DØ AD 18 Ø9
CE98:00 00 00 00 00 00 00 00 36	9538:E4 FF A2 ØØ 86 C6 4C 47 59	97DØ:DØ Ø9 Ø8 8D 18 DØ AD 11 F4
CEA0:00 00 00 00 00 00 00 00 3E	9540:96 AD 00 DC 8D 92 9C 29 09	97D8:DØ Ø9 2Ø 8D 11 DØ AD 16 CC
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Color Pad 3.O 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA	9558:AD 90 9C C9 15 D0 3F LE 90 9C 93 9558:AD 90 9C C9 15 D0 08 A9 54 9568:AC 89 A9 01 8D 82 9C AD 8F 9570:02 D0 18 69 10 8D 02 D0 F5 9578:90 0D AD 10 D0 09 02 8D 22 9580:10 D0 A9 FE 8D F9 07 A5 15 9588:3F 18 69 02 85 3F A5 40 5B 9590:69 00 85 40 AD 92 9C 29 3F	97E8:9C       DØ       Ø3       4C       3A       93       6Ø       AD       4E         97FØ:93       9C       85       FB       AD       94       9C       85       FF         97F8:FC       AD       95       9C       85       FD       AD       96       A4         98ØØ:9C       85       FE       AD       97       9C       8D       41       27         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         981Ø:99       9C       8D       3E       Ø3       AD       9A       9C       6B         9818:8D       3F       Ø3       AD       9B       9C       8D       40       C5         982Ø:Ø3       6Ø       AØ       ØØ       B1       3F       91       41       ED         9828:A5       3F       18       69       Ø1       85       3F       A5       D7
Color Pad 3.O 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA 93ØØ:9D FØ ØD 6Ø 4C 51 98 4C FE	9550:9C       29       08       D0       37       EE       90       90       93         9558:AD       90       9C       C9       15       D0       08       A9       54         9568:AD       90       9C       C9       15       D0       08       A9       54         9568:AC       89       A9       01       8D       B2       9C       AD       8F         9570:02       D0       18       69       10       8D       02       D0       F5         9578:90       0D       AD       10       D0       09       02       8D       22         9580:10       D0       A9       FE       8D       F9       07       A5       15         9588:3F       18       69       02       85       3F       A5       40       5B         9598:69       00       85       40       AD       92       92       3F         9598:04       D0       3D       CE       90       9C       AD       90       71	97E8:9C       DØ       Ø3       4C       3A       93       6Ø       AD       4E         97FØ:93       9C       85       FB       AD       94       9C       85       FF         97F8:FC       AD       95       9C       85       FD       AD       96       A4         98ØØ:9C       85       FE       AD       97       9C       8D       41       27         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         9810:99       9C       8D       3E       Ø3       AD       9A       9C       6B         9818:8D       3F       Ø3       AD       9B       9C       8D       4Ø       C5         9820:Ø3       6Ø       AØ       ØB       1       3F       91       41       ED         9828:A5       3F       18       69       Ø1       85       3F       A5       D7         983Ø:4Ø       69       ØØ       85       4Ø       A5       41       18       67
<b>Color Pad 3.0</b> 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA 93ØØ:9D FØ ØD 6Ø 4C 51 98 4C FE 93Ø8:13 93 4C 3A 93 4C 2E 93 88	9550:9C       29       08       D0       37       EE       90       90       93         9558:AD       90       9C       29       15       D0       08       A9       54         9568:AD       90       9C       29       15       D0       08       A9       54         9568:AC       89       A9       01       8D       B2       9C       AD       8F         9570:02       D0       18       69       10       8D       02       D0       F5         9578:90       0D       AD       10       D0       09       02       8D       22         9580:10       D0       A9       FE       8D       F9       07       A5       15         9588:37       18       69       02       85       3F       A5       40       5B         9598:04       D0       3D       CE       90       9C       29       29       3F         9598:04       D0       3D       CE       90       9C       A5       90       71         95A9:9C       D0       08       A9       01       8D       90       9C       E5 <td>97E8:9C DØ Ø3 4C 3A 93 6Ø AD 4E 97FØ:93 9C 85 FB AD 94 9C 85 FF 97F8:FC AD 95 9C 85 FD AD 96 A4 98ØØ:9C 85 FE AD 97 9C 8D 41 27 98Ø8:Ø3 AD 98 9C 8D 42 Ø3 AD 2C 981Ø:99 9C 8D 3E Ø3 AD 9A 9C 6B 9818:8D 3F Ø3 AD 9B 9C 8D 4Ø C5 982Ø:Ø3 6Ø AØ ØØ B1 3F 91 41 ED 9828:A5 3F 18 69 Ø1 85 3F A5 D7 983Ø:4Ø 69 ØØ 85 4Ø A5 41 18 67 9838:69 Ø1 85 41 A5 42 69 ØØ 2C</td>	97E8:9C DØ Ø3 4C 3A 93 6Ø AD 4E 97FØ:93 9C 85 FB AD 94 9C 85 FF 97F8:FC AD 95 9C 85 FD AD 96 A4 98ØØ:9C 85 FE AD 97 9C 8D 41 27 98Ø8:Ø3 AD 98 9C 8D 42 Ø3 AD 2C 981Ø:99 9C 8D 3E Ø3 AD 9A 9C 6B 9818:8D 3F Ø3 AD 9B 9C 8D 4Ø C5 982Ø:Ø3 6Ø AØ ØØ B1 3F 91 41 ED 9828:A5 3F 18 69 Ø1 85 3F A5 D7 983Ø:4Ø 69 ØØ 85 4Ø A5 41 18 67 9838:69 Ø1 85 41 A5 42 69 ØØ 2C
<b>Color Pad 3.0</b> 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA 93ØØ:9D FØ ØD 6Ø 4C 51 98 4C FE 93Ø8:13 93 4C 3A 93 4C 2E 93 88 931Ø:4C FF 99 AD 7Ø Ø3 C9 57 E5	9558:AD 90 9C C9 15 D0 3F EE 90 9C 95 9558:AD 90 9C C9 15 D0 08 A9 54 9560:14 8D 90 9C 4C 94 95 20 D4 9568:6C 89 A9 01 8D B2 9C AD 8F 9570:02 D0 18 69 10 8D 02 D0 F5 9578:90 0D AD 10 D0 09 02 8D 22 9580:10 D0 A9 FE 8D F9 07 A5 15 9588:3F 18 69 02 85 3F A5 40 5B 9590:69 00 85 40 AD 92 9C 29 3F 9598:04 D0 3D CE 90 9C AD 90 71 95A0:9C D0 08 A9 01 8D 90 9C E5 95A8:4C D8 95 20 B6 89 A9 01 15	97E8:9C DØ Ø3 4C 3A 93 6Ø AD 4E 97FØ:93 9C 85 FB AD 94 9C 85 FF 97F8:FC AD 95 9C 85 FD AD 96 A4 98ØØ:9C 85 FE AD 97 9C 8D 41 27 98Ø8:Ø3 AD 98 9C 8D 42 Ø3 AD 2C 981Ø:99 9C 8D 3E Ø3 AD 9A 9C 6B 9818:8D 3F Ø3 AD 9B 9C 8D 4Ø C5 982Ø:Ø3 6Ø AØ ØØ 81 3F 91 41 ED 9828:A5 3F 18 69 Ø1 85 3F A5 D7 9830:4Ø 69 ØØ 85 4Ø A5 41 18 67 9838:69 Ø1 85 41 A5 42 69 ØØ 2C 984Ø:85 42 A5 4Ø CD 84 9C DØ C8
<b>Color Pad 3.0</b> 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA 93ØØ:9D FØ ØD 6Ø 4C 51 98 4C FE 93Ø8:13 93 4C 3A 93 4C 2E 93 88 931Ø:4C FF 99 AD 7Ø Ø3 C9 57 E5 9318:FØ ØB A9 57 8D 7Ø Ø3 A9 Ø3	9558:4D 90 9C C9 15 D0 3F EE 90 9C 93 9558:AD 90 9C C9 15 D0 08 A9 54 9560:14 8D 90 9C 4C 94 95 20 D4 9568:6C 89 A9 01 8D 82 9C AD 8F 9570:02 D0 18 69 10 8D 02 D0 F5 9578:90 0D AD 10 D0 09 02 8D 22 9580:10 D0 A9 FE 8D F9 07 A5 15 9588:3F 18 69 02 85 3F A5 40 5B 9590:69 00 85 40 AD 92 9C 29 3F 9598:04 D0 3D CE 90 9C AD 90 71 95A0:9C D0 08 A9 01 8D 90 9C E5 95A8:4C D8 95 20 B6 89 A9 01 15 95B0:8D B2 9C AD 02 D0 38 E9 6B	97E8:9C DØ Ø3 4C 3A 93 6Ø AD 4E 97FØ:93 9C 85 FB AD 94 9C 85 FF 97F8:FC AD 95 9C 85 FD AD 96 A4 98ØØ:9C 85 FE AD 97 9C 8D 41 27 98Ø8:Ø3 AD 98 9C 8D 42 Ø3 AD 2C 981Ø:99 9C 8D 3E Ø3 AD 9A 9C 6B 9818:8D 3F Ø3 AD 9B 9C 8D 4Ø C5 982Ø:Ø3 6Ø AØ ØØ 81 3F 91 41 ED 9828:A5 3F 18 69 Ø1 85 3F A5 D7 983Ø:4Ø 69 Ø0 85 4Ø A5 41 18 67 9838:69 Ø1 85 41 A5 42 69 ØØ 2C 984Ø:85 42 A5 4Ø CD B4 9C DØ C8 9848:D9 A5 3F CD B3 9C ØZ 19
<b>Color Pad 3.0</b> 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA 93ØØ:9D FØ ØD 6Ø 4C 51 98 4C FE 93Ø8:13 93 4C 3A 93 4C 2E 93 88 931Ø:4C FF 99 AD 7Ø Ø3 C9 57 E5 9318:FØ ØB A9 57 8D 7Ø Ø3 A9 Ø3 932Ø:ØA 8D 71 Ø3 6Ø AD 45 Ø3 55	9558:4D 90 9C C9 15 D0 3F EE 90 9C 93 9558:AD 90 9C C9 15 D0 08 A9 54 9560:14 8D 90 9C 4C 94 95 20 D4 9568:6C 89 A9 01 8D 82 9C AD 8F 9570:02 D0 18 69 10 8D 02 D0 F5 9578:90 0D AD 10 D0 09 02 8D 22 9580:10 D0 A9 FE 8D F9 07 A5 15 9588:3F 18 69 02 85 3F A5 40 5B 9590:69 00 85 40 AD 92 9C 29 3F 9598:04 D0 3D CE 90 9C AD 90 71 95A0:9C D0 08 A9 01 8D 90 9C E5 95A8:4C D8 95 20 B6 89 A9 01 15 95B0:8D B2 9C AD 02 D0 38 E9 6B 9598:10 8D 02 D0 80 0D AD 10 C1	97E8:9C DØ Ø3 4C 3A 93 6Ø AD 4E 97FØ:93 9C 85 FB AD 94 9C 85 FF 97F8:FC AD 95 9C 85 FD AD 96 A4 98ØØ:9C 85 FE AD 97 9C 8D 41 27 98Ø8:Ø3 AD 98 9C 8D 42 Ø3 AD 2C 981Ø:99 9C 8D 3E Ø3 AD 9A 9C 6B 9818:8D 3F Ø3 AD 9B 9C 8D 4Ø C5 982Ø:Ø3 6Ø AØ ØØ 81 3F 91 41 ED 9828:A5 3F 18 69 Ø1 85 3F A5 D7 983Ø:4Ø 69 ØØ 85 4Ø A5 41 18 67 9838:69 Ø1 85 41 A5 42 69 ØØ 2C 984Ø:85 42 A5 4Ø CD 84 9C DØ C8 9848:D9 A5 3F CD B3 9C DØ D2 19 985Ø:6Ø A2 ØØ BD 8E 9C 29 7F EE
<b>Color Pad 3.0</b> 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA 93ØØ:9D FØ ØD 6Ø 4C 51 98 4C FE 93Ø8:13 93 4C 3A 93 4C 2E 93 88 931Ø:4C FF 99 AD 7Ø Ø3 C9 57 E5 9318:FØ ØB A9 57 8D 7Ø Ø3 A9 Ø3 932Ø:ØA 8D 71 Ø3 6Ø AD 45 Ø3 55 9328:8D 2Ø DØ 4C 1C 93 AD 7Ø F7	9558:4D 90 9C C9 15 D0 3F EE 90 9C 93 9558:AD 90 9C C9 15 D0 08 A9 54 9568:4C 8D 90 9C 4C 94 95 20 D4 9568:6C 89 A9 01 8D 82 9C AD 8F 9570:02 D0 18 69 10 8D 02 D0 F5 9578:90 0D AD 10 D0 09 02 8D 22 9580:10 D0 A9 FE 8D F9 07 A5 15 9588:3F 18 69 02 85 3F A5 40 5B 9590:69 00 85 40 AD 92 9C 29 3F 9598:04 D0 3D CE 90 9C AD 90 71 95A0:9C D0 08 A9 01 8D 90 9C E5 95A8:4C D8 95 20 86 89 A9 01 15 9580:8D 82 9C AD 02 D0 38 E9 6B 9588:10 8D 02 D0 80 0D AD 10 C1 95C0:D0 29 FD 8D 10 D0 A9 FF 4E	97E8:9C DØ Ø3 4C 3A 93 6Ø AD 4E 97FØ:93 9C 85 FB AD 94 9C 85 FF 97F8:FC AD 95 9C 85 FD AD 96 A4 98ØØ:9C 85 FE AD 97 9C 8D 41 27 98Ø8:Ø3 AD 98 9C 8D 42 Ø3 AD 2C 981Ø:99 9C 8D 3E Ø3 AD 9A 9C 6B 9818:8D 3F Ø3 AD 9B 9C 8D 4Ø C5 982Ø:Ø3 6Ø AØ ØØ 81 3F 91 41 ED 9828:A5 3F 18 69 Ø1 85 3F A5 D7 983Ø:4Ø 69 ØØ 85 4Ø A5 41 18 67 983Ø:4Ø 69 ØØ 85 4Ø A5 41 18 67 983Ø:4Ø 69 ØØ 85 4Ø CD B4 9C DØ C8 984Ø:85 42 A5 4Ø CD B4 9C DØ C8 984Ø:85 42 A5 GD B3 9C DØ D2 19 985Ø:6Ø A2 ØØ 8D 8E 9C 29 7F EE 9858:9D 86 9C E8 EØ Ø2 DØ F3 CØ
<b>Color Pad 3.0</b> 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA 93ØØ:9D FØ ØD 6Ø 4C 51 98 4C FE 93Ø8:13 93 4C 3A 93 4C 2E 93 88 931Ø:4C FF 99 AD 7Ø Ø3 C9 57 E5 9318:FØ ØB A9 57 8D 7Ø Ø3 A9 Ø3 9320:ØA 8D 71 Ø3 6Ø AD 45 Ø3 55 9328:8D 2Ø DØ 4C 1C 93 AD 7Ø F7 933Ø:Ø3 C9 58 FØ FØ A9 58 4C 9Ø	9558:AD 90 9C 29 08 D0 3F EE 90 9C 93 9558:AD 90 9C C9 15 D0 08 A9 54 9568:AC 89 A9 01 8D B2 9C AD 8F 9570:02 D0 18 69 10 8D 02 D0 F5 9578:90 0D AD 10 D0 09 02 8D 22 9580:10 D0 A9 FE 8D F9 07 A5 15 9588:3F 18 69 02 85 3F A5 40 5B 9590:69 00 85 40 AD 92 9C 29 3F 9598:04 D0 3D CE 90 9C AD 90 71 95A0:9C D0 08 A9 01 8D 90 9C E5 95A8:4C D8 95 20 B6 89 A9 01 15 95B8:10 8D 02 D0 80 0D AD 10 C1 95C0:D0 29 FD 8D 10 D0 A9 FF 4E 95C0:D0 29 FD 8D 10 D0 A9 FF 4E 95C8:8D F9 07 A5 3F 38 E9 02 25	97E8:9C       DØ       Ø3       4C       3A       93       6Ø       AD       4E         97FØ:93       9C       85       FB       AD       94       9C       85       FF         97F8:FC       AD       95       9C       85       FD       AD       96       A4         98ØØ:9C       85       FE       AD       97       9C       8D       41       27         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       3E       Ø3       AD       9A       9C       6B         9818:8D       3F       Ø3       AD       9B       9C       8D       40       C5       9820:40       A5       41       8E       67       9830:40       65       40
<b>Color Pad 3.0</b> 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA 93ØØ:9D FØ ØD 6Ø 4C 51 98 4C FE 93Ø8:13 93 4C 3A 93 4C 2E 93 88 931Ø:4C FF 99 AD 7Ø Ø3 C9 57 E5 9318:FØ ØB A9 57 8D 7Ø Ø3 A9 Ø3 9320:ØA 8D 71 Ø3 6Ø AD 45 Ø3 55 9328:8D 2Ø DØ 4C 1C 93 AD 7Ø F7 933Ø:Ø3 C9 58 FØ FØ A9 58 4C 9Ø 9338:1C 93 2Ø Ø6 86 A9 ØØ 8D FF 934Ø:69 Ø3 PD F5 9C A5 3F 9D 71	9550:9C       29       08       D0       37       EL       90       90       93         9558:AD       90       9C       C9       15       D0       08       A9       54         9560:14       8D       90       9C       42       95       20       D4         9568:6C       89       A9       01       8D       B2       9C       AD       8F         9570:02       D0       18       69       10       8D       02       D0       F5         9578:90       0D       AD       10       D0       09       02       8D       22         9580:10       D0       AP       FE       8D       F9       07       A5       15         9588:31       18       69       02       85       3F       A5       40       5B         9598:04       D0       3D       CE       90       9C       AD       90       71         95A0:9C       D0       88       A9       01       8D       90       2C       15         958:04       D0       3D       CE       90       9C       AD       10       15 <tr< td=""><td>97E8:9C       DØ       Ø3       4C       3A       93       6Ø       AD       4E         97FØ:93       9C       85       FB       AD       94       9C       85       FF         97F8:FC       AD       95       9C       85       FD       AD       96       A4         98ØØ:9C       85       FE       AD       97       9C       8D       41       27         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         9818:8D       3F       Ø3       AD       9B       9C       8D       40       C5         9820:Ø3       6Ø       AØ       ØØ       B1       3F       91       41       ED         9828:A5       3F       18       69       Ø1       85       47       A5       A7</td></tr<>	97E8:9C       DØ       Ø3       4C       3A       93       6Ø       AD       4E         97FØ:93       9C       85       FB       AD       94       9C       85       FF         97F8:FC       AD       95       9C       85       FD       AD       96       A4         98ØØ:9C       85       FE       AD       97       9C       8D       41       27         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         9818:8D       3F       Ø3       AD       9B       9C       8D       40       C5         9820:Ø3       6Ø       AØ       ØØ       B1       3F       91       41       ED         9828:A5       3F       18       69       Ø1       85       47       A5       A7
<b>Color Pad 3.0</b> 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA 93ØØ:9D FØ 0D 6Ø 4C 51 98 4C FE 93Ø8:13 93 4C 3A 93 4C 2E 93 88 931Ø:4C FF 99 AD 7Ø Ø3 C9 57 E5 9318:FØ ØB A9 57 8D 7Ø Ø3 A9 Ø3 932Ø:ØA 8D 71 Ø3 6Ø AD 45 Ø3 55 9328:8D 2Ø DØ 4C 1C 93 AD 7Ø F7 933Ø:Ø3 C9 58 FØ FØ A9 58 4C 9Ø 9338:1C 93 2Ø Ø6 86 A9 ØØ 8D 1F 934Ø:69 Ø3 8D 85 9C A5 3F 8D 71	9550:9C       29       08       D0       37       EE       90       92       93         9558:AD       90       9C       C9       15       D0       08       A9       54         9568:AC       80       90       9C       42       52       0       D4         9568:AC       80       A9       01       8D       B2       9C       AD       87         9578:90       0D       AD       10       D0       09       02       80       22         9588:10       D0       AP       FE       8D       F9       07       A5       15         9588:31       18       69       02       85       3F       A5       40       58         9598:69       00       85       40       AD       92       92       23       37         9598:64       D0       3D       CE       90       9C       AD       90       71         95A8:9C       D0       80       AD       02       D0       38       E9       68         9588:8D       B2       CA       D0       D0       AS       E9       68         9588:8	97E8:9C       DØ       Ø3       4C       3A       93       6Ø       AD       4E         97FØ:93       9C       85       FB       AD       94       9C       85       FF         97F8:FC       AD       95       9C       85       FD       AD       96       A4         98ØØ:9C       85       FE       AD       97       9C       8D       41       27         98ØØ:9C       85       FE       AD       97       9C       8D       41       27         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       40       05       94       4C       53         980:90       9C       8D       3E       Ø3       AD       9B       9C       8D       40       C5         9828:A5       3F       18       69       Ø1       85       40       A5       41       86         9838:40       96       85       41       A5
<b>Color Pad 3.0</b> 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA 93ØØ:9D FØ ØD 6Ø 4C 51 98 4C FE 93Ø8:13 93 4C 3A 93 4C 2E 93 88 931Ø:4C FF 99 AD 7Ø Ø3 C9 57 E5 9318:FØ ØB A9 57 8D 7Ø Ø3 A9 Ø3 932Ø:ØA 8D 71 Ø3 6Ø AD 45 Ø3 55 9328:8D 2Ø DØ 4C 1C 93 AD 7Ø F7 933Ø:Ø3 C9 58 FØ FØ A9 58 4C 9Ø 9338:1C 93 2Ø Ø6 86 A9 ØØ 8D 1F 934Ø:69 Ø3 8D 85 9C A5 3F 8D 71 9348:5E 9C A5 4Ø 8D 5F 9C A5 47	9550:9C       29       08       D0       37       EE       90       90       93         9558:AD       90       9C       C9       15       D0       08       A9       54         9568:AC       80       90       9C       42       95       20       D4         9568:AC       80       A9       01       8D       B2       9C       AD       8F         9576:02       D0       18       69       10       8D       02       D0       F5         9578:90       0D       AD       10       D0       99       02       8D       22         9588:10       D0       AP       FE       8D       F9       07       A5       15         9588:37       18       69       02       85       3F       A5       40       5B         9598:04       D0       3D       CE       90       9C       AD       90       71         95A8:4C       D8       95       20       B6       89       A9       11       55         95A8:4C       D8       92       20       AD       20       38       96       B5 <t< td=""><td>97E8:9C       DØ       Ø3       4C       3A       93       6Ø       AD       4E         97FØ:93       9C       85       FB       AD       94       9C       85       FF         97F8:FC       AD       95       9C       85       FD       AD       96       A4         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         9818:8D       3F       Ø3       AD       9B       9C       8D       40       C5         9828:43       3F       18       69       Ø1       85       3F       A5       D7         9838:40       69       Ø8       84       A5       41       A5       A2       69       Ø2       C2         9848:55       42       A5       40       CD       B4       9C</td></t<>	97E8:9C       DØ       Ø3       4C       3A       93       6Ø       AD       4E         97FØ:93       9C       85       FB       AD       94       9C       85       FF         97F8:FC       AD       95       9C       85       FD       AD       96       A4         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         9818:8D       3F       Ø3       AD       9B       9C       8D       40       C5         9828:43       3F       18       69       Ø1       85       3F       A5       D7         9838:40       69       Ø8       84       A5       41       A5       A2       69       Ø2       C2         9848:55       42       A5       40       CD       B4       9C
