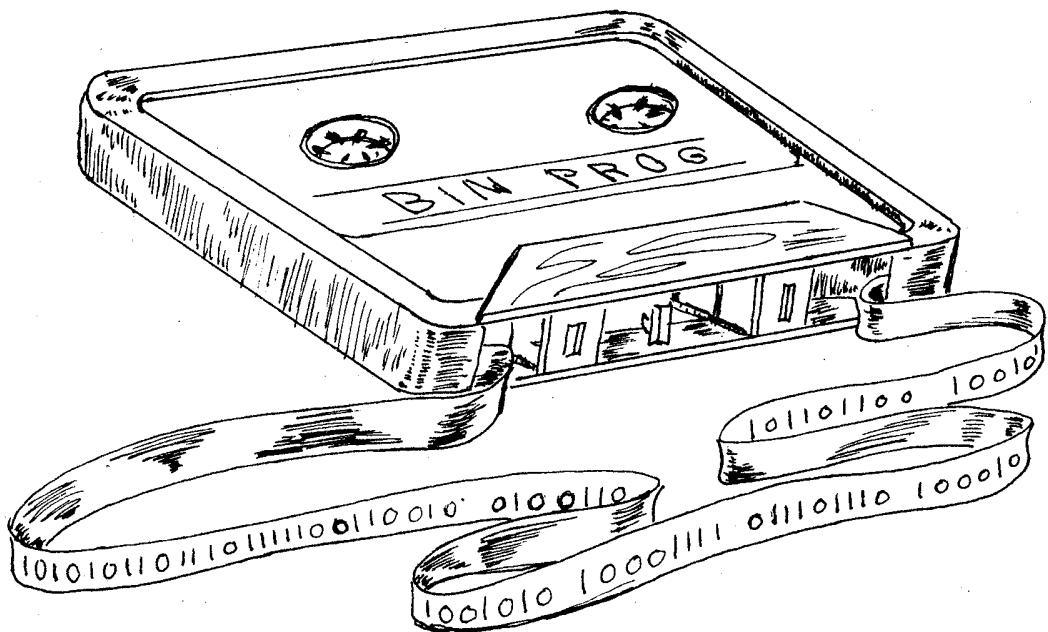


COCO-ADS

The Color Computers Users Magazine
June, 1987 \$2.00 Issue C-7



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A Review Of Koronis Rift

One of the first pieces of software from Tandy for the CoCo 3, is the arcade game "Koronis Rift." Written by Epyx and Lucasfilm games under OS-9 Level Two, it is a fine example of the "power" our CoCo 3 has. Speed and graphics are the major elements in this combination simulation and arcade game.

The scenario is more or less as follows: You are a "techno-scavenger" on a deadly radioactive planet. You are controlling some sort of "lunar-rover" vehicle on the planets surface, using the radar you must locate "abandoned space hulks." When one is found, you instruct your robot to "loot" the "hulks" and then destroy them. Contained within these hulks are "modules" which are essential for the operation of your vehicle. These modules can be shields, weapons, power storage units, generators and various other objects. Each different type of module you will find has different strengths and power demands. The amount of reserve energy you have in your vehicle at all times, is the key to the game. More advanced modules require more energy, so you are faced with a constant juggling act of matching modules with the amount of energy on hand. When you have destroyed all of the annoying "Alien Saucers" in the immediate area, you have the option of returning to

your spacecraft which is orbiting the planet. When inside, your "Science Droid Analyzer" is at your disposal. You can have it analyze any of the modules, or dismantle the useless ones in exchange for points. There are 20 levels to the game, your ultimate goal is to destroy the main alien saucer on level 20. It is not difficult to get to 20 though, the hard part is finding the right modules on the lower levels which have enough power to do the job.

The graphics are well done by the unknown author(s) (a lot better than the atari version pictured in the manual), an option is given at the beginning for RGB or Composite color sets. As is the windowing (if it can even be called that). There are up to seven windows going at once, yet the game is still fast and smooth. Yet another fine point of the game is the animation of the robot, very intricate movements. The sound effects are very mediocre and the game does not utilize the Speech/Sound Pack. The documentation is very confusing, the best way to approach the game is to play it immediately, and look up what you don't understand in the manual. Overall, on a scale from 1 to 10, I rate this game a 7.

Mike Schneider

All the programs that appear in this issue of COCO ADS are available already typed in and running. On cassette or on disk for only \$4.00 sent first class mail. Just fill in the below coupon and mail in with payment.

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PROGRAM OF THE MONTH

By Eric G. Robichaud

The purpose of this column, since it's debut, has been to present good programs for a diversity of interests, which when coupled with the articles will hopefully teach the reader something new, as well as provide a source of entertainment and enjoyment. I have been trying hard to make sure that I am passing along some information that may be of use to someone SOMEWHERE. Now I ask you, what better way is there to accomplish this than (the blatantly obvious..) an educational program?

AH! What a novel idea. Well it seems that a good friend of mine has written what I feel is a terrific educational program (What a coincidence?). Enter "DIPLOMAT".

DIPLOMAT is a BASIC program that was conceived and written by Mr. David Mills of Huntington, WV. David's program is a sort of database that holds a wealth of information on just about every country around the world. All of the information is as exact as it can be, and there are no typographical errors in it, whatsoever.

I will explain the use of the program first, and then delve into some of the nifty little things about the program itself, and finally end with a few extraneous comments. The program, as I mentioned, contains an enormous amount of information. When first running the program, you will see the title screen and some introductory instruction summaries.

Once the program is up and running, it asks you to enter the name of a country, for which it will return several pieces of information such as it's capital, it's largest city (which may differ), the unit of currency, population, the continent it is located on, etc. What is nice is that if you are unsure of the correct spelling of the country, you may just enter the first letter, and you will be provided with a list of every country beginning with that letter.

Be aware, however, that all of this information is very accurate, including details such as EXACT names of countries. I was dissapointed when I thought that a certain country was not listed, until I realized that the country was actually two countries: a North and South. I, personally, have entered the name of every backwater and third world country from the United States to Zimbabwe, and have not found one that was not

recognized (once I found the correct name, that is!).

There are a few nice features that are worth mentioning. If you get brave and daring, David has incorporated a test! This test reminds me a lot of those trivia games; it has a great propensity for making a person feel plainly stupid! But, just like the trivia games, the test is fun, so I continue to be a glutton for punishment.