<b>Color Pad 3.0</b> 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA 93ØØ:9D FØ ØD 6Ø 4C 51 98 4C FE 93Ø8:13 93 4C 3A 93 4C 2E 93 88 931Ø:4C FF 99 AD 7Ø Ø3 C9 57 E5 9318:FØ ØB A9 57 8D 7Ø Ø3 A9 Ø3 932Ø:ØA 8D 71 Ø3 6Ø AD 45 Ø3 55 9328:8D 2Ø DØ 4C 1C 93 AD 7Ø F7 933Ø:Ø3 C9 58 FØ FØ A9 58 4C 9Ø 9338:1C 93 2Ø Ø6 86 A9 ØØ 8D 1F 934Ø:69 Ø3 8D B5 9C A5 3F 8D 71 9348:5E 9C A5 4Ø 8D 5F 9C A5 47 935Ø:41 8D 6Ø 9C A5 42 8D 61 Ø4 9358:9C A9 Ø3 8D B2 9C A9 14 FØ	9550:9C       29       08       D0       37       EE       90       90       93         9558:AD       90       9C       C9       15       D0       08       A9       54         9568:AC       80       90       9C       42       94       52       20       D4         9568:AC       80       A9       01       8D       B2       9C       AD       8F         9576:02       D0       18       69       10       8D       02       D0       F5         9578:90       0D       AD       10       D0       09       02       8D       22         9588:10       D0       AP       FE       8D       F9       07       A5       15         9588:37       18       69       02       85       3F       A5       40       5B         9598:04       D0       3D       CE       90       9C       AD       90       71         9588:37       18       69       02       D0       8D       90       9C       E5         95A8:4C       D8       95       20       B6       89       A9       11       15 <td>97E8:9C       DØ       Ø3       4C       3A       93       6Ø       AD       4E         97FØ:93       9C       85       FB       AD       94       9C       85       FF         97F8:FC       AD       95       9C       85       FD       AD       96       A4         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         9818:8D       3F       Ø3       AD       9B       9C       8D       40       C5         9820:Ø3       6Ø       AØ       ØØ       85       40       A5       D7       98         9820:A3       53       F       86       ØI       85       3F       D7       98         9820:A3       6Ø       AØ       ØØ       85       44       A5       42       69</td>	97E8:9C       DØ       Ø3       4C       3A       93       6Ø       AD       4E         97FØ:93       9C       85       FB       AD       94       9C       85       FF         97F8:FC       AD       95       9C       85       FD       AD       96       A4         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         9818:8D       3F       Ø3       AD       9B       9C       8D       40       C5         9820:Ø3       6Ø       AØ       ØØ       85       40       A5       D7       98         9820:A3       53       F       86       ØI       85       3F       D7       98         9820:A3       6Ø       AØ       ØØ       85       44       A5       42       69
Color Pad 3.O 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA 93ØØ:9D FØ ØD 6Ø 4C 51 98 4C FE 93Ø8:13 93 4C 3A 93 4C 2E 93 88 931Ø:4C FF 99 AD 7Ø Ø3 C9 57 E5 9318:FØ ØB A9 57 8D 7Ø Ø3 A9 Ø3 9320:ØA 8D 71 Ø3 6Ø AD 45 Ø3 55 9328:8D 2Ø DØ 4C 1C 93 AD 7Ø F7 933Ø:Ø3 C9 58 FØ FØ A9 58 4C 9Ø 9338:1C 93 20 Ø6 86 A9 ØØ 8D 1F 934Ø:69 Ø3 8D B5 9C A5 3F 8D 71 9348:5E 9C A5 4Ø 8D 5F 9C A5 47 935Ø:41 8D 6Ø 9C A5 42 8D 61 Ø4 936Ø:8D 78 69 A9 19 8D 79 69 8F	9550:9C       29       08       D0       37       EE       90       92       93         9558:AD       90       9C       C9       15       D0       08       A9       54         9568:AC       80       90       9C       42       94       95       20       D4         9568:AC       80       A9       01       8D       B2       9C       AD       8F         9576:02       D0       18       69       10       8D       02       D0       F5         9578:90       0D       AD       10       D0       09       02       8D       22         9588:10       D0       AP       FE       8D       90       A5       15         9598:04       D0       3D       CE       90       9C       A5       40       5B         9598:04       D0       3D       CE       90       9C       A5       40       5B         9598:04       D0       3D       CE       90       9C       A5       40       5B         958:05       D0       3D       CE       90       9C       A5       40       90       CE	97E8:9C       DØ       Ø3       4C       3A       93       6Ø       AD       4E         97FØ:93       9C       85       FB       AD       94       9C       85       FF         97F8:FC       AD       95       9C       85       FD       AD       96       A4         98ØØ:9C       85       FE       AD       97       9C       8D       41       27         98Ø8:Ø3       AD       98       9C       8D       42       Ø3       AD       2C         981Ø:99       9C       8D       3E       Ø3       AD       9A       9C       6B         981Ø:99       9C       8D       3E       Ø3       AD       9B       9C       8D       40       C5         982Ø:Ø3       6Ø       AØ       ØØ       B1       3F       91       41       ED         982Ø:Ø3       6Ø       AØ       ØØ       B1       3F       91       41       ED         982Ø:A5       3F       18       69       Ø1       85       3F       A5       D7         983Ø:46       90       85       40       A5       45       CD
Color Pad 3.O 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA 93ØØ:9D FØ ØD 6Ø 4C 51 98 4C FE 93Ø8:13 93 4C 3A 93 4C 2E 93 88 931Ø:4C FF 99 AD 7Ø Ø3 C9 57 E5 9318:FØ ØB A9 57 8D 7Ø Ø3 A9 Ø3 9320:ØA 8D 71 Ø3 6Ø AD 45 Ø3 55 9328:8D 2Ø DØ 4C 1C 93 AD 7Ø F7 933Ø:Ø3 C9 58 FØ FØ A9 58 4C 9Ø 9338:1C 93 2Ø Ø6 86 A9 ØØ 8D 1F 934Ø:69 Ø3 8D B5 9C A5 3F 8D 71 9348:5E 9C A5 4Ø 8D 5F 9C A5 47 935Ø:41 8D 6Ø 9C A5 42 8D 61 Ø4 936Ø:8D 78 69 A9 19 8D 79 69 8F 9360:8D 78 69 A9 19 8D 79 69 8F	9550:9C       29       08       D0       37       EE       90       92       93         9558:AD       90       9C       C9       15       D0       08       A9       54         9568:AD       90       9C       C9       15       D0       08       A9       54         9568:AC       89       A9       01       8D       B2       9C       AD       8F         9576:02       D0       18       69       10       8D       02       D0       F5         9578:90       DD       AD       10       D0       09       02       8D       22         9588:31       D0       A9       FE       8D       90       A5       40       55         9598:04       D0       3D       CE       90       9C       A5       40       55         9598:04       D0       3D       CE       90       9C       A5       40       55         9588:37       D8       90       3D       CE       90       9C       E5         9588:40       BD       2C       D8       B0       D0       A9       F4         9588:	97E8:9C       DØ       Ø3       4C       3A       93       6Ø       AD       4E         97FØ:93       9C       85       FB       AD       94       9C       85       FF         97F8:FC       AD       95       9C       85       FD       AD       96       A4         98ØØ:9C       85       FE       AD       97       9C       8D       41       27         98Ø8:9C       85       FE       AD       97       9C       8D       41       27         98Ø8:9C       85       FE       AD       97       9C       8D       41       27         98Ø8:9D       AD       98       9C       8D       42       Ø3       AD       2C         981Ø:9D       9C       8D       3E       Ø3       AD       98       9C       8D       40       C5         982Ø:Ø3       6Ø       AØ       ØØ       B1       3F       91       41       ED         982Ø:Ø3       6Ø       AØ       ØØ       B1       A5       91       45       57         983Ø:46       6Ø       0Ø       85       40       A5       41
Color Pad 3.O 92EØ:AE 47 Ø3 EØ 8D FØ 1D C9 D1 92E8:D2 FØ 1C C9 5A FØ 1B C9 6A 92FØ:D3 FØ 1A C9 91 FØ 19 C9 68 92F8:11 FØ 15 C9 1D FØ 11 C9 BA 93ØØ:9D FØ ØD 6Ø 4C 51 98 4C FE 93Ø8:13 93 4C 3A 93 4C 2E 93 88 931Ø:4C FF 99 AD 7Ø Ø3 C9 57 E5 9318:FØ ØB A9 57 8D 7Ø Ø3 A9 Ø3 932Ø:ØA 8D 71 Ø3 6Ø AD 45 Ø3 55 9328:8D 2Ø DØ 4C 1C 93 AD 7Ø F7 933Ø:Ø3 C9 58 FØ FØ A9 58 4C 9Ø 9338:1C 93 2Ø Ø6 86 A9 ØØ 8D 1F 934Ø:69 Ø3 8D B5 9C A5 3F 8D 71 9348:5E 9C A5 4Ø 8D 5F 9C A5 47 935Ø:41 8D 6Ø 9C A5 42 8D 61 Ø4 9358:9C A9 Ø3 8D B2 9C A9 14 EØ 936Ø:8D 78 69 A9 19 8D 79 69 8F 936Ø:8D 78 69 A9 19 8D 79 69 8F	9550:9C       29       08       D0       37       EE       90       90       93         9558:AD       90       9C       C9       15       D0       08       A9       54         9568:AD       90       9C       C9       15       D0       08       A9       54         9568:AC       89       A9       01       8D       B2       20       AD         9578:90       ØD       AD       10       D0       09       02       80       22         9588:10       D0       AD       10       D0       09       02       80       22         9588:31       18       69       02       85       3F       A5       40       5B         9598:64       D0       3D       CE       90       9C       AD       90       71         9588:34       D8       20       AB       AP       01       8D       90       2C       29       3F         9588:42       D8       20       AB       AP       01       8D       22       25         9588:10       BD       02       D0       BD       BO       AD       10 <td>97E8:9C       DØ       Ø3       4C       3A       93       6Ø       AD       4E         97FØ:93       9C       85       FB       AD       94       9C       85       FF         97F8:FC       AD       95       9C       85       FD       AD       96       A4         98ØØ:9C       85       FE       AD       97       9C       8D       41       27         98Ø8:03       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:03       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:03       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:03       AD       98       9C       8D       42       Ø3       AD       2C         9818:8D       3F       Ø3       AD       98       9C       8D       40       C5         9820:03       6Ø       AØ       ØØ       85       40       A5       41       18       67         9838:40       06       85       40       A5       42       69       Ø2</td>	97E8:9C       DØ       Ø3       4C       3A       93       6Ø       AD       4E         97FØ:93       9C       85       FB       AD       94       9C       85       FF         97F8:FC       AD       95       9C       85       FD       AD       96       A4         98ØØ:9C       85       FE       AD       97       9C       8D       41       27         98Ø8:03       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:03       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:03       AD       98       9C       8D       42       Ø3       AD       2C         98Ø8:03       AD       98       9C       8D       42       Ø3       AD       2C         9818:8D       3F       Ø3       AD       98       9C       8D       40       C5         9820:03       6Ø       AØ       ØØ       85       40       A5       41       18       67         9838:40       06       85       40       A5       42       69       Ø2
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98B8:00 20 91 B3 20 14 BB 20 48	99FØ:F3	20	CC	FF	A9	Øl	2Ø	C3	1
98CØ:AA B1 8C 6D 9C 98 18 69 FC	99F8:FF	A9	ØD	20	D2	FF	6Ø	2Ø	В
98C8:30 20 D2 FF AC 6D 9C A5 6E	9AØØ:9Ø	9B	C9	91	FØ	ØB	C9	11	Ø
98DØ:1E 2Ø 91 B3 2Ø ØF BC AØ DD	9A08:FØ	ØA	C9	1D	FØ	Ø9	4C	1A	A
98D8:64 A9 ØØ 2Ø 91 B3 A5 61 BØ	9A10:9A	4C	42	9A	4C	6A	9A	4C	2
98EØ:20 2B BA 20 AA B1 8C 6D E8	9A18:92	9A	A9	04	8D	B6	90	A9	D
98E8:9C 8D 6E 9C AD 4F 9C 38 7F	9A20:00	85	3F	A9	20	85	40	A9	1
BF0:ED 6D 9C 8D 4F 9C A8 AD CC	9A28:08	85	41	A9	20	85	42	A9	C.
98F8:50 9C ED 6E 9C 8D 50 9C 76	9A30:00	85	45	A9	04	85	46	A9	1
9900:20 91 B3 20 0F BC A0 0A D6	9A38:01	85	41	A9	04	85	48	40	E
9908:A9 00 20 91 B3 20 14 BB 2F	9A40:B7	9A	A9	10	80	80	90	A9	6
9910:20 AA BI 8C 6D 9C 98 18 24	9A48:00	85	3F	A9	20	85	40	A9	A
9918:69 30 20 D2 FF AC 6D 9C 6/	9A50:40	85	41	A9	21	85	42	A9	T
9920:A9 00 20 91 B3 20 0F BC 3E	9A58:00	85	45	A9	04	85	40	AG	9
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030.6D 00 AD 4E 00 30 ED 6D 03	0170.20	OF	25	202	20	DO	10	A9	D
940.9C 19 69 30 20 D2 FF 19 FD	9470:30	05	11	AS	20	05	40	A9	7
049.20 20 D2 FF 20 CF FF 0D DD	9790.F7	05	41	20	30	05	44	10	D
9546.20 20 D2 FF 20 CF FF 00 BB	DAGD:ET	05	45	A9	07	05	40	AC	D
058.03 AC E2 00 AD 5E 0C CO FE	9A00:DF	05	4/	A9 02	90	DS DS	40	40	A
966.22 DØ F9 20 D2 FF 20 CF BF	9498.38	85	31	20	35	85	10	10	a
968.FF C9 22 FØ 16 8D 5F 9C AL	0779-20	05	41	20	25	05	10	20	50
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978.5E 9C 20 D2 EE 4C 66 99 CA	OABO.F6	85	43	AD	07	85	40	20	C
980.4C E2 99 20 D2 FE 20 CE 6E	9488.01	8D	90	90	80	91	90	10	31
988:FF C9 20 F0 F6 8D 5E 9C 88	9400.00	BI	41	91	3F	AD	90	90	1
990:A9 0D 20 D2 FF A9 91 20 F6	9108.09	28	FØ	013	AC	DF	QA	AD	ET
998:D2 FF A9 16 8D 72 9C A9 F4	9400.86	90	CQ	al	FØ	ØR	CQ	an	a
9AØ:1D 2Ø D2 FF CE 72 9C DØ ØF	9AD8.FØ	94	19	aa	91	35	AD	91	3
9A8:F6 AD 5E 9C 20 D2 FF 20 C4	9AEØ:9C	C9	19	FØ	03	40	F7	9A	D
9BØ:CF FF 8D 5E 9C 2Ø B7 FF 38	9AE8:AD	BG	90	00	03	FØ	as	00	88
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9DØ:20 A5 C6 FØ FC 20 E4 FF 97	9BØ8:69	ØØ	85	45	A5	46	69	D4	E
9D8:20 B7 FF C9 00 D0 12 4C 5A	9B1Ø:85	46	A5	47	18	69	ØØ	85	B
9EØ:97 98 A2 ØØ BD 55 9C 29 FF	9B18:47	A5	48	69	D4	85	48	B1	F
9E8:7F 20 D2 FF E8 E0 09 D0 EB	9B2Ø:47	91	45	A5	45	38	E9	ØØ	4
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MASTER COMPUTERS	9B60:C9	Ø2	FØ	ØA	C9	Ø3	FØ	Ø9	Ø
Now you can write programs and get a	9868:40	86	98	40	14	98	40	/A	C
computer to do just what you want. Get the	9B7019B	4C	20	17	20	10	95	40	04
most out of any computer, and avoid having	9880.20	17	90	40	89	9R	20	F2	C
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	9890:A6	3F	8E	5E	90	AG	40	8E	3
	9898:5F	90	AG	41	8E	60	90	A6	6
Our independent study program allows you	9BAØ:42	8E	61	90	A6	45	8E	62	50
to learn about computers, operations, appli-	9BA8:9C	A6	46	8E	63	9C	A6	47	A
at home. Our instructors provide you with	9BBØ:8E	64	9C	A6	48	8E	65	9C	21
one-on-one counseling	9BB8:60	AD	5E	90	85	3F	AD	5F	Ø
	9BCØ:9C	85	40	AD	6Ø	90	85	41	40
RN EVEN BEFORE YOU DECIDE ON A COMPUTER	9BC8:AD	61	90	85	42	AD	62	90	4:
thing is explained in simple language. You will enjoy learning to	9800:85	45	AD	63	90	85	46	AD	31
computer - EVEN IF YOU DON'T OWN ONE. Learn to program on	9808:04	60	35	20	10	60	90	05	DE
esonal computer, ibw, APPLE, COMMODUNE, THS, and more.	9BE8+3F	A5	40	69	aa	85	40	AS	a
BE YOUR OWN COMPUTER EXPERT	9BFØ:41	18	69	08	85	41	AS	42	31
amming is the best way to learn to use computers, and we can	9BF8:69	ØØ	85	42	A5	45	18	69	95
you the best—and most economical—way to learn programming!	9000:01	85	45	A5	46	69	ØØ	85	71
today for your free information package. No obligation. No	9008:46	A5 .	47	18	69	Øl	-85	47	D
man will call.	9C1Ø:A5	48	69	ØØ	85	48	6Ø	A5	ØI
	9C18:3F	38	E9	Ø8	85	3F	A5	40	71
CENTER FOR COMPUTER EDUCATION	9C20:E9	ØØ	85	4Ø	A5	41	38	E9	81
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ITTUTE 510 S. Avarado Street. Los Angeles. CA 90057-2998 UX INSTITUTE CENTER FOR COMPUTER EDUCATION DEPT 613 IS Avarado Street. Los Angeles. CA 90057-2998 Send me information on how I can learn about computers and pro- gramming at home!	9C30:42 9C38:A5 9C40:38 9C48:00 9C50:00	A5 46 E9 85 ØØ CC	45 E9 Ø1 48 ØØ	38 ØØ 85 6Ø ØØ C2	85 47 ØØ ØØ	46 A5 ØØ C1	A5 48 ØØ D6 ØØ	47 E9 ØØ C1 ØØ	EA DI FI
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D2	Ø1	20	C3	15	9C88:00 00 00 00 00 00 A4 B0 BB
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FØ	60	4C	IA	A1 25	9CA0:00 00 00 00 00 00 00 00 00 00
8D	BG	9C	A9	DC	9CR3:00 00 00 00 00 00 00 00 00 E1
20	85	40	A9	7A	
20	85	42	A9	CA	DACIO Chatab London
Ø4	85	46	A9	76	BASIC Skerch Lodder
Ø4	85	48	4C	E5	JS 100 POKE52, 32: POKE56, 32: CLR
20	BO	90	A9	6/	PH 110 IF (PEEK(49998)=87) OR(
20	85	40	A9	17	PEEK(49998)=88) THEN GO
Ø4	85	46	A9	9E	T014Ø
Ø4	85	48	4C	Al	AJ 120 PRINT"{CLR}LOADING CPBA
8D	B6	9C	A9	9F	SIC.0(3 DOWN)"
3F	85	40	A9	DF	TC.O" 8 1
30	85	42	A9	70	HC 140 IF PEEK(49998)=88 THEN
07	85	40	AG	AD	{SPACE}GOTO19Ø
8D	B6	90	A9	D7	KG 150 PRINT"PLEASE ENTER THE
3F	85	40	A9	Ø8	{SPACE}COLOR PAD"
3F	85	42	A9	50	SF 160 INPUT"FILE NAME (EXCLUD
Ø7	85	46	A9	FA	E CP.)";FLS
Ø7	85	48	A9	C6	ED 170 PRINT (3 DOWN)LOADING C
8D	91	90	AD	3A	0A 180 POKE49998.88 LOAD"CP. "+
40	DE	94	AD	FB	FL\$,8,1
FØ	Ø8	C9	Ø2	ØF	ED 190 POKE49999,87:SYS50000
91	3F	AD	91	33	GP 200 GET INS: IF INS <> "" THEN
ØЗ	4C	F7	9A	DC	GOTO2ØØ
Ø3	FØ	Ø8	C9	88	DX 210 GET INS: IF INS="" THEN
ØØ	91	3F	C8	ØD	SPACE GOTO 210
40	AS	9A	18	A0	AF 230 POKE49998.0
AS	46	69	D4	EG	11 200 FORE45550,0
18	69	ØØ	85	BØ	
D4	85	48	B1	FA	CPBASIC .O
45	38	E9	ØØ	41	
E9	D4	85	46	80	C350:AD 4F C3 D0 03 4C D6 C3 C2
10	85	4/	A5	FB	C360:8D 31 C4 AD 21 DØ 8D 32 Ø8
29	DØ	12	190	FC	C368:C4 A9 68 85 FB A9 42 85 B2
EE	91	90	AD	E3	C370:FC A9 00 85 FD A9 20 85 95
DØ	Ø3	4C	80	ØA	C378:FE A9 A8 8D 2F C4 A9 61 19
				28	C380:8D 30 C4 20 00 C4 AD 18 FB
C9	Øl	FØ	ØB	no	
C9 C9	Ø1 Ø3	FØ FØ	ØB Ø9	Ø1	C300.D0 09 00 0D 10 D0 AD 11 05
C9 C9 74	Ø1 Ø3 9B	FØ FØ 4C	ØB Ø9 7A	Ø1 C4	C390:DØ Ø9 20 8D 11 DØ AD 16 DC C398:DØ Ø9 10 8D 16 DØ A9 00 FC
C9 C9 74 20	Ø1 Ø3 9B E2	FØ FØ 4C 9B	ØB Ø9 7A 4C	Ø1 C4 62	C390:D0 09 20 8D 11 D0 AD 16 DC C398:D0 09 10 8D 16 D0 A9 00 EC C3A0:85 FD A9 04 85 FE A9 90 EB
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C9 C9 74 20 9C 89 20	Ø1 Ø3 9B E2 4C 9B B9	FØ FØ 4C 9B 89 2Ø 9B	ØB Ø9 7A 4C 9B E2 6Ø	Ø1 C4 62 95 C3 C1	C390:D0 09 20 8D 11 D0 AD 16 DC C398:D0 09 10 8D 16 D0 A9 00 EC C388:B0 09 10 8D 16 D0 A9 00 EC C3A0:85 FD A9 04 85 FE A9 90 EB C3A8:8D 2F C4 A9 65 8D 30 C4 7C C3B0:20 00 C4 A9 00 85 FD A9 37
C9 C9 74 20 9C 89 20 9C	Ø1 Ø3 9B E2 4C 9B B9 A6	FØ FØ 9B 89 20 9B 40	ØB Ø9 7A 4C 9B E2 6Ø 8E	Ø1 C4 62 95 C3 C1 31	C390:D0 09 20 8D 11 D0 AD 16 DC C398:D0 09 10 8D 16 D0 A9 00 EC C388:B0 09 10 8D 16 D0 A9 00 EC C3A0:85 FD A9 04 85 FE A9 90 EB C3A8:8D 2F C4 A9 65 8D 30 C4 7C C3B0:20 00 C4 A9 00 85 FD A9 37 C3B8:D8 85 FE A9 78 8D 2F C4 A5
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C9 C9 74 20 9C 92 92 92 88 63 48 50 42	Ø1 Ø3 9B 24C 9B 89 A6 60 45 9C 8E 3F 9C AD	FØ FØ 9B 9B 2Ø 9B 4Ø 8E 65 AD 85 62	ØB Ø9 7A 9B 22 6Ø 8E 6Ø 8E 62 47 9C 5F 41 9C	Ø1 C4 62 95 C3 C1 31 65 5C AB 2A Ø5 4C 45	C390:D0       09       20       8D       11       D0       AD       16       DC         C398:D0       09       10       8D       16       D0       A9       00       EC         C3A0:85       FD       A9       04       85       FE       A9       90       EB         C3A8:8D       2F       C4       A9       65       8D       30       C4       7C         C3B8:20       00       C4       A9       60       85       FD       A9       37         C3B8:20       00       C4       A9       78       8D       2F       C4       A5         C3C0:A9       69       8D       30       C4       20       00       C4       97         C3C8:AD       90       65       4A       4A       4A       8D       3A         C3D0:20       D0       8D       21       D0       60       A9       57       13         C3D8:8D       4F       C3       AD       18       D0       29       F7       9C         C3E8:8D       11       D0       AD       16       D0       29       EF       A6 <t< td=""></t<>
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"Math Draw" is a menu-driven program that can create graphic webs, seashells, and wheels.

# Math Draw For Amiga

Create complex geometric patterns with this menu-driven graphics program for the Amiga. When you've finished, you can save your picture as an IFF graphics file for use with Deluxe Paint II and other Amiga paint programs. Requires 512K.

"Math Draw" lets you create intricate geometric designs and patterns, even if you don't understand the mathematics behind them. Use the special menu to select from a palette of 32 different colors and several different drawing options. When you've finished your picture, you can save it in IFF ILBM format, which is used by most paint programs.

Math Draw is written in Amiga Basic. Type it in and save it to disk. When you're ready to use the program, load and run it.

Math Draw starts drawing immediately. After you've seen the pattern it draws, activate the Amiga menus by pressing the right mouse button. Math Draw adds an Option menu to Amiga Basic's menus. While holding the right button, slide the mouse pointer up to the word Option to see the new menu options. To choose an option, release the button while pointing to the desired option. Here is a list of the new options:

Color Control. When you activate

#### Rhett Anderson

this function, you'll be presented with a chart which shows 32 colors, each labeled with a number. Choose a new drawing color by entering a number. The 32 colors are fixed; they cannot be changed from within the program. If you wish to change the colors, you'll need to modify the numbers in the first set of DATA statements in the program.

• Radius Control. Math Draw works by moving an imaginary circle inside or outside another imaginary circle. The drawing pen is "attached" to the edge of the moving circle. You change the size of these circles (and thus the scale of your drawing) by choosing the Radius Control menu selection. You'll be asked for new radius values for the circles.

• Growth Control. If you choose, the imaginary circles used to move the drawing pen can grow at a fixed rate. This feature can be used to create spirals and shell designs. Normally, you'll want to keep this parameter at its default value, 0. A reasonable growth rate is 0.01. A negative number will make the circles shrink.

• **Type Control.** This option lets you choose between drawing epicycloids and hypocycloids. In an epicycloid, the moving circle moves around the outside of the stationary circle. In a hypocycloid, the moving circle moves around the inside of the stationary one.

• Pause. This option halts drawing. After selecting this option, the drawing pen freezes. This is useful when you want to make several changes to the pen at once. For instance, you may want to change the pen color and the outer radius at the same time. Select Pause and then use the menu options to select the new color and the new radii. Continue is used to start the pen moving again.

Continue. Ends Pause mode.

• Save Picture. Saves your picture as an IFF file compatible with *Deluxe Paint II*, *Digi-Paint*, *Aegis Images*, and other Amiga paint programs. Since the save routine is written entirely in BASIC, it takes a few minutes to save a picture. Be sure not to drop any menus down while the picture is being saved, or else you'll see ghosts of the menus in your saved pictures.

• Clear. Clears the screen. Since your work could be lost if you accidently select this option, you'll be asked whether you're sure you want to clear the screen.

• Quit. Exits to BASIC cleanly. You should always use this menu option to stop the program. If you quit another way, type MENU RESET to disable the Math Draw menu and SCREEN CLOSE 1 to free up the screen created by Math Draw. Since

your work could be lost if you select this option accidently, you'll be asked whether you're sure you want to quit.

#### Your First Drawing

Let's create a picture. First, select Pause to freeze the drawing pen. Now select Clear to erase any picture that might be on the screen. Select Color Control and pick a color. Now select Radius Control. Type 30 at the first prompt, 8 at the second. Select Continue, and a pattern will be drawn. When the pattern begins to repeat, select Pause again and then change the color. Change the radii to 50 and 10. Repeat this process until you're satisfied with your picture. If you wish to save it, select the Save option.

When you're ready for a new effect, turn on the Growth control. A moderate value for Growth is 0.01, but try values like 0.001, 1, and 10 to see how Growth works.

The following table has six sets of parameters that produce attractive designs. After seeing what they do, try combining them.

Radius 1	Radius 2	Growth	Туре
120	35	0	2
75	25	1	1
10	45	0	2
80	46	0	2
30	16	0	1
40	16	0	1

After you have saved a couple of pictures, go to a paint program and fill in different areas with different colors. From within the paint program, you can modify the palette colors if you like.

#### Math Draw

For instructions on entering this program, please reter to "COMPUTEI's Guide to Typing In Programs" elsewhere in this issue. Math Draw4 Copyright 19884 'COMPUTE! Publications, Inc.4 'All Rights Reserved4 CLEAR 327674 DEFSNG a-z : DEFDBL g,h,theta4 TRUE% = -1 : FALSE% =0 : PI = 3.141593 : speed = PI/1004 DIM cmap\$(31)4 coLours:4 DATA 0,0,0, 10,10,10, 6,0,0, 9,0,0, 12,0,0, 15, 0,04 DATA 0,6,0, 0,9,0, 0,12,0, 0,15,0, 0,0,6, 0,0,9 DATA Ø, Ø, 12, Ø, Ø, 15, 4, 4, Ø, 7, 7, Ø, 10, 10, Ø, 13, 13,04 DATA 4,0,4, 7,0,7, 10,0,10, 13,0,13, 6,3,0, 8,4 ,04 DATA 10,5,0, 12,6,0, 4,8,12, 8,4,12, 4,12,8, 12 ,8,44 DATA 12,4,8, 8,12,44 ON BREAK GOSUB NoMore4 BREAK ON4 SCREEN 1,320,200,5,1:WINDOW 3,"",(0,0)-(311,186) ,16,1:WINDOW OUTPUT 34 RESTORE coLours4 FOR 1%=0 TO 314 READ r,g,b4 PALETTE 1%, r/15, g/15, b/154 cmap\$(i%)=CHR\$(r*17)+CHR\$(g*17)+CHR\$(b*17)+ NEXT i% MENU 3,0,1,"Options"4 MENU 3,1,1, "Color Control"+

```
MENU 3,2,1,"Radius Control"
MENU 3,3,1,"Growth Control"
MENU 3,4,1,"Type Control"
MENU 3,5,1,"Save Picture"
MENU 3,6,1, "Pause"4
MENU 3,7,1, "Continue"4
MENU 3,8,1,"Clear"4
MENU 3,9,1,"Quit"4
ON MENU GOSUB checkmenu4
a=100:b=20:type%=1:coLour=10:deLtaA=0:deLtaB=04
starting = TRUE% : pause = FALSE% +
nextpoint:4
MENU ON4
WHILE pause:WEND4
MENU STOP4
 g = (a+b)/b : h = (a-b)/b4
 theta = theta+speed4
 a = a + deLtaA4
 b = b + deLtaB +
 oLdx = x: oLdy = y4
 IF type% = 1 THEN GOSUB EpicycLoid ELSE GOSUB H
ypocycLoid4
IF NOT starting THEN LINE (160+oLdx, 100+oLdy*.8
8)-(160+x,100+y*.88), coLour4
 starting = FALSE%4
GOTO nextpoint4
EpicycLoid:4
 x = (a+b)*COS(theta)-b*COS(g*theta) + y = (a+b)*SIN(theta)-b*SIN(g*theta)+
RETURN4
HypocycLoid:4
 x=(a-b)*COS(theta)+b*COS(h*theta)+
 y=(a-b)*SIN(theta)-b*SIN(h*theta)4
RETURN 4
checkmenu:4
 menuid=MENU(Ø) 4
 menuitem=MENU(1) 4
 IF menuid=3 THEN4
  IF menuitem = 1 THEN4
WINDOW 4,"",(Ø,0)-(260,82),18,1:WINDOW OUTPUT
 44
   FOR xx%=Ø TO 74
    FOR YY%=Ø TO 34
      LINE (xx%*32+16,yy%*16+8)-(xx%*32+24,yy%*16
+16), xx%+yy%*8, bf4
      LOCATE yy8*2+2, xx8*4+14
      PRINT RIGHT$(STR$(xx%+yy%*8),2);4
    NEXT YY84
   NEXT XX&4
   LOCATE 10,44
   INPUT "Choose a Color"; coLour : coLour=coLour
 MOD 324
   WINDOW OUTPUT 34
   WINDOW CLOSE 44
  END IF4
  IF menuitem = 2 THEN4
   WINDOW 4, "", (0,0)-(280,65), 18,1:WINDOW OUTPUT
 44
   PRINT "Current Radius": PRINT" of Stationary C
ircle:";a4
   INPUT "New Radius"; a4
   PRINT "Current Radius": PRINT" of Moving Circl
e:";b4
   INPUT "New Radius"; b4
   a=ABS(a):b=ABS(b)4
   IF a=Ø THEN a=14
   IF b=Ø THEN b=14
   starting = TRUE% <
   WINDOW OUTPUT 34
   WINDOW CLOSE 44
  END IF4
  IF menuitem = 3 THEN4
WINDOW 4,"",(0,0)-(300,50),18,1:WINDOW OUTPUT
 44
   PRINT "Current Growth Rate:";deLtaA4
INPUT "New Rate";deLtaA:IF a<>Ø THEN deLtaB=d
eLtaA*b/a4
   starting = TRUE%4
   WINDOW OUTPUT 34
   WINDOW CLOSE 44
  END IF4
  IF menuitem = 4 THEN4
```

```
WINDOW 4, "", (Ø, Ø)-(250, 50), 18, 1: WINDOW OUTPUT
 44
  PRINT "Choose a Type:"4
  IF type% = 2 THEN speed = PI/50 ELSE speed =
PI/1004
   starting = TRUE%4
  WINDOW OUTPUT 34
  WINDOW CLOSE 44
  END IF4
  IF menuitem = 5 THEN4
   WINDOW 4, "", (0,0)-(300,40),18,1:WINDOW OUTPUT
 44
  INPUT "Filename For Save"; fiL$4
   WINDOW OUTPUT 3 : WINDOW CLOSE 44
  IF fil$<>"" THEN GOSUB savepic4
  END IF4
  IF menuitem = 6 THEN pause = TRUE%4
  IF menuitem = 7 THEN pause = FALSE%4
 IF menuitem = 8 THEN4
  WINDOW 4, "", (0,0)-(250,50), 18,1:WINDOW OUTPUT
 44
  PRINT "Are You Sure You Want": PRINT" To Erase
 the Screen?"4
   INPUT a$4
   WINDOW OUTPUT 3 : WINDOW CLOSE 44
  IF UCASE$(LEFT$(a$,1))="Y" THEN CLS : startin
g = TRUE
  END IF4
  IF menuitem = 9 THEN4
   WINDOW 4, "", (0,0)-(250,50), 18,1 : WINDOW OUTP
117 44
  PRINT "Are You Sure You Want To Quit?"4
   INPUT a$4
   IF UCASE$(LEFT$(a$,1))="Y" THEN GOTO NoMore4
   WINDOW OUTPUT 3 : WINDOW CLOSE 4 4
  END TF 4
 END IF 4
RETURN4
```

```
savepic:4
 rastport& = WINDOW(8) 4
 bitmap& = PEEKL(rastport&+4)4
 topLine = Ø4
 topadd = topLine * 404
 FOR i% = Ø TO 44
  pLane&(i%) = PEEKL(bitmap& + 8 + i%*4)+topadd*
 NEXT4
 bottomLine = 2004
 Lines = bottomLine - topLine4
 OPEN fil$ FOR OUTPUT AS 14
 PRINT#1,"FORM";a$;"ILBMBMHD";MKL$(20);4
 PRINT#1, MKI$(320); MKI$(Lines); MKL$(0); 4
 PRINT#1, CHR$(5); MKI$(Ø); CHR$(Ø); 4
 PRINT#1, MKI$(Ø); CHR$(10); CHR$(11); 4
 PRINT#1, MKI$(320); MKI$(200); 4
 PRINT#1, "CMAP"; MKL$(96); 4
 FOR i% = Ø TO 314
  PRINT#1, cmap$(i%);4
 NEXT4
 PRINT#1, "BODY"; MKL$(Lines * 40 * 5); *
 FOR is = 1 TO Lines4
  FOR p% = Ø TO 44
   FOR 18 = Ø TO 39 STEP 44
    PRINT#1, MKL$(PEEKL(pLane&(p%) + j%));4
   NEXT j84
   pLane\&(p\&) = pLane\&(p\&) + 404
  NEXT p%4
 NEXT 184
 CLOSE4
 PALETTE Ø,1,1,1:SOUND 440,20,200,0:PALETTE Ø,0,
0,04
RETURN4
NoMore:4
WINDOW CLOSE 3 : WINDOW CLOSE 4 : SCREEN CLOSE
14
MENU RESET4
MENU OFF4
END4
                                                 0
```

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# Catalog To Text File

Jason Fuller

Apple II users can turn disk directories into text files with this BASIC program. Saved as text, disk catalogs can be edited, and then printed with a word processor or your own BASIC program. Works with DOS 3.3 disks only.

Unlike many computers, the Apple II doesn't provide a way to make text files from disk catalogs. "Catalog to Text File" is a BASIC program that solves this problem. When run, Catalog to Text File reads in a disk's directory and creates a text file that you can print and/or edit using almost any word processor.

By modifying the program to suit your needs, Catalog to Text File can be used to read the number of free sectors on a disk, to count the number of files on a particular volume, or to print out selected filenames in an easy-to-read format. This program works with unprotected DOS 3.3 disks only.

#### **Getting Started**

To begin, type in Programs 1 and 2 using the "Automatic Proofreader" program found elsewhere in this issue. When you're done, be sure to save a copy of each program.

Next, load and run Program 1. Program 1 writes a short machine language file to disk. This file is BLOADed into memory by Program 2, so it is important that the machine language file and Program 2 are saved to the same disk.

#### Creating A Text File

Load and run Program 2. The program prompts you for the volume number (or name) of a disk. Enter anything you wish, including letters. The characters that you enter become part of the filename used to save the disk's catalog.

When the computer prompts you, insert the disk that you wish to catalog and press Return. After the computer has read the catalog into memory, you are asked to insert the destination disk. Insert a disk and press Return. The catalog is written to disk with the filename CAT-VOL followed by the volume name that you entered earlier.