Instead of entering the name of a country, one may enter either the word "MAP" or "FLAG". Entering "MAP" will halt the program temporarily and load in a nice hi-res graphics map of the world, drawn to scale in PMODE 3. Hitting a key will return the user to the program immediately. Entering "FLAG" will, similarly, bring up a quick picture of the American flag.

The program itself is well done, and operates very quickly. The program can scan through 150 countries in only a second or two to find Zimbabwe, for instance. The use of some colors and sounds also makes it interesting. I feel that this is a program that would prove to be interesting to the older generation, and would be educational for younger people, yet still maintain even the shortest of attention spans.

David used three sub-programs to create the displays such as the opening title screen, the flag, and the map. Each of the programs creates it's own display, then saves it to disk as a binary file. The main program then loads in the binary file to allow the quickest possible display of screens. This is very similar to the concept of the "MAP DRAW" program used in my "CONQUEST" game.

The first program called "TITLE" will draw a title screen in the normal 32 column mode, then saves it to disk with START, END, and EXEC addresses of 1024,1536,1024, respectively. By issuing a SAVEM"TITLE/SCR",1024,1536,1024 the 32 column text screen is saved to disk as a binary file. A LOADM"TITLE/SCR" will have the entire screen loaded in at blistering speed, as opposed to the time it would take to re-draw the screen every time the program is run. If you have not expiremented with this technique, I suggest you try it! The other two programs do precisely the same

thing, with the exception being that their purpose is to save and load the hi-res graphics screens. The addresses for the hi-res text screens differ from one mode to the next, but the most widely used PMODEs are 3 and 4. The addresses for these are 3584, 9728, 3584.

While on the subject of PMODE graphics, I will also briefly mention the color artifacting on the CoCo 1/2. By issuing a PMODE4:SCREEN1,1:PMODE3 you can "cheat" your CoCo into displaying not only black and white, but also blue and red, on either a color TV or a composite monitor (CMP). This technique will work on the CoCo3 also, but there is no need to do this, unless writing a CoCo1/2 program, since the CoCo3 has up to 16 colors available at any one time.

As many proud new CoCo3 owners have found out, this procedure will not work with an RGB monitor. The reason? The blue and red colors are not true colors. Artifacting exploits the inefficiencies of composite displays. When placing a white line immediately next to a black line, the color guns on the display "bleed" through producing either red or blue. An RGB monitor (RGB meaning Red, Green, Blue for the primary color signals used... truly ingenious) is a much more accurate animal, and will actually display the white line next to the black one. If you want the superb clarity of a RGB on your CoCo3, however, and don't want to lose the color in your favorite game, fear not; there are many utilities available now to patch games to display the correct colors with an RGB monitor.

While on the subject of the CoCo3, I would also like address a few topics that I have been asked about. To begin with, the first thing you must realize is that there is no way to upgrade a CoCo1/2 to a CoCo3 (without spending more than a new CoCo3, anyway!). The CoCo3 is a completely different species altogether. The one thing that I can say, is that it is possible to put in a newer VDG chip to allow true lowercase in the 32 column mode, but this will not allow simulation of the 40 or 80 columns screens, or any of the other features of the CoCo3.

The RAM upgrades for the CoCo1/2 will not allow use of memory in 8K "chunks" like the CoCo3. These other memory upgrades will only allow the standard memory-banking technique.

There has been talk of two "bugs" in the CoCo3. One is in regards to the horizontal scroll register of the CoCo3. If you have used a program that takes advantage of this new feature, don't be surprised if it bombs out on you. My 'lil CoCo3 runs fine with the horizontal scroll register, yet a friend's crashes everytime the horiz. scroll register is used.

The second problem seems to be with the CoCo3's timing. It seems that resistor R22 is a 120 ohm resistor, which has caused a bit of a problem. I know of some of the new 512K upgrades that have added a 48 ohm resistor in parallel with the 120 ohm resistor to bring the effective resistance down to approximately 34 ohms (using significant figures).

John Burke has expressed some aggravation over not being able to read in certain files off cassette with his new CC3. Apparently they work fine on his older CoCo, but not on the CoCo3. Files created with the CC3 will load back in, however. I suspect the 120 ohm resistor is the problem. If you are experiencing a similar problem, I would suggest looking into this, although it is still speculative.

Some of these topics are generally known, but I decided that I would mention them for everyone's general knowledge. In the future I would like to present a compilation of addresses for Assembly programmers to use when programming on the CoCo3. Thus far, I have a list of addresses and values; if you have any you would like to submit, drop me a line.

I began this column in April, 1986, and thus have recently completed one full year in CoCo Ads. With this in mind, I would like to announce a new program package that I have put together. Using my ingenuity, as always, I have compiled a package entitled "One Year of The Program of the Month" (I knew you'd like the title). This package contains all of the programs that were printed between April 1986, and March 1987, inclusive. It also contains a booklet with documentation for every program, and I've included a few "extra", bonus programs that will not be printed. The package is available for \$15 from myself. My address can be found below.

I hope that you have found this month's programs to be valuable, entertaining, and enlightning. If you have any comments or questions on the programs or any of the

topics discussed this month, feel free to write. I would also like to hear from you if there is a topic that you would like me discuss in the future. This month's programs, as well as back issues of this column, are available from the author for \$5.00 each, post-paid to Paragon Software, 10 Stoneham Drive, Woonsocket, RI 02895.

I would like to thank David Mills publicly for his good programs, and would urge readers to let me know if they would like to see more of his programs in the future.

I am looking forward, as always, to next month, and whatever new information we can dig up! So, stay tuned.. ("Same bat time..")

```

10 'AMERICAN FLAG
20 '
30 ' Copyright(c) 1987
40 ' David Mills
50 '
60 ' This program will draw
70 ' the hi-res graphics flag
80 ' and save it to disk as a
90 ' binary file.
100 '
110 PMODE 3,1:SCREEN1,1:PCLS5:CO
LOR8
120 LINE(0,0)-(255,169),PSET,B
130 FOR Y=1 TO 178 STEP 13
140 LINE(0,Y)-(255,Y),PSET
150 NEXT Y
160 FOR H=0 TO 255
170 FOR X=2 TO 175 STEP 26
180 PAINT(10,X),8,8
190 NEXT X
200 COLOR 6
210 LINE(0,0)-(100,78),PSET,B
220 PAINT(10,10),6,6
230 FOR Y=5 TO 73 STEP 16
240 FOR X=10 TO 92 STEP 16
250 CIRCLE(X,Y),4,5
260 PAINT(X,Y),5,5
270 NEXTX,Y
280 FOR Y=13 TO 68 STEP 16
290 FOR X=18 TO 87 STEP 16
300 CIRCLE(X,Y),4,5
310 PAINT(X,Y),5,5
320 NEXT X,Y
330 COLOR 8
340 LINE(0,0)-(0,170),PSET
350 SAVEM"FLAG",&H0E00,&H25FF,&H
0E00