#### Using The Text File

The text file created by this program can be loaded by most word processors. From there you may edit it, reformat it, and print it out. When viewed, the catalog text file appears in the following format:

Volume number, as entered by the user Total number of used sectors Total number of files on the disk Filenames

#### Filenames The word *END*

It is possible to use this text file from within your own BASIC programs. To read the file, use the following subroutine:

58 1000 TEXT : HOME 8F 1010 INPUT "WHAT VOLUME NUMBE R TO LOAD ";VOL\$ 20 1020 D\$ = CHR\$ (4): REM CTRL-D IC 1030 PRINT D\$; "OPEN CAT-VOL " ; VOL\$ BI 1040 PRINT D\$; "READ CAT-VOL " ; VOL\$ 77 1050 INPUT VOL\$ 53 1060 INPUT USED 45 1070 INPUT NUM

- 11 1080 FOR X = 1 TO NUM 2E 1090 INPUT NAME\$ (X)
- 7C 1100 NEXT X
- CJ 1110 PRINT D\$; "CLOSE CAT-VOL "; VOL\$
- DB 112Ø RETURN

If you would like see the catalog text file sent to the screen, add these lines to the subroutine above.

#F 100 DIM NAME\$ (75): GOSUB 1000 A2 110 FOR X = 1 TO NUM #7 120 PRINT NAME\$(X) 68 130 NEXT X 91 14Ø END

#### Catalog To Text File

For instructions on entering these programs, please refer to "COMPUTEI's Guide to Typing In Programs" elsewhere in this issue.

Program 1: ML File Creator

```
5F 1Ø T = Ø
52 2Ø D$ = CHR$ (4)
20 30 FOR X = 1 TO 52
75 4Ø READ D
4C 5Ø T = T + D
BC 60 POKE 767 + X, D
EN 70 NEXT X
BE BØ IF T < > 1717 THEN PRINT "
     ERROR IN DATA STATEMENTS.
     PLEASE CHECK. ": END
A9 90 PRINT D$; "BSAVE IOB, A 768,
     L 53"
89 100 END
29 200 DATA 169, 3, 160, 16, 32, 217,
      3,96,0,0
70 210 DATA Ø,Ø,Ø,Ø,Ø,Ø,1,96,1,Ø
      ,17,15
C# 220 DATA 48,3,0,32,0,0,1,0,25
      4,96,1
54 230 DATA Ø,Ø,Ø,Ø,Ø,Ø,Ø,Ø
F1 24Ø DATA Ø,Ø,Ø,Ø,Ø,Ø,Ø,Ø,Ø,1,23
      9,216
Program 2: Main Program
₩ 10 REM COPYRIGHT 1988 COMPUTE
      PUBLICATIONS, INC.
69 20 REM ALL RIGHTS RESERVED.
C7 100 ONERR GOTO 1600
CA 105 HIMEM: 8192
54 11Ø D$ = CHR$ (4)
```

- 58 120 TEXT : HOME
- BI 13Ø IF PEEK (768) = 169 THEN 150

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64 140 PRINT D\$; "BLOAD IOB, D1" FF 150 INVERSE : FOR X = 1 TO 6: FOR Y = 1 TO 40: PRINT ";: NEXT : NEXT 4A 16Ø A\$ = "PRINT CATALOG TO A TEXT FILE": GOSUB 1200 72 170 VTAB 2: HTAB HT: PRINT A\$ 10 180 A\$ = "COPYRIGHT '88 COMPU TE!": GOSUB 1200: INVERSE 17 190 VTAB 4: HTAB HT: PRINT A\$ 10 200 POKE 34,8 DB 210 DIM FE\$(100), NB\$(35) C9 22Ø NORMAL A6 230 HOME : PRINT "WHAT IS VOL UME NUMBER OF THE DISK YO U": PRINT "WANT CATALOGUE D?": 61 240 INPUT ""; VOL\$ CA 250 IF LEN (VOL\$) > 24 THEN 2 30 33 26Ø INVERSE F4 27Ø HOME : PRINT "DISK VOLUME "; VOL\$ 05 280 NORMAL D6 290 PRINT : PRINT : PRINT : P RINT "IS THIS CORRECT?"; 54 300 GET S\$ 06 310 IF S\$ = "Y" DR S\$ = "y" T **HEN 340** 28 320 IF S\$ = "N" OR S\$ = "n" T **HEN 230** 93 33Ø GOTO 3ØØ 40 340 HOME : PRINT "PLEASE INSE RT": PRINT : PRINT "DISK VOLUME "; VOL\$: PRINT : PR INT "AND PRESS RETURN. "; D1 350 GOSUB 1400 A\$ = "PLEASE WAIT. READIN C9 400 G CATALOG TO MEMORY": GOS **UB 1200** 60 410 HOME : HTAB HT: PRINT A\$ 14 42Ø SS = Ø:SE = 15:TR = 17:BU = 8192:0P = 1: GOSUB 150 ø EI 430 STA = 12046:EN = 12256:LL = Ø:KK = Ø:USED = Ø:NB\$ = "":FE\$ = "" 9E 44Ø FOR X = STA TO EN STEP 35 B# 45Ø IF PEEK (X) = Ø THEN KK = LL: GOTO 700: REM UNUSE D FILE 44 46Ø IF PEEK (X - 3) = 255 THE N 560: REM DELETED FILE 50 470 E = PEEK (X - 1): GOSUB 1 ØØØ: REM TYPE CD 480 LY = PEEK (X + 30): GOSUB 1300:FE\$(LL) = FE\$(LL) + FINS:FES(LL) = FES(LL) + "-": REM LENGTH OF FILE IN SECTORS 16 490 USED = USED + LY: REM CO UNTER FOR SECTORS USED 74 500 NB\$ = "" E5 510 FOR C = X TO X + 29: IF P EEK (C) > Ø AND PEEK (C) < = 31 OR PEEK (C) > 127
AND PEEK (C) < = 159 THEN
NB\$ = NB\$ + " ": GOTO 53</pre> ø 30 520 NB\$ = NB\$ + CHR\$ ( PEEK ( C)) E4 53Ø NEXT C 6E 54Ø FE\$(LL) = FE\$(LL) + NB\$ 77 550 LL = LL + 1 75 56Ø NEXT X 49 570 STA = EN - 466:EN = STA + 210 24 58Ø GOTO 44Ø BF 700 HOME : PRINT "PLEASE INSE RT A DISK WITH WHICH" PRINT "YOU WANT TO STORE 710 THE TEXT FILE AND" DB 720 PRINT "PRESS RETURN";

D1 73Ø GOSUB 14ØØ EF 740 PRINT : PRINT D\$ 40 750 PRINT D\$; "OPEN CAT-VOL "; VOL\$ 1A 760 PRINT D\$; "WRITE CAT-VOL " : VOLS CJ 77Ø PRINT VOL\$ BI 780 PRINT USED 50 790 PRINT KK 94 800 FOR X = 0 TO (LL - 1): PR INT FE\$(X): NEXT PRINT "*END*" B9 81Ø 12 820 PRINT D\$; "CLOSE CAT-VOL " : VOL\$ TEXT : HOME : PRINT "DONE 28 830 ": END E5 998 : 78 999 REM TYPE OF FILE 85 1000 IF E = 0 OR E = 128 THEN FE\$(LL) = "T-": GOTO 10 80 09 1010 IF E = 1 OR E = 129 THEN FE\$(LL) = "I-": GOTO 10 80 99 1020 IF E = 2 OR E = 130 THEN FE\$(LL) = "A-": GOTO 10 BØ CO 1030 IF E = 4 OR E = 132 THEN FE\$(LL) = "B-": GOTO 10 80 EC 1040 IF E = 8 OR E = 136 THEN FE\$(LL) = "S-": GOTO 10 RØ 80 1050 IF E = 10 OR E = 144 THE N FE\$(LL) = "R-": GOTO 1 080 05 1060 IF E = 20 OR E = 160 THE N FE\$(LL) = "A1-": GOTO 1080 9F 1070 IF E = 40 OR E = 192 THE N FE\$(LL) = "B1-": GOTO 1080 FI 1080 RETURN 6D 1198 : 64 1199 REM CENTER TEXT 5C 1200 HT = ((40 - LEN (A\$)) / 2) + 1 41 121Ø NORMAL DD 1220 RETURN 6F 1298 : CA 1299 REM LENGTH OF FILE 3C 1300 GG\$ = STR\$ (LY) 7A 131Ø IF LEN (GG\$) = 1 THEN FI N\$ = "ØØ" + STR\$ (LY): R ETURN CC 1320 IF LEN (GG\$) = 2 THEN FI N\$ = "Ø" + STR\$ (LY): RE TURN EJ 133Ø RETURN 71 1398 : 18 1399 REM GET RETURN 50 1400 GET S\$ 28 1410 IF 5\$ < > CHR\$ (13) THEN 1400 EI 1420 RETURN 73 1498 : #9 1499 REM ACCESS DISK BA 1500 FOR SA = SS TO SE 99 1510 POKE 788, TR: POKE 789, SA : POKE 796, OP 39 1520 HB = INT (BU / 256):LB = BU - (HB # 256) 86 1530 POKE 792, LB: POKE 793, HB F7 1540 CALL 768:BU = BU + 256: NEXT SA EF 155Ø RETURN 75 1598 : EI 1599 REM ERROR ROUTINE DC 1600 EC = PEEK (222) 70 1610 LN = PEEK (218) + PEEK ( 219) \$ 256 AD 1620 POKE 216,0 A5 1630 PRINT D\$



# COMPUTE!'s Guide To Typing In Programs

Computers are precise—type the program *exactly* as listed, including necessary punctuation and symbols, except for special characters noted below. We have provided a special listing convention as well as a set of programs to check your typing—"The Automatic Proofreader."

Programs for the IBM and those in ST BASIC for Atari ST models should be typed exactly as listed; no special characters are used. Programs for Commodore, Apple, and Atari 400/800/ XL/XE computers may contain some hard-to-read special characters, so we have a listing system that indicates these control characters. You will find these characters in curly braces; do not type the braces. For example, {CLEAR} or {CLR} instructs you to type the character which clears the screen on the Atari or Commodore machines. A complete list of these symbols is shown in the tables below. For Commodore, Apple, and Atari, a single symbol by itself within curly braces is a control key or graphics key. If you see {A}, hold down the CONTROL key and press A. This will produce a reverse video character on the Commodore (in quote mode), a graphics character on the Atari, and an invisible control character on the Apple.

For Commodore computers, graphics characters entered with the Commodore logo key are enclosed in a special bracket: [<A>]. In this case, you would hold down the Commodore logo key as you type A. Our Commodore listings are in uppercase, so shifted symbols are underlined. A graphics heart symbol (SHIFT-S) would be listed as <u>S</u>. One exception is {SHIFT-SPACE}. When you see this, hold down SHIFT and press the space bar. If a number precedes a symbol, repeat the character the indicated number of times. For example, {5 RIGHT}, {6 S}, and [<8 Q>], mean, respectively, that you should enter five cursor rights, six shifted S's, and eight Commodore-Q's. On the Atari, inverse characters (white on black) should be entered with the inverse vid-

#### Atari 400/800/XL/XE

then you see	Туре	See	
(CLEAR)	ESC SHIFT <	15	Clear Screen
(UP)	ESC CTRL -	+	Cursor Up
(DOWN)	ESC CTRL =	+	Cursor Down
(LEFT)	ESC CTRL +	*	Cursor Left
(RIGHT)	ESC CTRL #	+	Cursor Right
(BACK S)	ESC DELETE	4	Backspace
(DELETE)	ESC CTRL DELETE	51	Delete character
(INSERT)	ESC CTRL INSERT	L	Insert character
(DEL LINE)	ESC SHIFT DELETE	0	Delete line
(INS LINE)	ESC SHIFT INSERT		Insert line
(TAB)	ESC TAB	•	TAB key
(CLR TAB)	ESC CTRL TAB	G	Clear tab
(SET TAB)	ESC SHIFT TAB	Ð	Set tab stop
(BELL)	ESC CTRL 2	53	Ring buzzer
(ESC)	ESC ESC	Ę.	ESCape key

#### Commodore PET/CBM/VIC/64/128/16/+4

When You Read:	Press:	See:	When You Read:	Press			See:
(CIR)	SHIFT CLR/HOME	-	E 1 J	СОММО	DORE	1	
(HOME)	CLR/HOME	-	E 1 3	COMMO	DORE	2	
(IIP)	SHIFT   CRSR ↓		Fil	СОММО	DORE	3	
(DOWN)	↑ CRSR ↓	a	EAS	СОММО	DORE	4	
(LEFT)	SHIFT ← CRSR →		E s S	СОММО	DORE	5	
{RIGHT}	$\leftarrow \text{CRSR} \rightarrow$	]	E 6 3	СОММО	DORE	6	
(RVS)	CTRL 9	R	R 7 S	СОММО	DORE	7	G
{OFF}	CTRL 0		E s J	СОММО	DORE	8	
{BLK}	CTRL 1		(FI)		f1		
(WHT)	CTRL 2	E	{ F2 }	SHIFT	f1		
(RED)	CTRL 3	£	{ F3 }		f3		
(CYN)	CTRL 4		{ F4 }	SHIFT	f3		
{PUR}	CTRL 5		( F5 )		f5		
(GRN)	CTRL 6	Ť	{ F6 }	SHIFT	f5		
(BLU)	CTRL 7	÷	{ F7 }		f7		
(YEL)	CTRL 8	Π	{ F8 }	SHIFT	f7		
(1444)			4				*

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eo key (Atari logo key on 400/800 models).

Whenever more than two spaces appear in a row, they are listed in a special format. For example, {6 SPACES} means press the space bar six times. Our Commodore listings never leave a single space at the end of a line, instead moving it to the next printed line as {SPACE}.

Amiga program listings and Atari ST program listings in GFA BASIC contain only one special character, the left arrow ( $\leftarrow$ ) symbol. This character marks the end of each program line. Wherever you see a left arrow, press RETURN to enter that line into memory. (For the Amiga, you can also enter the line simply by moving the cursor off the line.) Don't try to type in the left arrow symbol; it's there only as a marker to indicate where each program line ends.

#### The Automatic Proofreader

Type in the appropriate program listed below, then save it for future use. The Commodore Proofreader works on the Commodore 128, 64, Plus/4, 16, and VIC-20. Don't omit any lines, even if they contain unfamiliar commands or you think they don't apply to your computer. When you run the program, it installs a machine language program in memory and erases its BASIC portion automatically (so be sure to save several copies before running the program for the first time). If you're using a Commodore 128, Plus/4 or 16, do not use any GRAPHIC commands while the Proofreader is active. You should disable the Commodore Proofreader before running any other program. To do this, either turn the computer off and on or enter SYS 64738 (for the 64), SYS 65341 (128), SYS 64802 (VIC-20), or SYS 65526 (Plus/4 or 16). To reenable the Proofreader, reload the program and run it as usual. Unlike the original VIC/64 Proofreader, this version works the same with disk or tape.

The IBM Proofreader is a BASIC program that simulates the IBM BASIC line editor, letting you enter, edit, list, save, and load programs that you type. Type RUN to activate. Be sure to leave Caps Lock on, except when typing lowercase characters.

On the Atari, run the Proofreader to activate it (the Proofreader remains active in memory as a machine language program); you must then enter NEW to erase the BASIC loader. Pressing SYSTEM RESET deactivates the Atari Proofreader; enter PRINT USR (1536) to reenable it.

The Apple Proofreader erases the BASIC portion of itself after you run it, leaving only the machine language portion in memory. It works with either DOS 3.3 or ProDOS. Disable the Apple Proofreader by pressing CTRL-RESET before running another BASIC program.

Once the Proofreader is active, try typing in a line. As soon as you press RETURN, either a hexadecimal number (on the Apple) or a pair of letters (on the Commodore, Atari, or IBM) appears. The number or pair of letters is called a *checksum*.

Compare the value displayed on the screen by the Proofreader with the checksum printed in the program listing in the magazine. The checksum is given to the left of each line number. Just type in the program a line at a time (without the printed checksum), press RETURN or Enter, and compare the checksums. If they match, go on to the next line. If not, check your typing; you've made a mistake. Because of the checksum method used, do not type abbreviations, such as ? for PRINT. On the Atari and Apple Proofreaders, spaces are not counted as part of the checksum, so be sure you type the right number of spaces between quote marks. The Atari Proofreader does not check to see that you've typed the characters in the right order, so if characters are transposed, the checksum still matches the listing. The Commodore Proofreader catches transposition errors and ignores spaces unless they're enclosed in quotation marks. The IBM Proofreader detects errors in spacing and transposition.

#### **IBM Proofreader Commands**

Since the IBM Proofreader replaces the computer's normal BASIC line editor, it has to include many of the direct-mode IBM BASIC commands. The syntax is identical to IBM BASIC. Commands simulated are LIST, LLIST, NEW, FILES, SAVE, and LOAD. When listing your program, press any key (except Ctrl-Break) to stop the listing. If you enter NEW, the Proofreader prompts you to press Y to be especially sure you mean yes.

Two new commands are BASIC and CHECK. BASIC exits the Proofreader back to IBM BASIC, leaving the Proofreader in memory. CHECK works just like LIST, but shows the checksums along with the listing. After you have typed in a program, save it to disk. Then exit the Proofreader with the BASIC command, and load the program as usual (this replaces the Proofreader in memory). You can now run the program, but you may want to resave it to disk. This will shorten it on disk and make it load faster, but it can no longer be edited with the Proofreader. If you want to convert an existing BASIC program to Proofreader format, save it to disk with SAVE "filename", A.

#### Program 1: Atari Proofreader By Charles Brannon

100	GRAPHICS Ø
110	
110	FUR 1=1336 10 1/00:RE
	AD A: POKE I. A: CK=CK+A
	NEVT T
	INCAL I
120	IF CK<>19072 THEN ? "
	Frank in DATA Chakana
	error in DMIM Stateme
	nts. Check Typing.":
	CND
	END
130	A=USR(1536)
100	D . D HAutsautia Deset
140	f if "Mutomatic Proot
	reader Now Activated.
a second	
150	END
140	DATA 100 140 0 105 24
100	UNIN 104,100,0,100,20
	, 3, 201, 69, 240, 7
170	DATA 200 200 102 34 2
110	UNIN 200,200,172,04,2
	08,243,96,200,169,74
190	DATA 153 24 3 200 140
100	DATA 100,20,0,200,107
	, 6, 153, 26, 3, 162
190	DATA Ø. 189. Ø. 228. 157
	51111 5,107,5,220,107,
	74, 6, 232, 224, 16
200	DATA 208,245,169,93,1
1000	A4 70 / 4/0 / 444
	41,70,0,107,0,141
210	DATA 79.6.24.173.4.22
	P 105 1 101 05
A DECEMBER OF	0,103,1,141,73
220	DATA 6,173,5,228,105,
	9.141.96.6.169
074	DATA & 177 DAT OF 047
230	DATA 0,133,203,96,24/
	.238.125.241.93.6
240	DATA 244 241 115 241
240	DHIH 244,241,113,241,
	124,241,76,205,238
250	DATA A A A A A TO LO
200	DHIH D, D, D, D, D, OL, OL,
	246,8,201
260	DATA 155, 240, 13, 201 3
	0 044 7 70 04 141
	2,240,1,12,24,101
270	DATA 203,133,203,104.
	10 0/ 20 /00 20 /20
	40,70,72,102,72,138
280	DATA 72.160.0.169.128
	145 00 200 102 40
Survey and	,140,00,200,172,40
290	DATA 208,249,165,203.
	74 74 74 74 74 105
	11,11,11,11,11,21,100
300	DATA 161, 160, 3, 145, 88
	.165.203.41.15.24
710	DATA 105 111 DOG 115
210	DATA 100, 161, 200, 145,
	88,169,0,133,203,104
376	DATA 178 184 149 184
320	DATA 170,104,168,104,

#### Program 2: Commodore Proofreader

By Philip Nelson

- 10 VEC=PEEK(772)+256*PEEK(773) :LO=43:HI=44
- 20 PRINT "AUTOMATIC PROOFREADE R FOR ";:IF VEC=42364 THEN {SPACE}PRINT "C-64"
- 30 IF VEC=50556 THEN PRINT "VI C-20"
- 40 IF VEC=35158 THEN GRAPHIC C LR:PRINT "PLUS/4 & 16"
- 50 IF VEC=17165 THEN LO=45:HI= 46:GRAPHIC CLR:PRINT"128" 60 SA=(PEEK(LO)+256*PEEK(HI))+
- 6:ADR=SA
- 70 FOR J=0 TO 166:READ BYT:POK E ADR,BYT:ADR=ADR+1:CHK=CHK +BYT:NEXT
- 80 IF CHK<>20570 THEN PRINT "* ERROR* CHECK TYPING IN DATA STATEMENTS": END
- 9Ø FOR J=1 TO 5:READ RF,LF,HF: RS=SA+RF:HB=INT(RS/256):LB= RS-(256*HB)
- 100 CHK=CHK+RF+LF+HF:POKE SA+L F,LB:POKE SA+HF,HB:NEXT



- 110 IF CHK<>22054 THEN PRINT "
   *ERROR* RELOAD PROGRAM AND
   {SPACE}CHECK FINAL LINE":EN
   D
- 120 POKE SA+149, PEEK(772): POKE SA+150, PEEK(773)
- 130 IF VEC=17165 THEN POKE SA+ 14,22:POKE SA+18,23:POKESA+ 29,224:POKESA+139,224
- 140 PRINT CHR\$(147); CHR\$(17); " PROOFREADER ACTIVE": SYS SA
- 150 POKE HI, PEEK(HI)+1:POKE (P EEK(LO)+256*PEEK(HI))-1,0:N EW
- 160 DATA 120,169,73,141,4,3,16 9,3,141,5,3
- 170 DATA 88,96,165,20,133,167, 165,21,133,168,169
- 180 DATA 0,141,0,255,162,31,18 1,199,157,227,3
- 190 DATA 202,16,248,169,19,32, 210,255,169,18,32
- 200 DATA 210,255,160,0,132,180 ,132,176,136,230,180 210 DATA 200,185,0,2,240,46,20
- 1,34,208,8,72 220 DATA 165,176,73,255,133,17
- 6,104,72,201,32,208
- 230 DATA 7,165,176,208,3,104,2 08,226,104,166,180
- 240 DATA 24,165,167,121,0,2,13 3,167,165,168,105
- 250 DATA 0,133,168,202,208,239 ,240,202,165,167,69
- 260 DATA 168,72,41,15,168,185, 211,3,32,210,255
- 270 DATA 104,74,74,74,74,168,1 85,211,3,32,210
- 280 DATA 255,162,31,189,227,3, 149,199,202,16,248
- 290 DATA 169,146,32,210,255,76 ,86,137,65,66,67
- 300 DATA 68,69,70,71,72,74,75, 77,80,81,82,83,88
- 310 DATA 13,2,7,167,31,32,151, 116,117,151,128,129,167,136 ,137

#### Program 3: IBM Proofreader

By Charles Brannon

- 10 'Automatic Proofreader Ver sion 3.0 (Lines 205,206 ad ded/190 deleted/470,490 ch anged from V2.0)
- 100 DIM L\$(500),LNUM(500):COL OR 0,7,7:KEY OFF:CLS:MAX= 0:LNUM(0)=65536!
- 110 ON ERROR GOTO 120:KEY 15, CHR\$(4)+CHR\$(70):ON KEY(1 5) GOSUB 640:KEY (15) ON: GOTO 130
- 120 RESUME 130
- 130 DEF SEG=&H40:W=PEEK(&H4A) 140 ON ERROR GOTO 650:PRINT:P
- RINT"Proofreader Ready."
- 150 LINE INPUT L\$:Y=CSRLIN-IN T(LEN(L\$)/W)-1:LOCATE Y,1
- 160 DEF SEG=0:POKE 1050,30:PO KE 1052,34:POKE 1054,0:PO KE 1055,79:POKE 1054,0:PO KE 1055,79:POKE 1056,13:P OKE 1057,28:LINE INPUT L\$ :DEF SEG:IF L\$="" THEN 15 0
- 170 IF LEFT\$(L\$,1)=" " THEN L \$=MID\$(L\$,2):GOTO 170
- 180 IF VAL(LEFT\$(L\$,2))=0 AND MID\$(L\$,3,1)=" " THEN L\$ =MID\$(L\$,4)
- 200 IF ASC(L\$)>57 THEN 260 'n o line number, therefore command

- 205 BL=INSTR(L\$," "):IF BL=0 THEN BL\$=L\$:GOTO 206 ELSE BL\$=LEFT\$(L\$,BL-1)
- 206 LNUM=VAL(BL\$):TEXT\$=MID\$( L\$,LEN(STR\$(LNUM))+1)
- 210 IF TEXT\$="" THEN GOSUB 54 0:IF LNUM=LNUM(P) THEN GO SUB 560:GOTO 150 ELSE 150
- 220 CKSUM=0:FOR I=1 TO LEN(L\$ ):CKSUM=(CKSUM+ASC(MID\$(L \$,I))\$I) AND 255:NEXT:LOC ATE Y,1:PRINT CHR\$(65+CKS UM/16)+CHR\$(65+(CKSUM AND 15))+" "+L\$

230 GOSUB 540:IF LNUM(P)=LNUM THEN L\$(P)=TEXT\$:GOTO 15 0 'replace line

- 240 GOSUB 580:GOTO 150 'inser t the line
- 26Ø TEXT\$="":FOR I=1 TO LEN(L \$):A=ASC(MID\$(L\$,I)):TEXT \$=TEXT\$+CHR\$(A+32*(A)96 A ND A(123)):NEXT
- 270 DELIMITER=INSTR(TEXT*,""):COMMAND*=TEXT*:ARG*="": IF DELIMITER THEN COMMAND *=LEFT*(TEXT*,DELIMITER-1):ARG*=MID*(TEXT*,DELIMITER=INST R(TEXT*,CHR*(34)):IF DELI MITER THEN COMMAND*=LEFT* (TEXT*,DELIMITER-1):ARG*= MID*(TEXT*,DELIMITER)
- 280 IF COMMAND\$<>"LIST" THEN 410
- 290 OPEN "scrn:" FOR OUTPUT A S #1
- 300 IF ARG\$="" THEN FIRST=0:P =MAX-1:GOTO 340
- 310 DELIMITER=INSTR(ARG\$,"-") :IF DELIMITER=0 THEN LNUM =VAL(ARG\$):GOSUB 540:FIRS T=P:GOTO 340
- 32Ø FIRST=VAL(LEFT\$(ARG\$,DELI MITER)):LAST=VAL(MID\$(ARG \$,DELIMITER+1))
- 330 LNUM=FIRST:GOSUB 540:FIRS 'T=P:LNUM=LAST:GOSUB 540:I F P=0 THEN P=MAX-1
- 34Ø FOR X=FIRST TO P:N\$=MID\$(
   STR\$(LNUM(X)),2)+" "
- 350 IF CKFLAG=0 THEN A\$="":GD TO 370
- 360 CKSUM=0:A\$=N\$+L\$(X):FOR I =1 TO LEN(A\$):CKSUM=(CKSU M+ASC(MID\$(A\$,I))*I) AND 255:NEXT:A\$=CHR\$(65+CKSUM /16)+CHR\$(65+(CKSUM AND 1 5))+" "
- 37Ø PRINT #1, A\$+N\$+L\$(X)
- 38Ø IF INKEY\$<>"" THEN X=P
- 39Ø NEXT :CLOSE #1:CKFLAG=Ø
- 400 GOTO 130
- 410 IF COMMAND\$="LLIST" THEN OPEN "lpt1:" FOR OUTPUT A S #1:00TO 300
- 420 IF COMMAND\$="CHECK" THEN CKFLAB=1:GOTO 290
- 430 IF COMMAND\$<>"SAVE" THEN 450
- 44Ø GOSUB 600:0PEN ARG\$ FOR 0 UTPUT AS #1:ARG\$="":80T0 300
- 450 IF COMMAND\$<>"LOAD" THEN 490
- 46Ø GOSUB 6ØØ: OPEN ARG\$ FOR I NPUT AS \$1: MAX=Ø: P=Ø
- 47Ø WHILE NOT EOF(1):LINE INP UT #1,L\$:BL=INSTR(L\$, " ") :BL\$=LEFT\$(L\$,BL-1):LNUM( P)=VAL(BL\$):L\$(P)=MID\$(L\$

,LEN(STR\$(VAL(BL\$)))+1):P =P+1:WEND

- 48Ø MAX=P:CLOSE #1:GOTO 13Ø 49Ø IF COMMAND\$="NEW" THEN IN PUT "Erase program - Are you sure";L\$:IF LEFT\$(L\$, 1)="y" OR LEFT\$(L\$,1)="Y" THEN MAX=0:LNUM(0)=65536 !:GOTO 130:ELSE 130
- 500 IF COMMAND\$="BASIC" THEN COLOR 7,0,0:ON ERROR GOTO 0:CLS:END
- 510 IF COMMAND\$<>"FILES" THEN 520
- 515 IF ARG\$="" THEN ARG\$="A:" ELSE SEL=1:GOSUB 600
- 517 FILES ARG\$:GOTO 130 520 PRINT"Syntax error":GOTO
- 130 540 P=0:WHILE LNUM>LNUM(P) AN
- D P<MAX:P=P+1:WEND:RETURN
  560 MAX=MAX-1:FOR X=P TO MAX:
  LNUM(X)=LNUM(X+1):L\$(X)=L
  \$(X+1):NEXT:RETURN</pre>
- 580 MAX=MAX+1:FOR X=MAX TO P+ 1 STEP -1:LNUM(X)=LNUM(X-1):L\$(X)=L\$(X-1):NEXT:L\$( P)=TEXT\$:LNUM(P)=LNUM:RET URN
- 600 IF LEFT\$(ARG\$,1)<>CHR\$(34 ) THEN 520 ELSE ARG\$=MID\$ (ARG\$,2)
- 610 IF RIGHT\$(ARG\$,1)=CHR\$(34
  ) THEN ARG\$=LEFT\$(ARG\$,LE
  N(ARG\$)-1)
- 620 IF SEL=0 AND INSTR(ARG\$," .")=0 THEN ARG\$=ARG\$+".BA S"
- 63Ø SEL=Ø: RETURN
- 640 CLOSE #1:CKFLAG=0:PRINT"S topped.":RETURN 150
- 650 PRINT "Error #"; ERR: RESUM E 150

#### Program 4: Apple Proofreader

By Tim Victor, Editorial Programmer

- 10 C = 0: FOR I = 768 TO 768 + 68: READ A:C = C + A: PO KE I,A: NEXT
- 20 IF C < > 7258 THEN PRINT " ERROR IN PROOFREADER DATA STATEMENTS": END
- 30 IF PEEK (190 * 256) < > 76 THEN POKE 56,0: POKE 57,3 : CALL 1002: GOTO 50
- 40 PRINT CHR\$ (4); "IN#A\$300"
- 50 POKE 34, 0: HOME : POKE 34,
- 1: VTAB 2: PRINT "PROOFREA DER INSTALLED" 60 NEW
- 100 DATA 216, 32, 27, 253, 201, 14

110 DATA 208,60,138,72,169,0 120 DATA 72,189,255,1,201,160 130 DATA 240,8,104,10,125,255 140 DATA 1,105,0,72,202,208 150 DATA 238,104,170,41,15,9 160 DATA 48,201,58,144,2,233 170 DATA 57,141,1,4,138,74 180 DATA 74,74,74,41,15,9 190 DATA 48,201,58,144,2,233 200 DATA 57,141,0,4,104,170 210 DATA 169,141,96

C

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# MLX Machine Language Entry Program For Commodore 64

Ottis Cowper, Technical Editor

"MLX" is a labor-saving utility that allows almost fail-safe entry of Commodore 64 machine language programs.

Type in and save some copies of MLX you'll want to use it to enter future machine langauge (ML) programs from COMPUTE!. When you're ready to enter an ML program, load and run MLX. It asks you for a starting address and an ending address. These addresses appear in the article accompanying the MLXformat program listing you're typing.

If you're unfamiliar with machine language, the addresses (and all other values you enter in MLX) may appear strange. Instead of the usual decimal numbers you're accustomed to, these numbers are in *hexadecimal*—a base 16 numbering system commonly used by ML programmers. Hexadecimal—hex for short—includes the numerals 0–9 and the letters A-F. But don't worry even if you know nothing about ML or hex, you should have no trouble using MLX.

After you enter the starting and ending addresses, you'll be offered the option of clearing the workspace. Choose this option if you're starting to enter a new listing. If you're continuing a listing that's partially typed from a previous session, don't choose this option.

A functions menu will appear. The first option in the menu is ENTER DATA. If you're just starting to type in a program, pick this. Press the E key, and type the first number in the first line of the program listing. If you've already typed in part of a program, type the line number where you left off typing at the end of the previous session (be sure to load the partially completed program before you resume entry). In any case, make sure the address you enter corresponds to the address of a line in the listing you are entering. Otherwise, you'll be unable to enter the data correctly. If you pressed E by mistake, you can return to the command menu by pressing RE-TURN alone when asked for the address. (You can get back to the menu from most options by pressing RETURN with no other input.)

#### **Entering A Listing**

Once you're in Enter mode, MLX prints the address for each program line for you. You then type in all nine numbers on that line, beginning with the first twodigit number after the colon (:). Each line represents eight data bytes and a checksum. Although an MLX-format listing appears similar to the "hex dump" listings from a machine language monitor program, the extra checksum number on the end allows MLX to check your typing.

When you enter a line, MLX recalculates the checksum from the eight bytes and the address and compares this value to the number from the ninth column. If the values match, you'll hear a bell tone, the data will be added to the workspace area, and the prompt for the next line of data will appear. But if MLX detects a typing error, you'll hear a low buzz and see an error message. The line will then be redisplayed for editing.

#### **Invalid Characters Banned**

Only a few keys are active while you're entering data, so you may have to unlearn some habits. You *do not* type spaces between the columns; MLX automatically inserts these for you. You *do not* press RETURN after typing the last number in a line; MLX automatically enters and checks the line after you type the last digit.

Only the numerals 0–9 and the letters A–F can be typed in. If you press any other key (with some exceptions noted below), you'll hear a warning buzz. To simplify typing, a numeric keypad is now incorporated in the listing. The keypad is active only while entering data. Addresses must be entered with the normal letter and number keys. The figure below shows the keypad configuration:



MLX checks for transposed characters. If you're supposed to type in A0 and instead enter 0A, MLX will catch your mistake. There is one error that can slip past MLX: Because of the checksum formula used, MLX won't notice if you accidentally type FF in place of 00, and vice versa. And there's a very slim chance that you could garble a line and still end up with a combination of characters that adds up to the proper checksum. However, these mistakes should not occur if you take reasonable care while entering data.

#### **Editing Features**

To correct typing mistakes before finishing a line, use the INST/DEL key to delete the character to the left of the cursor. (The cursor-left key also deletes.) If you mess up a line really badly, press CLR/HOME to start the line over. The RETURN key is also active, but only before any data is typed on a line. Pressing RETURN at this point returns you to the command menu. After you type a character of data, MLX disables RETURN until the cursor returns to the start of a line. Remember, you can press CLR/ HOME to quickly get to a line number prompt.

More editing features are available when correcting lines in which MLX has detected an error. To make corrections in a line that MLX has redisplayed for editing, compare the line on the screen with the one printed in the listing, then move the cursor to the mistake and type the correct key. The cursor left and right keys provide the normal cursor controls. (The INST/DEL key now works as an alternative cursor-left key.) You cannot move left beyond the first character in the line. If you try to move beyond the rightmost character, you'll reenter the line. During editing, RETURN is active; pressing it tells MLX to recheck the line. You can press the CLR/HOME key to clear the entire line if you want to start from scratch, or if you want to get to a line number prompt to use RETURN to get back to the menu.

#### **Display Data**

The second menu choice, DISPLAY DATA, examines memory and shows the contents in the same format as the program listing (including the checksum). When you press D, MLX asks you for a starting address. Be sure that the starting address you give corresponds to a line number in the listing. Otherwise, the checksum display will be meaningless. MLX displays program lines until it reaches the end of the program, at which point the menu is redisplayed. You can pause the display by pressing the space bar. (MLX finishes printing the current line before halting.) Press space again to



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#### Other Menu Options

Two more menu selections let you save programs and load them back into the computer. These are SAVE FILE and LOAD FILE; their operation is quite straightforward. When you press S or L, MLX asks you for the filename. You'll then be asked to press either D or T to select disk or tape.

You'll notice the disk drive starting and stopping several times during a load or save. Don't panic; this is normal behavior. MLX opens and reads from or writes to the file instead of using the usual LOAD and SAVE commands. Disk users should also note that the drive prefix 0: is automatically added to the filename (line 750), so this should *not* be included when entering the name. This also precludes the use of @ for Savewith-Replace, so remember to give each version you save a different name.

Remember that MLX saves the entire workspace area from the starting address to the ending address, so the save or load may take longer than you might expect if you've entered only a small amount of data from a long listing. When saving a partially completed listing, make sure to note the address where you stopped typing so you'll know where to resume entry when you reload.

MLX reports the standard disk or tape error messages if any problems are detected during the save or load. (Tape users should bear in mind that Commodore computers are never able to detect errors during a save to tape.) MLX also has three special load error messages: INCORRECT STARTING ADDRESS, which means the file you're trying to load does not have the starting address you specified when you ran MLX; LOAD ENDED AT address, which means the file you're trying to load ends before the ending address you specified when you started MLX; and TRUNCATED AT ENDING ADDRESS, which means the file you're trying to load extends beyond the ending address you specified when you started MLX. If you see one of these messages and feel certain that you've loaded the right file, exit and rerun MLX, being careful to enter the correct starting and ending addresses.

The QUIT menu option has the obvious effect—it stops MLX and enters BASIC. The RUN/STOP key is disabled, so the Q option lets you exit the program without turning off the computer. (Of course, RUN/STOP-RESTORE also gets you out.) You'll be asked for verification; press Y to exit to BASIC, or any other key to return to the menu. After quitting, you can type RUN again and reenter MLX without losing your data, as long as you don't use the clear workspace option.

#### **The Finished Product**

When you've finished typing all the data for an ML program and saved your work, you're ready to see the results. The instructions for loading and using the finished product vary from program to program. Some ML programs are designed to be loaded and run like BASIC programs, so all you need to type is LOAD "filename",8 for disk or LOAD "filename" for tape, and then RUN. Such programs will usually have a starting address of 0801 for the 64. Other programs must be reloaded to specific addresses with a command such as LOAD "filename",8,1 for disk or LOAD "filename",1,1 for tape, then started with a SYS to a particular memory address. On the Commodore 64, the most common starting address for such programs is 49152, which corresponds to MLX address C000. In either case, you should always refer to the article which accompanies the ML listing for information on loading and running the program.

#### An Ounce Of Prevention

By the time you finish typing in the data for a long ML program, you may have several hours invested in the project. Don't take chances-use our "Automatic Proofreader" to type the new MLX, and then test your copy thoroughly before first using it to enter any significant amount of data. Make sure all the menu options work as they should. Enter fragments of the program starting at several different addresses, then use the Display option to verify that the data has been entered correctly. And be sure to test the Save and Load options several times to ensure that you can recall your work from disk or tape. Don't let a simple typing error in the new MLX cost you several nights of hard work.