```

```

10 'DIPLOMAT'S PROFESSOR TITLE
20 'Copyright(c) 1987
30 ' David Mills
40 '
50 'This program will draw the
60 'opening title screen and save
e
70 'it to disk as a binary file.

80 '
90 CLS0
100 PRINT STRING$(96,128);
110 FOR X = 1 TO 12
120 PRINT STRING$(2,128);:PRINT
STRING$(10,203);:PRINT STRING$(2
0,128);
130 NEXT X
140 FOR H=4 TO 24
150 SET(H,5,5):NEXTH
160 FOR V=5 TO 29:SET(24,V,5):NE
XTV
170 FOR X=42 TO 55
180 FOR Y=8 TO 17
190 SET(X,Y,2):NEXTY,X
200 PRINT@182,CHR$(205);
210 PRINT@186,CHR$(205);
220 PRINT@248,CHR$(156);
230 PRINT@247,CHR$(148);
240 PRINT@249,CHR$(152);
250 FOR X=43 TO 54
260 FOR Y=5 TO 7
270 SET(X,Y,3):NEXTY,X
280 FOR X=36 TO 60
290 SET(X,5,3):NEXTX
300 PRINT@113,CHR$(166);
310 PRINT@144,CHR$(166);
320 PRINT@149,CHR$(151);
330 PRINT@277,CHR$(157);
340 PRINT@283,CHR$(158);
350 PRINT@155,CHR$(155);
360 PRINT@486,CHR$(128);
370 PRINT@487,CHR$(128);
380 PRINT@36,"united";
390 PRINT@68,"nations";
400 FOR H=4 TO 24
410 SET(H,6,5):NEXTH
420 PRINT@311,CHR$(159);
430 PRINT@312,CHR$(159);:PRINT@3
13,CHR$(159);
440 PRINT@180,CHR$(151);
450 PRINT@212,CHR$(159);
460 PRINT@244,CHR$(157);
470 PRINT@211,CHR$(149);
480 'RIGHT SIDE OF HEAD
490 PRINT@155,CHR$(155);
500 PRINT@188,CHR$(155);
510 PRINT@220,CHR$(159);
520 PRINT@252,CHR$(158);

```

```

530 PRINT@221,CHR$(154);
540 PRINT@216,CHR$(128);
550 'SPELL WORDS
560 PRINT@337,"THE DIPLOMAT'S";
570 PRINT@372,"PROFESSOR";
580 PRINT@406,"DAVID";
590 PRINT@438,"MILLS";
600 PRINT@470,CHR$(159);
610 PRINT@474,CHR$(159);
620 FOR H=4 TO 24
630 FOR V=28 TO 29
640 SET(H,V,5):NEXTV,H
650 PRINT@456,CHR$(128);
660 FOR X=0 TO 63
670 SET(X,0,8):SET(X,31,8)
680 NEXT X
690 FOR Y=0 TO 31
700 SET(0,Y,8):SET(63,Y,8)
710 NEXT Y
720 SAVEM"DIPLOMAT/SCR",1024,153
5,1024

0 GOTO91
1 COLOR6,B:LINE(88,184)-(252,186
),PSET,B:LINE(251,185)-(FUEL
10 CLS3
20 '**Paragon Software Presents
**
30 '
40 ' Diplomat
50 ' Copyright(c) 1987
60 ' David Mills
70 ' Huntington, West Virginia
80 ' Printed in June, 1987 issue
e
90 ' CoCo Ads Magazine
100 ' Houston, Texas
110 '
120 LOADM"DIPLOMAT/SCR"
130 A$=INKEY$:IFA$=""THEN130
140 X=RND(-TIMER)
150 CLS0:PRINT" YOUR COLOR COMPUTER HAS NOW BEEN LOADED WITH AN ENCYCLOPEDIA OF KNOWLEDGE AND DATA. VALUABLE, COMPREHENSIVE INFORMATION ON ALL 169 NATIONS OF THE WORLD IS NOW READY FOR YOUR USE."
160 PRINT:PRINT" TO RETRIEVE DATA, YOU MAY ENTER THE NAME OF THE COUNTRY OR ONLY THE FIRST LETTER. ENTERING THE FIRST LETTER WILL PRODUCE A LIST OF ALL NATIONS WHICH BEGIN WITH THAT LETTER."
170 PRINT@448,"TOUCH ANY KEY FOR ANOTHER PAGE. ";
180 GG$=INKEY$:IFGG$=""THEN180
190 CLS0:PRINT" FOR A SELF-EXAMINATION, ENTER<TEST> AT THE PROMPT. THE TEST SUBROUTINE CONTAINS MORE THAN 800 QUESTIONS RANDOMLY SELECTED.";
200 PRINT:PRINT" TO VIEW THE AMERICAN FLAG, ENTER <FLAG>."
210 PRINT:PRINT" TO REVIEW THE HIGH RESOLUTION MAP, ENTER <MAP> AT THE PROMPT. [COORDINATES FOR THIS MAP WERE DERIVED FROM THE EXCELLENT WORK OF R. DEWAIN POE.]"
220 PRINT@483,"TOUCH ANY KEY TO CONTINUE.";
230 QP$=INKEY$:IFQP$=""THEN230
240 CLEAR 300
250 CLS
260 RESTORE
270 S$=""":PRINT:PRINT" NAME OF COUNTRY OR 1ST LETTER.":PRINT STRING$(32,175)
280 P0=324:VB=207:GOSUB 2140
290 I$=A$
300 IF I$="TEST"THEN1580
310 IF I$="MAP" THEN LOADM"MAP/BIN":PMODE3,1:SCREEN 1,0:CLS:GOTO 350
320 IF I$="FLAG" THEN LOADM"FLAG/BIN":PMODE 3,1:CLS
330 IF I$="FLAG" THEN SCREEN 1,1 ELSE 370
340 CLS
350 AX$=INKEY$:IF AX$="" THEN350
360 GOTO 270
370 IF LEN(I$)=1 THEN 1220
380 CLS
390 '
400 FORX=1TO169
410 READ C$,N$,P$,CAP$,L$,M$,BC$ ,LCP$
420 IFI$=N$THEN470
430 NEXTX
440 PRINT:PRINT" NO COUNTRY CAN BE LOCATED BY THAT SPELLING.":PRINT STRING$(32,255)
450 GOTO 260
460 CLS
470 GOSUB 1980
480 PRINT@0,"continent: "C$
490 PRINT@64,"country: "N$
500 PRINT@128,"population: "P$
510 PRINT@192,"capital: "CAP$
520 PRINT@256,"language: "L$
530 PRINT@320,"money: "M$
540 PRINT@384,"largest city: "B
C$
```