#### MLX For Commodore 64

- SS 10 REM VERSION 1.1: LINES 8 30,950 MODIFIED, LINES 4 85-487 ADDED
- EK 100 POKE 56,50:CLR:DIM IN\$, I,J,A,B,A\$,B\$,A(7),N\$ DM 110 C4=48:C6=16:C7=7:Z2=2:Z
- 4=254:Z5=255:Z6=256:Z7= 127 CJ 120 FA=PEEK(45)+Z6*PEEK(46)
- SB 130 R\$=CHR\$(13):L\$="{LEFT}" :S\$="":D\$=CHR\$(20):Z\$= CHR\$(0):T\$="{13 RIGHT}" CQ 140 SD=54272:FOR I=SD TO SD
- +23:POKE I,Ø:NEXT:POKE {SPACE}SD+24,15:POKE 78 8,52
- FC 150 PRINT"[CLR]"CHR\$(142)CH R\$(8):POKE 53280,15:POK

	E 53281,15
EJ 160	PRINT TS" [RED] [RVS]
	[2 SPACES]"SPC(28)"
	{2 SPACES } {OFF } {BLU } ML
	X II {RED; {RVS}
	[12 SPACES] [BLU]"
FR 170	PRINT" [3 DOWN]
	[3 SPACES]COMPUTEI'S MA
	3 DOWN !"
JB 18Ø	PRINT" [BLK] STARTING ADD
	RESS[4]";:GOSUB300:SA=A
	D:GOSUBI040:IF F THEN18
GF 19Ø	PRINT"{BLK} [2 SPACES]EN
	DING ADDRESS 43";:GOSUB
	SPACE F THEN190
KR 200	INPUT" [3 DOWN ] [BLK] CLEA
	R WORKSPACE [Y/N][4]";A
	STIF LEFTS(AS,I) > Y"TH EN220
PG 21.0	PRINT" [2 DOWN ] [BLU] WORK
	ING";:FORI=BS TO BS+
	EA-SA+7:POKE I,Ø:NEXT:P
DR 220	PRINTTAB(10)" [2 DOWN]
	[BLK] [RVS] MLX COMMAND
	[SPACE]MENU [DOWN][4]":
	R DATA"
BD 23Ø	PRINT T\$" {RVS}D{OFF}ISP
	LAY DATA":PRINT T\$"
JS 24Ø	PRINT TS" RVS SOFF AVE
	FILE":PRINT TS" [RVS]Q
	[OFF]UIT[2 DOWN][BLK]"
JH 250 HK 260	GET AS: IF AS=NS THEN250 A=0.FOR T=1 TO 5.TF AS=
	MIDS("EDLSQ", I, 1) THEN A
	=1:1=5
FD 270	NEXT:ON A GOTO420,610,6
	T0250
EJ 280	PRINT" [RVS] QUIT ": INPU
	T" (DOWN) K43ARE YOU SURE
	1) <> "Y"THEN220
EM 290	POKE SD+24,0:END
JX 300	INS=NS:AD=0:INPUTINS:IF LEN(INS)<>4THENRETURN
KF 310	B\$=IN\$:GOSUB320:AD=A:B\$
	=MID\$(IN\$,3):GOSUB320:A
PP 320	$D=AD^*256+A: RETURN$ A=0:FOR J=1 TO 2:AS=MID
	\$(B\$,J,1):B=ASC(A\$)-C4+
	(A\$>"@")*C7:A=A*C6+B
JA 330	11 B 0 OK B>15 THEN AD= 0:A=-1:J=2
GX 34Ø	NEXT: RETURN
CH 350	B=INT(A/C6):PRINT MID\$(
	H\$,B+1,1);:B=A-B*C6:PRI
	RN
RR 360	A=INT(AD/Z6):GOSUB350:A
	=AD-A*Z6:GOSUB350:PRINT
BE 37Ø	CK=INT(AD/Z6):CK=AD-Z4*
-	CK+Z5*(CK>Z7):GOTO39Ø
PX 380	CK = CK + Z2 + Z5 * (CK > Z7) + A
QS 400	PRINT" [DOWN ] STARTING AT
	<pre>[4]";:GOSUB300:IF IN\$&lt;&gt;</pre>
	NS THEN GOSUBIØ30:IF F
EX 41.0	RETURN
HD 420	PRINT" [RVS] ENTER DATA
	{SPACE}":GOSUB400:IF IN
JK 43Ø	OPEN3, 3: PRINT
SK 440	POKE198. 0 . GOSUB360 . TE E

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			THEN PRINT INS .PRINT "
			fuplis prouml".
		AFR	POD T-C MO 24 CMED 2.DC
	GC	430	FOR 1=0 TO 24 SIEP 3:BS
			=SSIFOR J=1 TO ZIIF F T
			HEN BS=MIDS(INS,I+J,1)
	HA	460	PRINT" (RVS)"BSLS; : IF I<
			24THEN PRINT" [OFF]";
	HD	470	GET AS: IF AS=NS THEN470
	FK	480	IF(A\$>"/"ANDA\$<":")OR(A
			\$>"@"ANDA\$<"G")THEN54Ø
	GS	485	A=-(A\$="M")-2*(A\$=",")-
			3*(AS=".")-4*(AS="/")-5
			*(AS="J")-6*(AS="K")
	FX	486	A=A-7*(AS="L")-8*(AS=":
			")-9*(AS="11")-10*(AS="T
			")-11*(AS="0")-12*(AS="
			7-11 (A9- 0 )-12 (A9-
	ON	407	
	CM	407	A=A=13"(A=b\$)TIF A THE
			N AS=MIDS( ABCD123E456F
	180		0", A, 1):GOTO 540
	MP	49Ø	IF AS=RS AND((I=0)AND(J
			=1)OR F)THEN PRINT B\$;:
			J=2:NEXT:I=24:GOTO550
	KC	500	IF AS="[HOME]" THEN PRI
			NT BS:J=2:NEXT:I=24:NEX
			T = E=0 = COTO/40
	1000	F 1.0	
	MX	5.10	IF (AS= [RIGHT]")ANDF TH
	-	FAR	ENPRINT BALA; GOTO540
	GK	520	IF ASCALS AND ASCADS OR
			((1=0)AND(J=1))THEN GOS
			UB1060:GOT0470
	HG	530	A\$=L\$+S\$+L\$:PRINT B\$L\$;
			:J=2-J:IF J THEN PRINT
			{SPACE}L\$;:I=I-3
	OS	540	PRINT AS: :NEXT J:PRINT
			[SPACE ]SS :
	DM	550	NEYT T. DRINT . DRINT " (IIP)
	FM	550	IS DICHE H INDUM#3 INS
			TE INC-NC THEN CLOSES.
			acmenant inter choses:
			GOTOZZO
	QC	560	FOR I=1 TO 25 STEP3:B3=
			MID\$(IN\$,1):GOSUB320:1F
			I<25 THEN GOSUB380:A(1
			/3)=A
	PK	57Ø	NEXT: IF A <> CK THEN GOSU
			B1060:PRINT"[BLK] [RVS]
			{SPACE } ERROR: REENTER I
			INE 843":F=1:GOTO440
	HJ	58Ø	GOSUB1080:B=BS+AD-SA:FC
			R I=0 TO 7: POKE B+I.A()
			) +NEXT
	00	500	AD-AD+8 TE AD>FA THEN (
	WW	350	LOCES . DDINE " [DOWN ] [ DI U]
			LUSES PRINT (DOWN) (BLU)
			12 DOWNIN COMOTOR
			12 DOWN J GOTO/00
	GQ	600	F=0:G0T0440
	QA	610	PRINT (CLR) (DOWN) (RVS)
			[SPACE] DI SPLAY DATA ":C
			OSUB400:IF INS=NS THEN2
			20
	RJ	620	PRINT " { DOWN } { BLU } PRESS:
			[RVS]SPACE(OFF] TO PAL
			SE. [RVS]RETURN[OFF] TO
			BREAKRAS [ DOWN ] "
	VC	620	COCUP360 . P=PC+1 D_C1 . POI
	VP	030	T-PRO PL7 - A-DERV(T) - CO
			UD250 COCUD200 DD1
			OB350 IG050B380 IPRINT S
			i north a contract a second
	CC	640	NEXT: PRINT" (RVS)"; :A=CH
	1	2.31	:GOSUB350:PRINT
	KH	65Ø	F=1:AD=AD+8:IF AD>EA TH
			ENPRINT "{DOWN} {BLU} ** 1
			ND OF DATA **":GOTO22Ø
	KC	660	GFT AS: IF AS=RS THEN GO
			SUB1080:GOTO220
I	EO	67Ø	IF AS=SS THEN F=F+1:GOS
Í			UB1080
I	AD	680	ONFGOTO630,660,630
ĺ	CM	600	PRINT " [DOWN ] [PUS] LOAD
I	CPI	050	[SPACE]DAMA ".OP-1.COM
			710
Í	DO	700	DELME # [DOWN] [ DUO] CAUP
4	PL	1 8 9 8 1	CALLET LINNELLING SAVE

		SPACE LETLE ".OP-0
DV	710	TNS-NS . TNDUT " (DOWN ) FILE
RA	110	NAMERAS" TNS TE THS NS
		ARDERS TROTT ING-NG
DD	720	E-A.DRINT" (DOWN ) (BLK)
FK	120	[PUS TOFF APE OF [RVS]
		DIOFFITSK + RAI" +
FD	730	GET AS TE AS="T"THEN PR
EF	150	INT "T [DOWN] "+GOTOBBO
HO	740	TE AS(>"D"THEN730
цц	750	PPINT "DI DOWN]" + OPENIS.8
1111	150	15. "TØ: ":B=EA-SA:TNS="
		0."+TNS:TE OP THEN810
SO	760	OPEN 1.8.8. INS+". P.W":G
	,	OSUB860 TF A THEN220
F.T	770	AH=INT(SA/256):AL=SA-(A
		H*256) :PRINT#1.CHR\$(AL)
		; CHR\$ (AH);
PE	78Ø	FOR I=Ø TO B:PRINT#1,CH
		R\$(PEEK(BS+I)); :IF ST T
		HEN8ØØ
FC	79Ø	NEXT: CLOSE1: CLOSE15:GOT
		0940
GS	800	GOSUB1060:PRINT" [DOWN]
		[BLK]ERROR DURING SAVE:
		[4]":GOSUB860:GOT0220
MA	810	OPEN 1,8,8,IN\$+",P,R":G
		OSUB860:IF A THEN220
GE	820	GET#1,A\$,B\$:AD=ASC(A\$+Z
		\$)+256*ASC(B\$+Z\$):IF AD
		<>SA THEN F=1:GOT0850
RX	830	FOR I=Ø TO B:GET#1,A\$:P
		OKE BS+I, ASC(A\$+Z\$):IF(
		I <> B) AND ST THEN F=2:AD
		=I:I=B
FA	840	NEXT: IF ST <> 64 THEN F=3
FQ	85Ø	CLOSE1 : CLOSE15 : ON ABS (F
		>Ø)+1 GOTO960,970
SA	860	INPUT#15, A, AS: IF A THEN
		CLOSE1 :CLOSE15 :GOSUB10
		60:PRINT" (RVS)ERROR: "A
-	070	2
GQ	870	RETURN
EJ	880	PORE183, PEER (FAT2) PORE
		18/, PEER (PATS / IPORE100,
		PEER(FAT4) TIPOP-DINEN 92
нт	890	SVS 63466 . TE (DEEK (783) A
110	050	ND1) THEN GOSUBI 060 PRIN
		T" [DOWN ] [RVS] FILE NOT
		SPACE FOUND ":GOTO690
CS	900	AD=PEEK(829)+256*PEEK(8
		30): IF AD >> SA THEN F=1:
		GOT097Ø
SC	910	A=PEEK(831)+256*PEEK(83
		2)-1:F=F-2*(A <ea)-3*(a></ea)-3*(a>
		EA):AD=A-AD:GOTO930
KM	920	A=SA:B=EA+1:GOSUB1010:P
		OKE780.3:SYS 63338
JF	930	A=BS:B=BS+(EA-SA)+1:GOS
		UB1010:ON OP GOT0950:SY
		S 63591
AE	940	GOSUB1080:PRINT" [BLU] **
		SAVE COMPLETED **":GOT
		022Ø
XP	95Ø	POKE147,0:SYS 63562:IF
		{SPACE}ST>Ø THEN97Ø
FR	960	GOSUB1080:PRINT"[BLU]**
		LOAD COMPLETED **":GOT
	1	0220
DP	97Ø	GOSUB1060:PRINT"[BLK]
		RVSJERROR DURING LOAD:
		[DOWN]E43":ON F GOSUB98
-		0,990,1000:GOTO220
PP	980	PRINT "INCORRECT STARTIN
		G ADDRESS (";:GOSUB360:
	000	PRINT")": RETURN
GR	990	PRINT LOAD ENDED AT ";:
		DS · DETURN
		DA SUPTOUR

FD 1000 PRINT "TRUNCATED AT END ING ADDRESS": RETURN

RX	1010	AH=INT(A/256):AL=A-(AH
		*256):POKE193,AL:POKE1
		94, AH
FF	1020	AH=INT(B/256):AL=B-(AH
		*256) : POKE174, AL: POKE1
	1	75, AH: RETURN
FX	1030	IF AD < SA OR AD > EA THEN
		1050
HA	1040	IF (AD> 511 AND AD<40960
		)OR(AD>49151 AND AD<53
		248) THEN GOSUBLUBUTE
	1050	COCUDI GGG . DDT NT " ( DVC )
HC	1020	GOSUBLOOD IPRINI (RVS)
		[ DOUDI [ DI K] ". F-] . DETI
		(DOWN)(BLK) II-LIKEIO
»D	1060	POKE SDIE 31 . POKE SDIE
AR	1000	200 DOVE SD 240 DOVE
		CRACE COLL A POKE SD+
		A 22
DY	1070	FOR S-1 TO 100 .NEXT.GO
DA	1010	TOI 494
PF	1080	POKE SD+5.8:POKE SD+6.
	1000	240 POKE SD. 0 POKE SD+
		1.90:POKE SD+4.17
AC	1090	FOR S=1 TO 100:NEXT:PO
		KE SD+4,Ø:POKE SD,Ø:PO
		KE SD+1,Ø:RETURN
		C

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# Machine Language Entry Program For Apple

Tim Victor, Editorial Programmer

To make it easier to enter machine language programs into your computer without typos, COMPUTE! is introducing its "MLX" entry program for the Apple II series. It's our best MLX yet. It runs on the II, II+, IIe, and IIc, and with either DOS 3.3 or ProDOS.

A machine language (ML) program is usually listed as a long series of numbers. It's hard to keep your place and even harder to avoid making mistakes as you type in the listing, since an incorrect line looks almost identical to a correct one. To make error-free entry easier, COMPUTE! generally lists ML programs for Commodore and Atari computers in a format designed to be typed in with a utility called "MLX." The MLX program uses a checksum system to catch typing errors almost as soon as they happen.

Apple MLX checks your typing on a line-by-line basis. It won't let you enter invalid characters or let you continue if there's a mistake in a line. It won't even let you enter a line or digit out of sequence. Best of all, you don't have to know anything about machine language to enter ML programs with MLX. Apple MLX makes typing ML programs almost foolproof.

#### **Using Apple MLX**

Type in and save some copies of Apple MLX on disk (you'll want to use MLX to enter future ML programs in COM-PUTE!). It doesn't matter whether you type it in on a disk formatted for DOS 3.3 or ProDOS. Programs entered with Apple MLX, however, must be saved to a disk formatted with the same operating system as Apple MLX itself.

If you have an Apple IIe or IIc, make sure that the key marked CAPS LOCK is in the down position. Type RUN. You'll be asked for the starting and ending addresses of the ML program. These values vary for each program, so they're given at the beginning of the ML program listing and in the program's accompanying article. Find them and type them in.

The next thing you'll see is a menu asking you to select a function. The first is (E)NTER DATA. If you're just starting to type in a program, pick this. Press the E key, and the program asks for the address where you want to begin entering data. Type the first number in the first line of the program listing if you're just starting, or the line number where you left off if you've already typed in part of a program. Hit the RETURN key and begin entering the data.

Once you're in Enter mode, Apple MLX prints the address for each program line for you. You then type in all nine numbers on that line, beginning with the first two-digit number after the colon (:). Each line represents eight bytes and a checksum. When you enter a line and hit RETURN, Apple MLX recalculates the checksum from the eight bytes and the address. If you enter more or less than nine numbers, or the checksum doesn't exactly match, Apple MLX erases the line you just entered and prompts you again for the same line.

#### Invalid Characters Banned

Apple MLX is fairly flexible about how you type in the numbers. You can put extra spaces between numbers or leave the spaces out entirely, compressing a line into 18 keypresses. Be careful not to put a space between two digits in the middle of a number. Apple MLX will read two single-digit numbers instead of one two-digit number (F 6 means F and 6, not F6).

You can't enter an invalid character with Apple MLX. Only the numerals 0–9 and the letters A–F can be typed in. If you press any other key (with some exceptions noted below), nothing happens. This safeguards against entering extraneous characters. Even better, Apple MLX checks for transposed characters. If you're supposed to type in A0 and instead enter 0A, Apple MLX will catch your mistake.

Apple MLX also checks to make sure you're typing in the right line. The address (the number to the left of the colon) is part of the checksum recalculation. If you accidentally skip a line and try to enter incorrect values, Apple MLX won't let you continue. Just make sure you enter the correct starting address; if you don't, you won't be able to enter any of the following lines. Apple MLX will stop you.

#### **Editing Features**

Apple MLX also includes some editing features. The left- and right-arrow keys allow you to back up and go forward on the line that you are entering, so you can retype data. Pressing the CON-

TROL (CTRL) and D keys at the same time (*delete*) removes the character under the cursor, shortening the line by one character. Pressing CTRL-I (*insert*) puts a space under the cursor and shifts the rest of the line to the right, making the line one character longer. If the cursor is at the right end of the line, neither CTRL-D nor CTRL-I has any effect.

When you've entered the entire listing (up to the ending address that you specified earlier), Apple MLX automatically leaves Enter mode and redisplays the functions menu. If you want to leave Enter mode before then, press the RETURN key when Apple MLX prompts you with a new line address. (For instance, you may want to leave Enter mode to enter a program listing in more than one sitting; see below.)

#### **Display Data**

The second menu choice, (D)ISPLAY DATA, examines memory and shows the contents in the same format as the program listing. You can use it to check your work or to see how far you've gotten. When you press D, Apple MLX asks you for a starting address. Type in the address of the first line you want to see and hit RETURN. Apple MLX displays program lines until you press any key or until it reaches the end of the program.

#### Save And Load

Two more menu selections let you save programs on disk and load them back into the computer. These are (S)AVE FILE and (L)OAD FILE. When you press S or L, Apple MLX asks you for the filename. The first time you save an ML program, the name you assign will be the program's filename on the disk. If you press L and specify a filename that doesn't exist on the disk, you'll see a disk error message.

If you're not sure why a disk error has occurred, check the drive. Make sure there's a formatted disk in the drive and that it was formatted by the same operating system you're using for Apple MLX (ProDOS or DOS 3.3). If you're trying to save a file and see an error message, the disk might be full. Either save the file on another disk or quit Apple MLX (by pressing the Q key), delete an old file or two, then run Apple MLX again. Your typing should still be safe in memory.

Apple MIX: Machine
Language Entry Program
For instructions on entering this program,
please refer to "COMPUTEI's Guide to Typing
In Programs" elsewhere in this issue.
35 100 N = 9: HOME : NORMAL : PR
V1.1": POKE 34.2: ONERR G
OTD 610
CC 110 VTAB 1: HTAB 20: PRINT "5
TART ADDRESS";: GOSUB 530
1 IF H = 9 INEN FRINT CAR \$ (7); BOTO 110
8C 12Ø S = A
EJ 130 VTAB 2: HTAB 20: PRINT "E
ND ADDRESS ";: GOSUB 530
N PRINT CHR\$ (7): 60T0 13
Ø
20 140 E = A
B 150 PRINT : PRINT "CHOOSE: (E)
NIER DATA": HIND 22: PRI
8: PRINT "(L) DAD FILE
S) AVE FILE (Q) UIT": PRIM
T I I T T
AE 160 GET AS: FUR I = 1 10 3: J
1) THEN NEXT : BOTO 160
93 170 ON I GOTO 270,220,180,200
: POKE 34,0: END
AF 180 INPUT "FILENAME: ";A\$: IF
\$ (4): "BLOAD": A\$: ". A": S
A1 190 GOTO 150
60 200 INPUT "FILENAME: "; A\$: IF
A\$ < > "" THEN PRINT CH
.L":E - S
92 21Ø GOTO 15Ø
C2 220 GOSUB 590: IF B = 0 THEN
150 EOP P = P TO E STEP 8.1 :
4:A = B: GOSUB 580: PRI
T A\$;": ";:L = 2
85 24Ø FOR F = Ø TO 7:V(F + 1) =
PEEK (B + F): NEXT : 00; IIB 560: V(9) = C
F2 250 FOR F = 1 TO N:A = V(F):
GOSUB 580: PRINT A\$" ";:
NEXT : PRINT : IF PEEK (
91 260 PDKE 49168.0: GDTD 150
CC 270 GOSUB 590: IF B = 0 THEN
150
48 280 FOR B = B TO E STEP 8
580: PRINT AS:": ":: CA
L 64668:A\$ = "":P = Ø: B
SUB 330: IF L = Ø THEN 1
STAG CORUP ATA: IF F ( ) N TH
N PRINT CHR\$ (7):: 60TO
7Ø
27 310 IF N = 9 THEN GOSUB 560:
IF C < > V(9) THEN PRINT
72 320 FOR F = 1 TO 8: POKE B +
F - 1,V(F): NEXT : PRINT
: NEXT : GOTO 150
# 330 IF LEN (A\$) = 33 THEN A\$
22 340 L = LEN (A\$):0\$ = A\$:0 =
P:L\$ = "": IF P > Ø THEN
LS = LEFTS (AS,P)
N R\$ = RIGHT\$ (A\$,L - P
1)
55 360 HTAB 7: PRINT L\$;: FLASH
\$ (A\$, P + 1, 1) :: NORMAL

PRINT R\$;