550 PRINT@448,"city population:
"LCP\$
560 WM\$=INKEY\$:IFWM\$=""THEN560
570 GOTO 250
580 GOTO 250
590 DATAA,AFGHANISTAN,"17,501",K
ABUL,PASHTO AND DARI,AFGHANI,KAB
UL,749,E,ALBANIA,"3,049",TIRANE,
ALBANIAN,LEK,TIRANE,175,AF,ALGER
IA,"22,480",ALGIERS,ARABIC,DINAR
,ALGIERS,"1,504",E,ANDORRA,38,AN
DORRA,CATALAN,FRANC AND PESETA,A
NDORRA,11
600 DATAAF,ANGOLA,"8,047",LUANDA
,PORTUGUESE,KWANZA,LUANDA,600,NA
,ANTIGUA AND BARBUDA,81,ST. JOHN
'S,ENGLISH,DOLLAR,ST. JOHN'S,24,
SA,ARGENTINA,"29,474",BUENOS AIRES,
SPANISH,PESO,BUENOS AIRES,"2,
908"
610 DATAAS,AUSTRALIA,"15,661",CA
NBERRA,ENGLISH,DOLLAR,SYDNEY,"2,
874",E,AUSTRIA,"7,525",VIENNA,GE
RMAN,SCHILLING,VIENNA,"1,615",NA
,BAHAMAS,256,NASSAU,ENGLISH,BAHA
MIAN DOLLAR,NASSAU,132
620 DATAA,BAHRAIN,401,MANAMA,ARA
BIC,DINAR,MANAMA,114,A,BANGLADES
H,"100,619",DACCA,BENGALI,ATAKA,D
ACCA,"1,680",NA,BARBADOS,263,BRI
DGETOWN,ENGLISH,BARBADOS DOLLAR,
BRIDGETOWN,9
630 DATAE,BELGIUM,"9,888",BRUSSE
LS,DUTCH AND FRENCH,BELGIAN FRAN
C,ANTWERP,209,NA,BELIZE,159,BELM
OPAN,ENGLISH,BELIZEAN DOLLAR,BEL
IZE CITY,50,AF,BENIN,"3,965",POR
TO-NOVO,FRENCH,FRANC,COTONOU,120
640 DATAA,BHUTAN,"1,451",THIMPHU
,DRUK-KE,INDIAN RUPEE,THIMPHU,50
,SA,BOLIVIA,"6,402",LA PAZ,SPANI
SH,PESO BOLIVIANO,LA PAZ,655,AF,
BOTSWANA,"1,063",GABORONE,ENGLIS
H,PULA,GABORONE,37,SA,BRAZIL,"13
3,121",BRASILIA,PORTUGUESE,CRUZE
IRO,SAO PAULO,"7,034"
650 DATAA,BRUNEI,277,BANDAR SERI
BEGAWAN,MALAY,BRUNEI DOLLAR,BAN
DAR SERI BEGA- WAN
,37,E,BULGARIA,"9,069",SOFIA,BUL
GARIAN,LEV,SOFIA,966
660 DATAAF,BURKINA FASO,"6,889",
OUAGADOUGOU,FRENCH,FRANC,OUAGADO
UGOU,169,A,BURMA,"37,875",RANGOON,
BURMESE,KYAT,RANGOON,"1,316"
670 DATAAF,BURUNDI,"4,818",BUJUM
BURA,KIRUNDI AND FRENCH,FRANC,BU
JUMBURA,134

680 DATAAF,CAMEROON,"9,548",YAOU
NDE,FRENCH AND ENGLISH,FRANC,DOU
ALA,458,NA,CANADA,"25,128",OTTAW
A,ENGLISH AND FRENCH,DOLLAR,MONT
REAL,"1,081",AF,CAPE VERDE,365,P
RAIA,LOCAL CREEOLE DIALECT,ESCUDO
,PRAIA,55
690 DATAAF,CENTRAL AFRICAN REPUB
LIC,"2,672",BANGUI,FRENCH,FRANC,
BANGUI,301,AF,CHAD,"4,941",N'DJA
MENA,FRENCH,FRANC,N'DJAMENA,242,
SA,CHILE,"12,168",SANTIAGO,SPANI
SH,PESO,SANTIAGO,"4,271",A,CHINA
,1,047,800",BEIJING,CHINESE,YUA
N,SHANGHAI,"11,860"
700 DATASA,COLOMBIA,"31,393",BOG
OTA,SPANISH,PESO,BOGOTA,"2,850",
AF,COMOROS,411,MORONI,FRENCH,FRA
NC,MORONI,20,AF,CONGO,"1,755",BR
AZZAVILLE,FRENCH,FRANC,BRAZZAVIL
LE,250,NA,COSTA RICA,"2,487",SAN
JOSE,SPANISH,COLON,SAN JOSE,215
710 DATANA,CUBA,"9,976",HAVANA,S
PANISH,PESO,HAVANA,"1,900",A,CYP
RUS,652,NICOSIA,GREEK AND TURKIS
H,CYPRUS POUND,NICOSIA,147,E,CZE
CHOSLOVAKIA,"15,618",PRAGUE,CZEC
H AND SLOVAK,KORUNA,PRAGUE,"1,18
9"
720 DATAE,DENMARK,"5,150",COPENH
AGEN,DANISH,KRONE,COPENHAGEN,516
,AF,DJIBOUTI,379,DJIBOUTI CITY,A
RABIC,DJIBOUTI FRANC,DJIBOUTI CI
TY,180,NA,DOMINICA,82,ROSEAU,ENG
LISH,DOLLAR,ROSEAU,12
730 DATANA,DOMINICAN REPUBLIC,"6
,168",SANTO DOMINGO,SPANISH,PESO
,SANTO DOMINGO,673,E,EAST GERMAN
Y,"16,756",EAST BERLIN,GERMAN,DE
UTSCHE MARK,EAST BERLIN,"1,129",
SA,ECUADOR,"9,803",QUITO,SPANISH
,SUCRE,GUAYAQUIL,814
740 DATAAF,EGYPT,"47,395",CAIRO,
ARABIC,POUND,CAIRO,"6,133"
750 DATANA,EL SALVADOR,"5,536",S
AN SALVADOR,SPANISH,COLON,SAN SA
LVADOR,397,AF,EQUATORIAL GUINEA,
411,MALABO,SPANISH,EKUELE,MALABO
,40,AF,ETHIOPIA,"35,295",ADDIS A
BABA,AMHARIC,BIRR,ADDIS ABABA,"1
,161"
760 DATAPI,FIJI,691,SUVA,ENGLISH
,FIJIAN DOLLAR,SUVA,60,E,FINLAND
,4,844",HELSINKI,FINNISH AND SW
EDISH,MARKKA,HELSINKI,499,E,FRAN
CE,"54,613",PARIS,FRENCH,FRANC,P
ARIS,"2,176"

770 DATAAF, GABON, 688, LIBREVILLE, FRENCH, FRANC, LIBREVILLE, 130, AF, GAMBIA, 686, BANJUL, ENGLISH, DALASI, BANJUL, 44
780 DATAAF, GHANA, "13,736", ACCRA, ENGLISH, CEDI, ACCRA, 636, E, GREAT BRITAIN, "55,681", LONDON, ENGLISH, POUND, LONDON, "6,609"
790 DATAE, GREECE, "9,942", ATHENS, GREEK, DRACHMA, ATHENS, 867, NA, GRENADA, 117, ST. GEORGE'S, ENGLISH, EAST CARIBBEAN DOLLAR, ST. GEORGE'S, 8, NA, GUATEMALA, "6,776", GUATEMALA CITY, SPANISH, QUETZAL, GUATEMALA CITY, 701
800 DATAAF, GUINEA, "5,726", CONAKRY, FRENCH, SYLI, CONAKRY, 526, AF, GUINEA-BISSAU, 870, BISSAU, PORTUGUESE, PESO, BISSAU, 71, SA, GUYANA, 880, GEORGETOWN, ENGLISH, GUYANA DOLLAR, GEORGETOWN, 72
810 DATANA, HAITI, "5,601", PORT-AU-PRINCE, FRENCH, GOURDE, PORT-AU-PRINCE, 475, NA, HONDURAS, "4,372", TEGUCIGALPA, SPANISH, LEMPIRA, TEGUCIGALPA, 268, E, HUNGARY, "10,769", BUDAPEST, MAGYAR (HUNGARIAN), FORINT, BUDAPEST, "2,093"
820 DATAE, ICELAND, 240, REYKJAVIK, ICELANDIC, KRONA, REYKJAVIK, 84, A, INDIA, "738,759", NEW DELHI, HINDI, RUPEE, BOMBAY, "8,227", A, INDONESIA, "159,673", JAKARTA, INDONESIAN, RUPIAH, JAKARTA, "6,503"
830 DATAA, IRAN, "44,255", TEHERAN, PERSIAN (FARSI), RIAL, TEHERAN, "4,496", A, IRAQ, "15,463", BAGHDAD, ARABIC, DINAR, BAGHDAD, "2,969", E, IRELAND, "3,597", DUBLIN, ENGLISH AND GAELIC, IRISH POUND, DUBLIN, 545
840 DATAA, ISRAEL, "4,267", JERUSALEM, HEBREW AND ARABIC, SHEKEL, TEL AVIV-YAFO, 368, E, ITALY, "56,753", ROME, ITALIAN, LIRA, ROME, "2,914", AF, IVORY COAST, "9,412", ABIDJAN, FRENCH, FRANC, ABIDJAN, "1,388"

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850 DATANA, JAMAICA, "2,356", KINGSTON, ENGLISH, JAMAICAN DOLLAR, KINGSTON, 118, A, JAPAN, "120,494", TOKYO, JAPANESE, YEN, TOKYO, "8,349", A, JORDAN, "3,568", AMMAN, ARABIC, DINAR, AMMAN, 500
860 DATAAA, KAMPUCHEA, "6,224", PHNOM PENH, CAMBODIAN, RIEL, PHNOM PENH, UNKNOWN
870 DATAAF, KENYA, "20,373", NAIROBI, SWAHILI, KENYA SHILLING, NAIROBI, 863, PI, KIRIBATI, 62, TARAWA, GILBERTSE, AUSTRALIAN DOLLAR, TARAWA, 20
880 DATAAA, KUWAIT, "1,798", KUWAIT, ARABIC, DINAR, HAWALLI, UNKNOWN, A, LAOS, "4,077", VIENTIANE, LAO, KIP, VIENTIANE, 181
890 DATAAA, LEBANON, "2,929", BEIRUT, ARABIC, POUND, BEIRUT, 702, AF, LESOTHO, "1,517", MASERU, ENGLISH AND SESOTHO, SOUTH AFRICAN RAND, MASERU, 45
900 DATAAF, LIBERIA, "2,312", MONROVIA, ENGLISH, UNITED STATES DOLLAR, MONROVIA, 209, AF, LIBYA, "3,608", TRIPOLI, ARABIC, DINAR, TRIPOLI, 551, E, LIECHTENSTEIN, 28, VADUZ, GERMAN, SWISS FRANC, VADUZ, 5
910 DATAE, LUXEMBOURG, 368, LUXEMBOURG, FRENCH AND GERMAN, FRANC, LUXEMBOURG, 76, AF, MADAGASCAR, "10,001", ANTANANARIVO, MALAGASY AND FRENCH, FRANC, ANTANANARIVO, 520, AF, MALAWI, "6,999", LILONGWE, CHICHEWA AND ENGLISH, KWACHA, BLANTYRE, 109
920 DATAA, MALAYSIA, "15,128", KUALA LUMPUR, BAHASA MALAYSIA, RINGGIT, KUALA LUMPUR, "1,072", A, MALDIVES, 177, MALE, DIVEHI, RUPEE, MALE, 30, AF, MALI, "7,996", BAMAKO, FRENCH, FRANC, BAMAKO, 404
930 DATAE, MALTA, 378, VALLETTA, MALTESE AND ENGLISH, MALTESE POUND, S LIEMA, 22, AF, MAURITANIA, "1,812", NOUAKCHOTT, FRENCH AND ARABIC, OUGUIYA, NOUAKCHOTT, 135, AF, MAURITIUS, "1,035", PORT LOUIS, ENGLISH, RUPEE, PORT LOUIS, 143
940 DATANA, MEXICO, "76,590", MEXICO CITY, SPANISH, PESO, MEXICO CITY, "9,373", E, MONACO, 27, MONACO, FRENCH, FRENCH FRANC, MONTE CARLO, 12, A, MONGOLIA, "1,876", ULAN BATOR, MONGOLIAN, TUGHRIK, ULAN BATOR, 403
950 DATAAF, MOROCCO, "23,418", RABAT, ARABIC, DIRHAM, CASABLANCA, "1,506", AF, MOZAMBIQUE, "14,088", MAPUTO, PORTUGUESE, ESCUDO, MAPUTO, 355