<pre>379 PRINT " ": NORMAL 5390 K = PEEK (49152): IF K &lt; 1390 POKE 49168, Ø:K = K - 128 9400 IF K = 13 THEN HTAB 7: PR INT A49; " ": RETURN 7 410 IF K = 32 OR K &gt; 47 AND K &lt; 58 OR K &gt; 64 AND K &lt; 7 I THEN A9 = L9 + CHR9 (K) + R\$:P = P + 1: GOTO 330 7 420 I = FRE (Ø): IF K = 4 THE N A9 = L + R\$ F 430 IF K = 9 THEN A9 = L9 + " " + MID\$ (A9,P + 1,1) + R 440 IF K = 8 THEN P = P - (P &gt; 0) 3 450 IF K = 21 THEN P = P + (P &lt; L) 9 460 GOTO 330 7 470 F = 1:D = Ø: FOR P = 1 TD LEN (A9):C\$ = MID\$ (A8,P , 1): IF F &gt; N AND C\$ &lt; &gt; " " THEN RETURN 8 480 IF C\$ &lt;&gt; " " THEN GOSUB S20:V(F):D = D + 1 F 490 IF D &gt; Ø AND C\$ = " " OR D = 2 THEN D = ØIF = F + 1 8 500 NEXT : IF D = Ø THEN F = F -1 7 510 RETURN 8 530 A = Ø: INPUT A\$:A8 = LEFT \$ (A5,4): IF LEN (A9):C\$ = MID\$ (A4,P,1): IF C\$ &lt; "Ø" OR C\$ &gt; "9" AND C\$ &lt; " " THEN RETURN 8 550 C = INT (B / 256):C = B - 254 * C - 255 * (C &gt; 127) ):C = C - 255 * (C &gt; 127) A8 580 I = FRE (Ø):A8 = "": FOR I = 1 TO L:T = INT (A / 1 6):A4 = T: NEXT : RETURN 10 590 PRINT "FROM ADDRESS ": G OSUB 530: IF S &gt; A OR E &lt; A0 CA A = Ø THEN B = Ø: R ETURN 10 609 B = S + B * INT ((A - S) A07 A = Ø THEN B = Ø: R ETURN 10 609 B = S + B * INT ((A - S) A07 A = Ø THEN B = Ø: R ETURN 10 609 B = S + B * INT ((A - S) A07 A = Ø THEN B = Ø: R ETURN 10 609 B = S + B * INT ((A - S) A07 A = Ø THEN B = Ø: R ETURN 10 609 B = S + B * INT ((A - S) A07 A = Ø THEN B = Ø: R ETURN 10 609 B = S + B * INT ((A - S) A07 A = Ø THEN B = Ø: R ETURN 10 609 B = S + B * INT ((A - S) A07 A = Ø THEN B = Ø: R ETURN 10 609 B = S + B * INT ((A - S) A07 A = Ø THEN B = Ø: R ETURN 10 609 B = S + B * INT ((A - S) A07 A = Ø THEN B = Ø: R ETURN 10 610 PRINT "DISK ERROR": GOTO 150 CTO A00 A = Ø THEN B = Ø: R ETURN</pre>	-	1000	
128 THEN 380 1 399 POKE 49168, Ø:K = K - 128 8 400 IF K = 13 THEN HTAB 7: PR INT A*; " ";: RETURN 7 410 IF K = 32 OR K > 47 AND K < SB OR K > 64 AND K < 7 i THEN A* = L\$ + CHR* (K) + R*:P = P + 1: 00TO 330 7 420 IF F = 0?: IF K = 4 THE N A* = L\$ + R* F 430 IF K = 9 THEN A* = L\$ + " " + MID\$ (A*,P + 1,1) + R* A 440 IF K = B THEN P = P - (P < L) 0 460 GOTD 330 7 470 F = 1:D = Ø: FOR P = 1 TO LEN (A*):C* = MID* (A*,P ,1): IF F > N AND C* (> " " THEN RETURN 8 480 IF C* (> " " THEN BOSUB S20:V(F) = J + 16 * (D = 1) * V(F):D = D + 1 F 490 IF D > Ø AND C* = " " OR D = 2 THEN D = Ø:F = F + 1 8 500 NEXT : IF D = Ø THEN F = F -1 7 510 RETURN 15 520 J = ASC (C*):J = J - 48 - 7 * (J > 64): RETURN 15 530 A = Ø: INPUT A*:A* = LEFT * (A*,A): IF LEN (A*) = Ø THEN RETURN 15 540 FOR P = 1 TO LEN (A*):C* = MID* (A*,P,1): IF C* ( "Ø" OR C* > "2" THEN A = Ø: RETURN 10 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 10 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 10 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 10 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 10 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 10 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 10 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 10 550 GOSUB 530:I F S > A OR E < A OR A = Ø THEN B = Ø: R ETURN 10 500 FOR F = 1 TO B:C = C * 2 - 255 * (C > 255): NEXT : RETURN 10 500 B = S + B * INT ((A - S) / 0): RETURN 10 600 B = S + B * INT ((A - S) / 0): RETURN 10 600 B = S + B * INT ((A - S) / 0): RETURN 10 600 B = S + B * INT ((A - S) / 0): RETURN 10 600 B = S + B * INT ((A - S) / 0): RETURN 10 600 PRINT "DISK ERROR": GOTO 150 (C) 150 (C)	8	37Ø 38Ø	PRINT " ";: NORMAL K = PEEK (49152): IF K <
8 400 IF K = 13 THEN HTAB 7: PR INT A\$;" ";: RETURN 7 410 IF K = 32 OR K > 64 AND K < 7 I THEN A\$ = L\$ + CHR\$ (K) + R\$:P = P + 1: GOTO 330 7 420 I = FRE (Ø): IF K = 4 THE N A\$ = L\$ + R\$ F 430 IF K = 9 THEN A\$ = L\$ + " " + HID\$ (A\$,P + 1,1) + R\$ A 440 IF K = B THEN P = P - (P > Ø) 3 450 IF K = 21 THEN P = P + (P < L) 0 460 GOTO 330 7 470 F = 1:D = Ø: FOR P = 1 TO LEN (A\$):C\$ = HID\$ (A\$,P 1): IF F > N AND C\$ (> " " THEN RETURN 8 480 IF C\$ (> " " THEN GOSUB 520:V(F) = J + 16 * (D = 1) * V(F):D = D + 1 1 * 0 Ø F D > Ø AND C\$ = " " OR D = 2 THEN D = Ø:F = F + 1 7 510 RETURN 15 520 J = ASC (C\$):J = J - 48 - 7 * (J > 64): RETURN 15 520 J = ASC (C\$):J = J - 48 - 7 * (J > 64): RETURN 15 520 A = Ø: INPUT A\$:A\$ = LEFT * (A\$,4): IF LEN (A\$) = Ø THEN RETURN 15 530 GOSUB 520:A = A * 16 + J: NEXT : RETURN 15 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 18 560 C = INT (B / 256):C = B - 254 * C - 255 * (C > 255) 18 560 C = INT (B / 256):C = B - 254 * C - 255 * (C > 255) 18 560 C = INT (B / 256):C = B - 254 * C - 255 * (C > 255) 18 560 C = INT (B / 256):C = B - 254 * C - 255 * (C > 255) 18 560 C = INT (B / 256):C = B - 254 * C - 255 * (C > 255) 18 560 C = INT (B / 256):C = B - 254 * C - 255 * (C > 255) 18 560 C = INT (B / 256):C = B - 254 * C - 255 * (C > 255) 18 560 C = INT (B / 256):C = B - 254 * C - 255 * (C > 255) 19 560 FOR F = 1 TO B:C = C * 2 0 550 FOR F = 1 TO B:C = C * 2 0 550 FOR F = 1 TO B:C = C * 2 0 550 FOR F = 1 TO B:C = C * 2 0 550 FOR F = 1 TO B:C = C * 2 0 550 FOR F = 1 TO B:C = C * 2 0 550 FOR F = 1 TO B:C = C * 2 0 550 FOR F = 1 TO B:C = C * 2 0 550 FOR F = 1 TO B:C = C * 2 0 550 FOR F = 1 TO B:C = C * 2 0 550 FOR F = 1 TO B:C = C * 2 0 550 FOR F = 1 TO B:C = C * 2 0 550 FOR F = 1 TO B:C = C * 2 1 = 1 TO L:T = INT (A / 1 6 10 PRINT "FROM ADDRESS ";: G 0 SUB 530: IF S > A OR E < A OR A = Ø THEN B = Ø: R ETURN 10 600 B = S + B * INT ((A - S) 7 0): RETURN 10 600 B = S + B * INT ((A - S) 7 0): RETURN 10 600 B = S + B * INT (AD - S) 7 0): A	1	39Ø	128 THEN 380 POKE 49168,0:K = K - 128
$ \begin{array}{c} 4.16 \ 1 \ F \ K = 3.2 \ UK \ K \ Y \ 4 \ AD \ K \ X \ 4 \ AD \ K \ X \ 7 \ 1 \ THEN \ AS = LS \ + \ CHRS \ (K) \ + \ RS: P = P \ + \ 1: \ GOTO \ 336 \ 7 \ 426 \ I = \ FRE \ (B): \ IF \ K = \ 4 \ THE \ N \ AS = \ LS \ + \ RS \ 4 \ 446 \ IF \ K = \ 9 \ THEN \ AS = \ LS \ + \ RS \ 4 \ 446 \ IF \ K = \ 9 \ THEN \ AS = \ LS \ + \ RS \ 4 \ 446 \ IF \ K = \ 9 \ THEN \ AS = \ LS \ + \ RS \ 4 \ 446 \ IF \ K = \ 9 \ THEN \ P = \ P \ - \ (P \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	B	400	IF K = 13 THEN HTAB 7: PR INT A\$;" ";: RETURN
$ \frac{1}{10} + 10 + 10 + 10 + 10 + 10 + 10 + 10 +$	1	410	1 + K = 32 UR K > 47 AND K < 58 OR K > 64 AND K $< 71 + 1 + 1 + 2 + 2 + 2 + 2 + 2 + 2 + 2 +$
N A\$ = L\$ + R\$ F 430 IF K = 9 THEN A\$ = L\$ + " " + MID\$ (A\$, P + 1,1) + R A 449 IF K = 8 THEN P = P - (P > 0) 3 450 IF K = 21 THEN P = P + (P < L) 0 460 GOTO 330 7 479 F = 1:D = 0: FOR P = 1 TO LEN (A\$):C\$ = MID\$ (A\$, P ,1): IF F > N AND C\$ (> " " THEN RETURN 8 480 IF C\$ <> " " THEN GOSUB S20:V(F) = J + 16 * (D = 1) * V(F):D = D + 1 F 490 IF D > 0 AND C\$ = " " OR D = 2 THEN D = 0:F = F + 1 7 510 RETURN 5 520 J = ASC (C\$):J = J - 48 - 7 * (J > 64): RETURN 8 530 A = 0: INPUT A\$:A\$ = LEFT * (A\$, 4): IF LEN (A\$) = 0 THEN RETURN 5 540 FOR P = 1 TO LEN (A\$):C\$ = MID\$ (A\$, P, 1): IF C\$ ( "0" OR C\$ > "2" THEN A = 0: RETURN 8 560 GOSUB 520:A = A * 16 + J: NEXT : RETURN 8 560 C = INT (B / 256):C = B - 254 * C - 255 * (C > 255): 8 570 FOR F = 1 TO 8:C = C * 2 - 255 * (C > 127) + V(F): C = C - 255 * (C > 255): NEXT : RETURN 0 580 II = FRE (0):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("0123456789 A = 0: HID\$ ("0123456789 A = 0: HID\$ ("0123456789 A = 0: HID\$ ("0123456789 A = 0: HID\$ ("0123456789 A = 0: A = 0 THEN B = 0: R ETURN 10 580 II = FRE (0):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("0123456789 A CR A = 0 THEN B = 0: R I = 10 L:T = INT (A / 1 6):A\$ = MID\$ ("0123456789 A CR A = 0 THEN B = 0: R ETURN 10 600 B = S + 8 * INT ((A - S) / 8): RETURN 10 600 B = S + 8 * INT ((A - S) / 8): RETURN 10 600 PRINT "FROM ADDRESS ";: G OSUB 530: IF S > A OR E < A OR A = 0 THEN B = 0: R ETURN 10 600 PRINT "DISK ERROR": GOTO 150 (C) <b>COMPUTE!</b> <b>D</b> A. A. A. OTHEN B = 0: R ETURN 10 600 PRINT "DISK ERROR": GOTO 150 (C) <b>COMPUTE!</b> <b>D</b> A. A. B. A. INT ((A - S) / 8): RETURN 10 A.	7	470	+ R\$:P = P + 1: GOTO 330 I = FRE (0): IF K = 4 THE
<pre>" + MID* (A*, P + 1, 1) + R* A 449 IF K = B THEN P = P - (P &gt; 0) 3 450 IF K = 21 THEN P = P + (P &lt; L) 0 460 60T0 330 7 470 F = 1:D = 0: FOR P = 1 TD LEN (A*):C* = MID* (A*, P , 1): IF F &gt; N AND C* (&gt; " " THEN RETURN 8 480 IF C* (&gt; " " THEN 60SUB S20:V(F) = J + 16 * (D = 1) * V(F):D = D + 1 F 490 IF D &gt; 0 AND C* = " " OR D = 2 THEN D = 0:F = F + 1 8 500 NEXT : IF D = 0 THEN F = F - 1 7 510 RETURN 8 520 J = ASC (C*):J = J - 48 - 7 * (J &gt; 64): RETURN 8 530 A = 0: INPUT A*:A* = LEFT * (A*, 4): IF LEN (A*) = 0 THEN RETURN 6 540 FOR P = 1 TD LEN (A*):C* = MID* (A*, P, 1): IF C* ( "0 OR C* &gt; "9" AND C* ( "0" OR C* &gt; "9" AND C* ( "A" OR C* &gt; "2" THEN A = 0: RETURN 8 540 C = INT (B / 256):C = B - 254 * C - 255 * (C &gt; 127) ):C = C - 255 * (C &gt; 255): NEXT : RETURN 8 560 C = INT (B / 256):C = B - 254 * C - 255 * (C &gt; 255): NEXT : RETURN 8 560 I = FRE (0):A* = "": FOR I = 1 TO L:T = INT (A / 1 6):A* = MID* ("9123456789 ABCDEF",A - 16 * T + 1,1) + A*:A = T: NEXT : RETURN 8 560 I = FRE (0):A* = "": FOR I = 1 TO L:T = INT (A / 1 6):A* = MID* ("9123456789 ABCDEF",A - 16 * T + 1,1) + A*:A = T: NEXT : RETURN 8 560 I = FRE (0):A* = "": FOR I = 1 TO L:T = INT (A / 1 6):A* = MID* ("A = 0 THEN B = 0: R ETURN 8 640 PRINT "FROM ADDRESS ":: G OSUB 530: IF S &gt; A OR E &lt; A OR A = 0 THEN B = 0: R ETURN 8 640 PRINT "FROM ADDRESS ": GOTD 150 ()</pre>	F	430	N A\$ = L\$ + R\$ IF K = 9 THEN A\$ = L\$ + "
A 449 IF K = B THEN P = P - (P > 0) 3 459 IF K = 21 THEN P = P + (P < L) 0 460 GOTD 330 7 479 F = 1:D = 0: FOR P = 1 TO LEN (A\$):C\$ = MID\$ (A\$,P ,1): IF F > N AND C\$ (> " " THEN RETURN 8 480 IF C\$ (> " " THEN GOSUB S20:V(F) = J + 16 * (D = 1) * V(F):D = D + 1 F 490 IF D > 0 AND C\$ = " " OR D = 2 THEN D = 0:F = F + 1 7 510 RETURN 5 520 J = ASC (C\$):J = J - 48 - 7 * (J > 64): RETURN 8 530 A = 0: INPUT A\$:A\$ = LEFT * (A\$,4): IF LEN (A\$) = 0 THEN RETURN 9 540 FOR P = 1 TO LEN (A\$):C\$ = MID\$ (A\$,P,1): IF C\$ (* "0" OR C\$ > "2" THEN A = 0: RETURN 20 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 20 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 20 550 FOR F = 1 TO 8:C = C * 2 - 255 * (C > 255): NEXT : RETURN 20 550 I = FFE (0):A\$ = "": FOR I = 1 TO 8:C = C * 2 - 255 * (C > 255): NEXT : RETURN 20 560 I = FFE (0):A\$ = "": FOR I = 1 TO 8:C = C * 2 - 255 * (C > 255): NEXT : RETURN 20 500 B 530: IF S > A OR E < A OR A = 0 THEN B = 0: R I = 1 TO L:T = INT (A / 1 ():A\$ = MID\$ ("0123456789 ABCDEF", A - 16 * T + 1,1) + A\$:A = T: NEXT : RETURN 20 600 B = S + 8 * INT ((A - S) / 0): RETURN 20 600 B = S + 8 * INT ((A - S) / 0): RETURN 20 610 PRINT "FROM ADDRESS ":: G OSUB 530: IF S > A OR E < A OR A = 0 THEN B = 0: R ETURN 20 610 PRINT "DISK ERROR": GOTD 150 (0) COMPUTE! D ASO -247-5470 IN IA 1-800-532-1272			" + MID\$ (A\$,P + 1,1) + R\$
3 450 IF K = 21 THEN P = P + (P	A	44Ø	IF K = 8 THEN P = P - (P $\geq \emptyset$ )
<pre>7 479 6 5010 339 7 479 F = 1:D = Ø: FOR P = 1 TO LEN (A\$):C\$ = MID\$ (A\$,P ,1): IF F &gt; N AND C\$ (&gt; " " THEN RETURN 8 480 IF C\$ (&gt; " " THEN GOSUB 520:V(F) = J + 16 * (D = 1) * V(F):D = D + 1 F 490 IF D &gt; Ø AND C\$ = " " OR D = 2 THEN D = Ø:F = F + 1 8 500 NEXT : IF D = Ø THEN F = F - 1 7 510 RETURN 8 520 J = ASC (C\$):J = J - 48 - 7 * (J &gt; 64): RETURN 8 530 A = Ø: INPUT A\$:A\$ = LEFT * (A\$,4): IF LEN (A\$) = Ø THEN RETURN 8 540 FOR P = 1 TO LEN (A\$):C\$ = MID\$ (A\$,P,1): IF C\$ ( "Ø" OR C\$ &gt; "7" AND C\$ ( "A" OR C\$ &gt; "7" AND C\$ ( "A" OR C\$ &gt; "7" AND C\$ ( "A" OR C\$ &gt; "7" THEN A = Ø: RETURN 20 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 20 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 20 550 FOR F = 1 TO B:C = C * 2 - 255 * (C &gt; 127) + V(F): C = C - 255 * (C &gt; 255): NEXT : RETURN 20 560 I = FRE (Ø):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("Ø123456789 ABCDEF",A - 16 * T + 1,1) + A\$:A = T: NEXT : RETUR 31 590 PRINT "FROM ADDRESS ":: 6 OSUB 530: IF S &gt; A OR E { A OR A = Ø THEN B = Ø: R ETURN 30 600 B = S + B * INT ((A - S) / B): RETURN 30 600 B = S + B * INT ((A - S) / B): RETURN 30 600 B = S + B * INT ((A - S) / B): RETURN 30 600 B = S + B * INT ((A - S) / B): RETURN 30 600 PRINT "DISK ERROR": GOTO 150 (OTCHE LINE 1-800-247-5470 In IA 1-800-532-1272</pre>	3	450	IF K = 21 THEN P = P + (P < L)
<pre>1): IF F &gt; N AND C\$ &lt; &gt; " THEN RETURN 8 489 IF C\$ &lt; &gt; " " THEN GOSUB 520:V(F) = J + 16 * (D = 1) * V(F):D = D + 1 F 490 IF D &gt; Ø AND C\$ = " " OR D = 2 THEN D = Ø:F = F + 1 8 500 NEXT : IF D = Ø THEN F = F -1 7 510 RETURN 5 520 J = ASC (C\$):J = J - 48 - 7 * (J &gt; 64): RETURN 8 530 A = Ø: INPUT A\$:A\$ = LEFT * (A\$,4): IF LEN (A\$) = Ø THEN RETURN 8 540 FOR P = 1 TD LEN (A\$):C\$ = MID\$ (A\$,P,1): IF C\$ &lt; "Ø" OR C\$ &gt; "7" AND C\$ &lt; "A" OR C\$ &gt; "7" AND C\$ &lt; "B" OR C\$ &gt; "7" AND C\$ &lt; "A" OR C\$ &gt; "2" THEN A = Ø: RETURN 8 560 C = INT (B / 256):C = B - 254 * C - 255 * (C &gt; 255): NEXT : RETURN 8 560 I = FRE (Ø):A\$ = "": FOR I = 1 TO B:C = C * 2 - 255 * (C &gt; 127) + V(F): C = C - 255 * (C &gt; 255): NEXT : RETURN 0 580 I = FRE (Ø):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("Ø123456789 ABCDEF",A - 16 * T + 1,1) + A\$:A = T: NEXT : RETURN 10 600 B = S + B * INT ((A - S) / B): RETURN 10 600 B = S + B * INT ((A - S) / B): RETURN 10 600 B = S + B * INT ((A - S) / B): RETURN 10 600 PRINT "DISK ERROR": GOTO 150 © COMPUTE! DISC COMPUTE! ABOO-247-5470 IN IA 1-800-532-1272 0 DI IA 1-800-532-1272 0 DI</pre>	7	46Ø 47Ø	$F = 1:D = \emptyset: FOR P = 1 TO$
8 480 IF C\$ $>$ " THEN 60SUB S20:V(F) = J + 16 * (D = 1) * V(F):D = D + 1 F 490 IF D > 0 AND C\$ = " OR D = 2 THEN D = 0:F = F + 1 8 500 NEXT : IF D = 0 THEN F = F - 1 7 510 RETURN 5 520 J = ASC (C\$):J = J - 48 - 7 * (J > 64): RETURN 8 530 A = 0: INPUT A\$:A\$ = LEFT * (A\$,4): IF LEN (A\$) = 0 THEN RETURN 5 540 FOR P = 1 TO LEN (A\$):C\$ = MID\$ (A\$,P,1): IF C\$ ( "0" OR C\$ > "2" THEN A = 0: RETURN 2 550 GDSUB 520:A = A * 16 + J: NEXT : RETURN 2 550 GDSUB 520:A = A * 16 + J: NEXT : RETURN 2 550 GDSUB 520:A = A * 16 + J: NEXT : RETURN 2 550 GDSUB 520:A = A * 16 + J: NEXT : RETURN 2 550 GDSUB 520:A = A * 16 + J: NEXT : RETURN 3 560 C = INT (B / 256):C = B - 254 * C - 255 * (C > 255): NEXT : RETURN 3 580 I = FRE (0):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("012345678) ABCDEF",A - 16 * T + 1,1) + A\$:A = T: NEXT : RETUR N 4 590 PRINT "FROM ADDRESS ": 6 OSUB 530: IF S > A OR E < A OR A = 0 THEN B = 0: R ETURN 4 600 B = S + 8 * INT ((A - S) / 8): RETURN 4 610 PRINT "DISK ERROR": GOTO 150 @ C			,1): IF F > N AND C\$ < >
<pre>1) * V(F):D = D + 1 F 490 IF D &gt; Ø AND C\$ = " " DR D = 2 THEN D = Ø:F = F + 1 8 500 NEXT : IF D = Ø THEN F = F - 1 7 510 RETURN 5 520 J = ASC (C\$):J = J - 48 - 7 * (J &gt; 64): RETURN 8 530 A = Ø: INPUT A*:A\$ = LEFT * (A\$,4): IF LEN (A\$):C\$ = MID\$ (A\$,P,1): IF C\$ ( "Ø" OR C\$ &gt; "?" AND C\$ ( "A" DR C\$ &gt; "?" AND C\$ ( "A" DR C\$ &gt; "?" AND C\$ ( "Ø" OR C\$ &gt; "?" AND C\$ ( "A" DR C\$ &gt; "?" AND C\$ ( "B 0550 GDSUB 520:A = A * 16 + J: NEXT : RETURN 8 560 C = INT (B / 256):C = B - 254 * C - 255 * (C &gt; 255): NEXT : RETURN 9 580 I = FRE (Ø):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("Ø123456789 ABCDEF",A - 16 * T + 1,1) + A\$:A = T: NEXT : RETUR N 1F 590 PRINT "FROM ADDRESS ";: G OSUB 530: IF S &gt; A OR E &lt; A OR A = Ø THEN B = Ø: R ETURN 16 600 B = S + 8 * INT ((A - S) / 8): RETURN 8 610 PRINT "DISK ERROR": GOTD 150 () CONSELLINE ABOD-247-5470 IN IA 1-800-532-1272 ) 17 50 () 10 10 10 00 00 00 00 00 00 00 00 00 00 0</pre>	B	<b>48</b> Ø	IF C\$ $\langle \rangle$ " THEN GOSUB 520: V(F) = J + 16 * (D =
D = 2 THEN D = $\emptyset:F = F + 1$ 18 590 NEXT : IF D = $\emptyset$ THEN F = F - 1 7 510 RETURN 5 520 J = ASC (C\$):J = J - 48 - 7 * (J > 64): RETURN 8 530 A = $\emptyset:$ INPUT A\$:A\$ = LEFT * (A\$,4): IF LEN (A\$) = $\emptyset$ THEN RETURN 9 540 FOR P = 1 TO LEN (A\$):C\$ = MID\$ (A\$,P,1): IF C\$ ( " $\emptyset$ " OR C\$ > "7" AND C\$ ( " $\emptyset$ " OR C\$ > "7" THEN A = $\emptyset:$ RETURN 10 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 10 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 10 560 C = INT (B / 256):C = B - 254 * C - 255 * (C > 255) 10 570 FOR F = 1 TO B:C = C * 2 - 255 * (C > 127) + V(F): C = C - 255 * (C > 255): NEXT : RETURN 10 580 I = FRE ( $\emptyset$ ):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ (" $\emptyset$ 123456789 ABCDEF",A - 16 * T + 1,1) + A\$:A = T: NEXT : RETURN 11 590 PRINT "FROM ADDRESS ":: G OSUB 530: IF S > A OR E < A OR A = $\emptyset$ THEN B = $\emptyset$ : R ETURN 10 600 B = S + 8 * INT ((A - S) / A): RETURN 10 610 PRINT "DISK ERROR": GOTO 150 ©	SF	490	1) \$ V(F):D = D + 1 IF D > Ø AND C\$ = " " DR
<pre>8 500 NEXT : IF D = 0 THEN F = F - 1 7 510 RETURN 5 520 J = ASC (C\$):J = J - 48 - 7 * (J &gt; 64): RETURN 8 530 A = 0: INPUT A\$:A\$ = LEFT * (A\$,4): IF LEN (A\$) = 0 THEN RETURN 9 540 FOR P = 1 TO LEN (A\$):C\$ "0" OR C\$ &gt; "9" AND C\$ ( "0" OR C\$ &gt; "9" AND C\$ ( "A" DR C\$ &gt; "2" THEN A = 0: RETURN 20 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 20 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 20 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 20 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 20 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 20 550 FOR F = 1 TO B:C = C * 2 - 255 * (C &gt; 127) + V(F): C = C - 255 * (C &gt; 255): NEXT : RETURN 30 580 I = FRE (0):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("0123456789 ABCDEF",A - 16 * T + 1,1) + A\$:A = T: NEXT : RETUR N 31 590 PRINT "FROM ADDRESS ": 6 OSUB 530: IF S &gt; A OR E { A OR A = 0 THEN B = 0: R ETURN 30 600 B = S + 8 * INT ((A - S) / B): RETURN 30 600 B = S + 8 * INT ((A - S) / B): RETURN 30 600 B = S + 8 * INT ((A - S) / B): RETURN 30 600 B = S + 8 * INT ((A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (A - S) / B): RETURN 30 600 D = S + 8 * INT (B - S) / B): RETURN 30 600 D = S + 8 * INT (B - S) / B): RETURN 30 600 D = S + 8 * INT (B - S) / B): RETURN 3</pre>			$D = 2$ THEN $D = \emptyset$ :F = F + 1
<pre>7 510 RETURN 5 520 J = ASC (C\$): J = J - 48 - 7 * (J &gt; 64): RETURN 8 530 A = Ø: INPUT A\$:A\$ = LEFT * (A\$,4): IF LEN (A\$): C\$ = MID\$ (A\$,P,1): IF C\$ ( "Ø" OR C\$ &gt; "9" AND C\$ ( "Ø" OR C\$ &gt; "9" AND C\$ ( "A" OR C\$ &gt; "2" THEN A = Ø: RETURN 20 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 20 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 20 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 20 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 20 550 FOR F = 1 TO 8:C = C * 2 - 255 * (C &gt; 127) + V(F): C = C - 255 * (C &gt; 255): NEXT : RETURN 20 590 FOR F = 1 TO 8:C = C * 2 - 255 * (C &gt; 127) + V(F): C = C - 255 * (C &gt; 255): NEXT : RETURN 20 590 FINT "FROM ADDRESS ": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("Ø123456789 ABCDEF", A - 16 * T + 1,1) + A\$:A = T: NEXT : RETUR N 21 590 PRINT "FROM ADDRESS ": G OSUB 530: IF S &gt; A OR E &lt; A OR A = Ø THEN B = Ø: R ETURN 20 600 B = S + B * INT ((A - S) / B): RETURN 20 600 B = S + B * INT ((A - S) / B): RETURN 20 610 PRINT "DISK ERROR": GOTO 150 @ @ 20 20 20 20 20 20 20 20 20 20 20 20 20</pre>	8	500	NEXT : IF D = Ø THEN F = F - 1
7 * (J > 64): RETURN * (A\$,4): IF LEN (A\$) = Ø THEN RETURN * 540 FOR P = 1 TO LEN (A\$):C\$ = MID\$ (A\$,P,1): IF C\$ ( "Ø" OR C\$ > "9" AND C\$ ( "A" OR C\$ > "2" THEN A = Ø: RETURN * 550 GDSUB 520:A = A * 16 + J: NEXT : RETURN * 560 C = INT (B / 256):C = B - 254 * C - 255 * (C > 127) ):C = C - 255 * (C > 127) ):C = C - 255 * (C > 255) * 570 FOR F = 1 TO 8:C = C * 2 - 255 * (C > 127) + V(F): C = C - 255 * (C > 255): NEXT : RETURN * 580 I = FRE (Ø):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("Ø123456789 ABCDEF",A - 16 * T + 1,1) + A\$:A = T: NEXT : RETURN * 590 FRINT "FROM ADDRESS ";: G OSUB 530: IF S > A OR E ( A OR A = Ø THEN B = Ø: R ETURN * 600 B = S + 8 * INT ((A - S) / 8): RETURN * 610 PRINT "DISK ERROR": GOTO 150 ©	17	51Ø 52Ø	RETURN $J = ASC (C$): J = J - 48 -$
THEN RETURN F 540 FOR P = 1 TO LEN (A\$):C\$ = MID\$ (A\$,P,1): IF C\$ ( "0" OR C\$ > "9" AND C\$ ( "0" OR C\$ > "2" THEN A = 0: RETURN D 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN B 560 C = INT (B / 256):C = B - 254 * C - 255 * (C > 127) ):C = C - 255 * (C > 255) NEXT : RETURN A 580 I = FRE (0):A\$ = "": FOR I = 1 TO B:C = C * 2 - 255 * (C > 127) + V(F): C = C - 255 * (C > 255): NEXT : RETURN A 580 I = FRE (0):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("0123456789 ABCDEF",A - 16 * T + 1,1) + A\$:A = T: NEXT : RETURN N F 590 PRINT "FROM ADDRESS ":: 6 OSUB 530: IF S > A OR E < A OR A = 0 THEN B = 0: R ETURN B 610 PRINT "DISK ERROR": GOTO 150 @ COMPUTE! Subscription Order Line 1-800-247-5470 In IA 1-800-532-1272	AB	53Ø	7 # $(J > 64)$ : RETURN A = Ø: INPUT A\$:A\$ = LEFT
= MIDS  (A\$, P, 1): IF C\$ <  = MIDS (A\$, P, 1): IF C\$ <  "Ø" OR C\$ > "2" THEN A =  Ø: RETURN  20 559 GOSUB 52Ø:A = A * 16 + J:  NEXT : RETURN  20 559 GOSUB 52Ø:A = A * 16 + J:  NEXT : RETURN  20 559 GOSUB 52Ø:A = A * 16 + J:  NEXT : RETURN  20 559 FOR F = 1 TO 8:C = C > 127  ):C = C - 255 * (C > 127)  ):C = C - 255 * (C > 255):  NEXT : RETURN  20 58Ø I = FRE (Ø):A\$ = "": FOR  I = 1 TO L:T = INT (A / 1  6):A\$ = MID\$ ("Ø123456789  ABCDEF",A - 16 * T + 1,1)  + A\$:A = T: NEXT : RETUR  N  21 59Ø PRINT "FROM ADDRESS ";: G  OSUB 53Ø: IF S > A OR E <  A OR A = Ø THEN B = Ø: R  ETURN  20 6ØØ B = S + B * INT ((A - S)  / B): RETURN  20 610 PRINT "DISK ERROR": GOTO  150 ©  COMPUTE!  Subscription  Order Line  1-800-247-5470  In IA 1-800-532-1272	IF	540	THEN RETURN $EOP P = 1 TO I EN (\Delta e) \cdot Pe$
<pre>"A" DR C\$ &gt; "Z" THEN A = 0: RETURN D 550 GDSUB 520:A = A * 16 + J: NEXT : RETURN B 560 C = INT (B / 256):C = B - 254 * C - 255 * (C &gt; 127 ):C = C - 255 * (C &gt; 255) S 570 FOR F = 1 TO 8:C = C * 2 - 255 * (C &gt; 127) + V(F): C = C - 255 * (C &gt; 255): NEXT : RETURN D 580 I = FRE (Ø):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("Ø123456789 ABCDEF",A - 16 * T + 1,1) + A\$:A = T: NEXT : RETUR N IF 590 PRINT "FROM ADDRESS ";: G OSUB 530: IF S &gt; A OR E &lt; A OR A = Ø THEN B = Ø: R ETURN 0 600 B = S + B * INT ((A - S) / B): RETURN B 610 PRINT "DISK ERROR": GOTO 150 @</pre>	DF.	3410	= MID\$ (A\$,P,1): IF C\$ <
20 550 GOSUB 520:A = A * 16 + J: NEXT : RETURN 254 * C - 255 * (C > 127) ):C = C - 255 * (C > 255) 26 570 FOR F = 1 TO B:C = C * 2 - 255 * (C > 127) + V(F): C = C - 255 * (C > 255): NEXT : RETURN 26 580 I = FRE (0):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("0123456789 ABCDEF",A - 16 * T + 1,1) + A\$:A = T: NEXT : RETUR N 26 590 PRINT "FROM ADDRESS ";: G OSUB 530: IF S > A OR E < A OR A = 0 THEN B = 0: R ETURN 26 600 B = S + 8 * INT ((A - S) / 8): RETURN 26 610 PRINT "DISK ERROR": GOTO 150 ©			"A" DR C\$ > "Z" THEN A =
28       56Ø       C = INT (B / 256):C = B - 254 * C - 255 * (C > 127); C = C - 255 * (C > 255)         28       57Ø       FOR F = 1 TO 8:C = C * 2 - 255 * (C > 127) + V(F):C = C - 255 * (C > 127) + V(F):C = C - 255 * (C > 255):NEXT : RETURN         24       58Ø       I = FRE (Ø):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("Ø123456789)         358Ø       I = FRE (Ø):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("Ø123456789)         360DEF",A - 16 * T + 1,1)       + A\$:A = T: NEXT : RETUR         31       59Ø       PRINT "FROM ADDRESS ";: G OSUB 53Ø: IF S > A OR E < A OR A = Ø THEN B = Ø: R ETURN	20	550	GOSUB 520:A = A * 16 + J: NEXT : RETURN
):C = C - 255 * (C > 255) 8 570 FOR F = 1 TO B:C = C * 2 - 255 * (C > 127) + V(F): C = C - 255 * (C > 255): NEXT : RETURN 0 580 I = FRE (0):A\$ = "": FOR I = 1 TO L:T = INT (A / 1 6):A\$ = MID\$ ("0123456789 ABCDEF",A - 16 * T + 1,1) + A\$:A = T: NEXT : RETUR N IF 590 PRINT "FROM ADDRESS ":: G OSUB 530: IF S > A OR E < A OR A = 0 THEN B = 0: R ETURN 10 600 B = S + B * INT ((A - S) / B): RETURN 86 610 PRINT "DISK ERROR": GOTO 150 © COMPUTE! TOLL FREE Subscription Order Line 1-800-247-5470 In IA 1-800-532-1272	28	56Ø	C = INT (B / 256):C = B - 254 * C - 255 * (C > 127
$\begin{array}{c} -255 * (C > 127) + V(F):\\ C = C - 255 * (C > 255):\\ NEXT : RETURN\\ 04 580 I = FRE (0):As = "": FOR\\ I = 1 TO L:T = INT (A / 16):As = MID$ ("0123456789ABCDEF",A - 16 * T + 1,1)+ A$:A = T: NEXT : RETURNIF 590 PRINT "FROM ADDRESS ";: GOSUB 530: IF S > A OR E $	20	57Ø	):C = C - 255 * (C > 255) FOR F = 1 TO 8:C = C * 2
NEAT : REIDRN         I = FRE (Ø):A\$ = "": FOR         I = 1 TO L:T = INT (A / 1         6):A\$ = MID\$ ("Ø123456789         ABCDEF",A - 16 * T + 1,1)         + A\$:A = T: NEXT : RETUR         N         IF 590 PRINT "FROM ADDRESS ";: G         DSUB 530: IF S > A DR E <			$\begin{array}{l} -255 * (C > 127) + V(F): \\ C = C - 255 * (C > 255): \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$
6):A\$ = MID\$ ("Ø123456789 ABCDEF",A - 16 * T + 1,1) + A\$:A = T: NEXT : RETUR N IF 59Ø PRINT "FROM ADDRESS ";: G OSUB 53Ø: IF S > A OR E < A OR A = Ø THEN B = Ø: R ETURN 00 6ØØ B = S + B * INT ((A - S) / B): RETURN 86 61Ø PRINT "DISK ERROR": GOTO 15Ø © COMPUTE! TOLL FREE Subscription Order Line 1-800-247-5470 In IA 1-800-532-1272	DA	58Ø	$I = FRE (\emptyset):A\$ = "": FOR$ $I = 1 TO I = T = INT (0 / 1)$
+ A\$:A = T: NEXT : RETUR N IF 590 PRINT "FROM ADDRESS ";: G OSUB 530: IF $S > A OR E <$ A OR $A = 0$ THEN $B = 0$ : R ETURN 0 600 $B = S + B * INT ((A - S))$ / B): RETURN 86 610 PRINT "DISK ERROR": GOTO 150 © COMPUTE! TOLL FREE Subscription Order Line 1-800-247-5470 In IA 1-800-532-1272			6):A\$ = MID\$ ("Ø123456789 ABCDEF".A - 16 # T + 1.1)
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A DR A = Ø THEN B = Ø: R ETURN D 600 B = S + B * INT ((A - S) / B): RETURN 610 PRINT "DISK ERROR": GDTD 150 © COMPUTE! TOLL FREE Subscription Order Line 1-800-247-5470 In IA 1-800-532-1272	1F	59Ø	PRINT "FROM ADDRESS ";: G OSUB 530: IF S > A OR E <
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If you own an IBM, Amiga or Commodore computer — Watch out! Because 4 of Konami's most awesome adventures are about to invade. You'll confront the missions you've dreamed of in Rush 'N Attack, Contra, Jackal and Boot Camp. And you'll find yourself face to face against unequaled challenges, with incredible graphics, awesome music, and sound effects that'll blow you away.