960 DATAPI, NAURU, 7, YAREN DISTRICT, ENGLISH AND NAURUAN, AUSTRALIAN DOLLAR, UNKNOWN, UNKNOWN, A, NEPAL, "16,450", KATHMANDU, NEPALI, RUPEE, KATHMANDU, 150, E, NETHERLANDS, "14,531", AMSTERDAM & THE HAGUE, DUTCH GUILDER, AMSTERDAM, 758

970 DATAPI, NEW ZEALAND, "3,177", WELLINGTON, ENGLISH, NEW ZEALAND DOLLAR, AUCKLAND, 766, NA, NICARAGUA, "3,216", MANAGUA, SPANISH, CORDOBA, M ANAGUA, 678, AF, NIGER, "6,355", NIAMEY, FRENCH, FRANC, NIAMEY, 130

980 DATAAF, NIGERIA, "91,081", LAGOS, ENGLISH, NAIRA, LAGOS, "1,149", A, NORTH KOREA, "20,061", PYONGYANG, KOREAN, WON, PYONGYANG, "2,500", A, NORTH YEMEN, "6,531", SANA, ARABIC, RIAL, SANA, 448, E, NORWAY, "4,158", OSL0, NORWEGIAN, KRONE, OSLO, 460

990 DATAAA, OMAN, "1,038", MUSCAT, ARABIC, RIAL, MATRAH, 15

1000 DATAAA, PAKISTAN, "94,650", ISLAMABAD, URDU, PAKISTANI RUPEE, KARACHI, "4,902", NA, PANAMA, "2,116", PANAMA CITY, SPANISH, BALBOA, PANAMA CITY, 465, PI, PAPUA NEW GUINEA, "3,405", PORT MORESBY, MORE THAN 700, KINA, PORT MORESBY, 123

1010 DATASA, PARAGUAY, "3,303", ASUNCION, SPANISH, GUARANI, ASUNCION, 393, SA, PERU, "20,240", LIMA, SPANISH AND QUECHUA, SOL, LIMA, "3,969", A, PHILIPPINES, "54,759", MANILA, PILIPINO AND ENGLISH, PESO, MANILA, "1,479"

1020 DATAE, POLAND, "37,424", WARSAW, POLISH, ZLOTY, WARSAW, "1,552", E, PORTUGAL, "10,081", LISBON, PORTUGUESE, ESCUDO, LISBON, 758, A, QATAR, 287, DOHA, ARABIC, QATAR DUBAI RIYAL, DOHA, 80

1030 DATAE, ROMANIA, "23,184", BUCHAREST, ROMANIAN, LEU, BUCHAREST, "1,807", E&A, RUSSIA, "277,465", MOSCOW, RUSSIAN, RUBLE, MOSCOW, "8,275", AF, RWANDA, "5,795", KIGALI, FRENCH & KINYARWANDA, FRANC, KIGALI, 118

1040 DATANA, ST. LUCIA, 129, CASTRIES, ENGLISH, DOLLAR, CASTRIES, 47, NA, ST. VINCENT & THE GRENADINES, 133, KINGSTOWN, ENGLISH, DOLLAR, KINGS TOWN, 30

1050 DATAE, SAN MARINO, 23, SAN MARINO, ITALIAN, ITALIAN LIRA, SAN MARINO, 4, AF, SAO TOME AND PRINCIPE, 88, SAO TOME CITY, PORTUGUESE, DOBRA, SAO TOME CITY, 17

1060 DATAAA, SAUDI ARABIA, "10,818", RIYADH, ARABIC, RIYAL, RIYADH, 669, AF, SENEGAL, "6,464", DAKAR, FRENCH, FRANC, DAKAR, 979, AF, SEYCHELLES, 69, VICTORIA, ENGLISH AND FRENCH, RUPPEE, VICTORIA, 14

1070 DATAAF, SIERRA LEONE, "3,988", FREETOWN, ENGLISH, LEONE, FREETOWN, 274, A, SINGAPORE, "2,570", SINGAPORE, CHINESE, ENGLISH, MALAY, AND TAMIL, SINGAPORE DOLLAR, SINGAPORE, "2,308"

1080 DATAPI, SOLOMON ISLANDS, 271, HONIARA, ENGLISH, DOLLAR, HONIARA, 15, AF, SOMALIA, "5,661", MOGADISCIO, SOMALI, SHILLING, MOGADISCIO, 445, AF, SOUTH AFRICA, "32,235", PRETORIA AND CAPE TOWN, AFRIKAANS AND ENGLISH, RAND, CAPE TOWN, 691

1090 DATAAA, SOUTH KOREA, "41,371", SEOUL, KOREAN, WON, SEOUL, "8,367", A, SOUTH YEMEN, "2,267", ADEN, ARABIC, DINAR, ADEN, 264

1100 DATAE, SPAIN, "38,865", MADRID, CASTILIAN SPANISH, PESETA, MADRID, "3,201", A, SRI LANKA, "16,099", COLOMBO, SINHALA AND TAMIL, RUPEE, COLOMBO, 616, AF, SUDAN, "21,191", KHARTOUM, ARABIC, SUDANESE POUND, KHARTOUM, 334

1110 DATASA, SURINAME, 402, PARAMARIBO, DUTCH, GUILDER, PARAMARIBO, 150, AF, SWAZILAND, 639, MBABANE AND LOBAMBA, ENGLISH AND SISWATI, LILANGENI, MBABANE, 22, E, SWEDEN, "8,353", STOCKHOLM, SWEDISH, KRONA, STOCKHOLM, 658

1120 DATAE, SWITZERLAND, "6,398", BERNE, GERMAN, FRENCH, AND ITALIAN, FRANC, ZURICH, 380, A, SYRIA, "10,835", DAMASCUS, ARABIC, POUND, DAMASCUS, "1,200"

1130 DATAAA, TAIWAN, "19,471", TAIPEI, CHINESE, NEW TAIWAN DOLLAR, TAIPÉI, "2,220", AF, TANZANIA, "21,837", DAR ES SALAAM, ENGLISH AND SWAHILI, SHILLING, DAR ES SALAAM, 870, A, THAILAND, "51,718", BANGKOK, THAI, BAHT, BANGKOK, "5,154"

1140 DATAAF, TOGO, "3,056", LOME, FRENCH, FRANC, LOME, 229, PI, TONGA, 108, NUKUALOFA, TONGAN, PA'ANGA, NUKUALOFA, 18, NA, TRINIDAD AND TOBAGO, "1,136", PORT-OF-SPAIN, ENGLISH, WEST INDIES DOLLAR, PORT-OF-SPAIN, 120

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1150 DATAAF,TUNISIA,"7,161",TUNI
S,ARABIC,DINAR,TUNIS,"1,000",E&
,TURKEY,"49,728",ANKARA,TURKISH,
LIRA,ISTANBUL,"2,547",PI,TUVALU,
7,FUNAFUTI,TUVALUAN AND ENGLISH,
AUSTRALIAN DOLLAR,FUNAFUTI,1
1160 DATAAF,UGANDA,"15,004",KAMP
ALA,ENGLISH,SHILLING,KAMPALA,531
,A,UNITED ARAB EMIRATES,"1,263",
ABU DHABI,ARABIC,DIRHAM,ABU DHAB
I,236,NA,UNITED STATES,"237,200"
,WASHINGTON,ENGLISH,DOLLAR,NEW Y
ORK CITY,"7,086"
1170 DATASA,URUGUAY,"3,000",MONT
EVIDEO,SPANISH,PESO,MONTEVIDEO,"
1,230",PI,VANUATU,136,PORT-VILA,
BISLAMA,VATU,PORT-VILA,25,E,VATI
CAN CITY,1,VATICAN CITY,ITALIAN
AND LATIN,VATICAN COIN, ,
1180 DATASA,VENEZUELA,"16,298",C
ARACAS,SPANISH,BOLIVAR,CARACAS,"
1,280",A,VIETNAM,"59,967",HANOI,
VIETNAMESE,DONG,HO CHI MINH CITY
,"2,441"
1190 DATAE,WEST GERMANY,"61,085"
,BONN,GERMAN,DEUTSCHE MARK,WEST
BERLIN,"1,910"
1200 DATAPI,WESTERN SAMOA,161,AP
IA,SAMOAN AND ENGLISH,TALA,APIA,
33,E,YUGOSLAVIA,"23,239",BELGRAD
E,"SERBO-CROATIAN, SLOVENIAN, AN
D MACEDONIAN",DINAR,BELGRADE,746
,AF,ZAIRE,"30,430",KINSHASA,FREN
CH,ZAIRE,KINSHASA,"2,008"
1210 DATAAF,ZAMBIA,"6,714",LUSAK
A,ENGLISH,KWACHA,LUSAKA,520,AF,Z
IMBABWE,"8,721",HARARE,ENGLISH,Z
IMBABWE DOLLAR,HARARE,627
1220 CLS
1230 FORY=1TO169
1240 READ C$,N$,P$,CAP$,L$,M$,BC
$,LCP$
1250 IFQ=0THENIFI$=LEFT$(N$,1)TH
ENZ=Y:Q=Q+1
1260 IFI$=LEFT$(N$,1)THENNUM=NUM
+1:NUM$=STR$(NUM)
1270 IFNUM=12THENPRINT
1280 IFI$=LEFT$(N$,1)THENPRINTNU
M$;." ";N$
1290 IF NUM>2 THEN IF I$<>LEFT$(N$,1) THEN 1440
1300 IF NUM>10 THEN 1340
1310 NEXT Y
1320 IF LEN(I$)=1 THEN IF NUM=0
THEN 440
1330 GOTO 1470
1340 BH=BH+1
1350 IF BH=1 THEN 1360 ELSE 1420
1360 PRINT@416,"ENTER YOUR SELEC
TION OR <M> FOR MORE CHOICES.";;
PO=463:VB=255:GOSUB2140
1370 A$=$
1380 IF A$="M" THEN 1340
1390 IF VAL(A$)>NUM THEN 1360
1400 IF VAL(A$)<1 THEN 1360
1410 IF A$<>"M" THEN 1510
1420 NEXTY
1430 Q=0:BH=0
1440 IF A$=="M"THENPRINT:PRINT"ENT
ER NUMBER OF COUNTRY.";;PO=506:V
B=175:GOSUB2140
1450 A$=$
1460 GOTO 1490
1470 PRINT@473,CHR$(143);:PRINT@
448,"ENTER NUMBER OF COUNTRY.";;
PO=474:VB=175:GOSUB2140
1480 A$=$
1490 IF VAL(A$)>NUM THEN 1470
1500 IF VAL(A$)<1 THEN 1470
1510 Q=0:NUM=0:BH=0
1520 RESTORE
1530 CLS
1540 FORW=1TOZ+VAL(A$)-1
1550 READC$,N$,P$,CAP$,L$,M$,BC$
,LCP$
1560 NEXTW
1570 GOTO460
1580 RESTORE:CLS
1590 JC=RND(5)
1600 IF JC=1 THEN VB=159:GOTO165
0
1610 IF JC=2 THEN VB=191:GOTO176
0
1620 IF JC=3 THEN VB=239:GOTO186
0
1630 IF JC=4 THEN VB=159:GOTO235
0
1640 IF JC=5 THEN 2450
1650 GOSUB 2100
1660 PRINT:PRINT"      WHAT CITY
IS THE CAPITAL OF";
1670 PRINT N$+"?":PRINT
1680 PO=165:GOSUB 2140
1690 IF A$=CAP$ THEN PRINT:PRINT
:PRINT:PRINT"      YOU ARE COR
RECT!!!!":PRINT
1700 IF A$<>CAP$ THEN PRINT:PRIN
T:PRINT:PRINT"      I AM SORRY. T
HE CAPITAL OF "N$" IS "CAP$".":P
RINT
1710 PRINT@384,STRING$(32,159)+"
TOUCH <ENTER> FOR ANOTHER
QUESTION OR THE SPACE BAR TO
EXIT THE TEST."
1720 VV$=INKEY$:IFVV$=""THEN1720
1730 IF VV$=CHR$(32)THEN250
1740 IF VV$=CHR$(13)THEN1580

```