So check out Konami's newest action wherever great software is sold. And be prepared for war.





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# Turn Your Computer Into a Starship.

#### Beam Aboard, Captain.

Your starship is fueled and ready. Your crew is fully trained. You launch from Starport, heading toward the galaxy's core on a hunch. You've been chosen to seek new worlds to colonize. New resources for a homeworld gone stale.

Your navigator zeroes in on a red dwarf star. Long-range scans show three planets: a gas giant, a frozen ice world, and a blueoceaned paradise that looks just like heaven. A good place to land.

Suddenly a klaxon sounds. "Captain, we're being scanned," says your Science Officer. A giant hologram of a squid-like crea-



Explore Strange New Worlds Land on different planets to collect valuable minerals, lifeform specimens, and artifacts from ancient civilizations. But keep your laser on stun—not all the locals will be glad to see you.



ture appears on your view screen and hisses, "Prepare to die, airbreathers."

Your space odyssey has just begun.



Talk to Aliens Each alien race, like this Veloxi, has a unique culture, personality, and language. They can give you clues—if you can get them to trust you.

#### State-of-the-art Outer Space Simulation.

• Stunning graphic simulation of rotating planets, landing sequences, laser battles, and more.

• Explore 270 star systems and 800 planets with unique ecosystems. Each planet contains almost 2 million different locations.

• Choose your own crew-Science Officer, Communications Officer, Navigator, Chief Engineer, Medical Officer, and Captain.

•Includes full starmap and security decoder.

• The state-of-the-art in entertainment software. Over 15 man-years in development.



"Standard Orbit, Captain." From hull-crushing gas giants to frozen dwarves, each star system is unique. Study your sensors carefully—there's a stiff fine for recommending colonization of boiling lava planets.



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For the IBM," Tandy, and all 100% compatibles. 256K RAM required. Not copy-protected.

**ELECTRONIC ARTS**[™]

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