```

1750 GOTO 1720
1760 GOSUB 2100
1770 PRINT:PRINT " WHICH COU
NTRY HAS A CAPITALCITY OF "CAP$"
?":PRINT
1780 PO=165:GOSUB 2140
1790 IF A$=N$ THEN PRINT:PRINT:P
RINT:PRINT" YOU ARE EXACTLY
RIGHT!!!!"
1800 IF A$<>N$ THENPRINT:PRINT:P
RINT: PRINT" I'M VERY SORRY.
THE CITY OF"CAP$" IS IN "N$"."
1810 PRINT@384,STRING$(32,159)+""
TOUCH <ENTER> FOR ANOTHER
QUESTION OR THE SPACE BAR TO
EXIT THE TEST.";
1820 VV$=INKEY$:IFVV$=""THEN1820

1830 IFVV$=CHR$(32)THEN250
1840 IFVV$=CHR$(13)THEN1580
1850 GOTO1820
1860 GOSUB 2100
1870 PRINT:PRINT" ON WHICH C
ONTINENT IS THE COUNTRY OF "N$"
?":PRINT
1880 PO=165:GOSUB 2140
1890 GOSUB 1980
1900 IF A$="ASIA" THEN IF C$="PA
CIFIC ISLANDS" THEN A$="PACIFIC
ISLANDS"
1910 IF A$=C$THENPRINT:PRINT:P
RINT:PRINT" YOU ARE ACCURAT
E."
1920 IF A$<>C$THEN PRINT:PRINT:P
RINT:PRINT" NO, IT ISN'T. TH
E NATION OF"N$" IS IN "C$"."
1930 PRINT@384,STRING$(32,159)+""
TOUCH <ENTER> FOR ANOTHER
QUESTION OR THE SPACE BAR TO
EXIT THE TEST.";
1940 VV$=INKEY$:IFVV$=""THEN1940

1950 IFVV$=CHR$(13)THEN1580
1960 IFVV$=CHR$(32)THEN250
1970 GOTO1940
1980 IFC$="A"THENC$="ASIA"
1990 IFC$="AF"THENC$="AFRICA"
2000 IFC$="E"THENC$="EUROPE"
2010 IFC$="NA"THENC$="NORTH AMER
ICA"
2020 IFC$="SA"THENC$="SOUTH AMER
ICA"
2030 IFC$="PI"THENC$="PACIFIC IS
LANDS"
2040 IFC$="AS"THENC$="AUSTRALIA"

2050 IFC$="E&A"THENC$="EUROPE AN
D ASIA"
2060 P$=P$+",000"
2070 IF LCP$=""THEN2090
2080 IF LCP$<>"UNKNOWN"THENLCP$=
LCP$+",000"
2090 RETURN
2100 FOR X=1 TO RND(169)
2110 READ C$,N$,P$,CAP$,L$,M$,BC
$,LCP$
2120 NEXT X
2130 RETURN
2140 'SET CURSOR
2150 S$=""
2160 PRINT@PO,CHR$(VB);
2170 AA$=INKEY$:IF AA$=""THEN 21
70
2180 IF AA$=CHR$(03) THEN 2170
2190 IF AA$=CHR$(12)THEN2170
2200 IF AA$=CHR$(09)THEN2170
2210 IF LEN(S$)=0 THEN IF AA$=CH
R$(0B) THEN 2170
2220 IF AA$=CHR$(13) THEN A$=S$:
PRINT:RETURN
2230 IF AA$=CHR$(08) THEN S$=LEF
T$(S$,LEN(S$)-1):PRINT@PO+LEN(S$)
)+1," ";:GOTO 2310
2240 IFVB=175THENWM=1ELSEWM=40
2250 IFVB=255THENWM=1
2260 IFVB=239THENWM=15
2270 IFVB=159THENWM=25
2280 IFVB=191THENWM=25
2290 IF LEN(S$)>WM THEN 2170
2300 S$=S$+AA$
2310 PRINT@PO+LEN(S$),CHR$(VB);
2320 PRINT@PO+LEN(S$)-1," ";
2330 PRINT@PO,S$;
2340 GOTO 2170
2350 GOSUB 2100
2360 PRINT:PRINT" WHAT LANGU
AGE IS SPOKEN IN":PRINTN$+"?"

```

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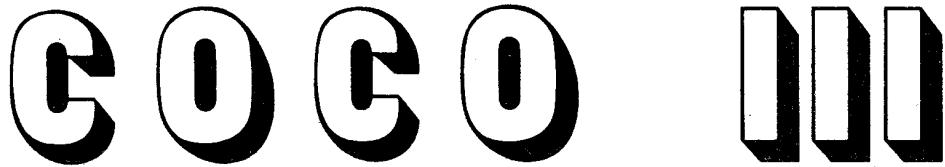
```
2370 P0=165:GOSUB 2140
2380 IF A$=L$ THENPRINT:PRINT: P
RINT:PRINT" EXCELLENT!
!!
2390 IF A$<>L$ THEN PRINT:PRINT:
PRINT:PRINT" NO. THE LANGUAG
E SPOKEN IN":PRINTN$" IS "L$".
2400 PRINT@384,STRING$(32,159)+""
TOUCH <ENTER> FOR ANOTHER
QUESTION OR THE SPACE BAR TO
EXIT THE TEST.";
2410 VV$=INKEY$:IFVV$=""THEN2410

2420 IF VV$=CHR$(32)THEN250
2430 IF VV$=CHR$(13)THEN1580
2440 GOTO 2410
2450 GOSUB 2100
2460 PRINT" WHICH COUNTRY HA
S A GREATERPOPULATION?":PRINT
2470 MN$=P$
2480 CW$=N$
2490 FOR X=1 TO LEN(MN$)
2500 ZA$=MID$(MN$,X,1):IF ZA$="",
"THEN MID$(MN$,X,1)=" "
2510 NEXT X
2520 PRINT" 1. "N$
2530 PRINT:PRINT" OR":PRINT
2540 RESTORE:GOSUB 2100
2550 FOR X=1 TO LEN(P$)
```

```
2560 ZB$=MID$(P$,X,1):IF ZB$="",
THEN MID$(P$,X,1)=" "
2570 NEXT X
2580 PRINT" 2. "N$
2590 SD$=INKEY$:IFSD$=""THEN2590

2600 IFSD$="1"THENIFVAL(MN$)>VAL
(P$)THENPRINT:PRINT" YOU
'VE GOT IT!!!!":GOTO2650
2610 IFSD$="1"THENIFVAL(MN$)<VAL
(P$)THENPRINT:PRINT" WRONG,
MORE PEOPLE LIVE IN":PRINTN$".":GOTO2650
2620 IFSD$="2"THENIFVAL(MN$)>VAL
(P$)THENPRINT:PRINT" WRONG.
MORE PEOPLE LIVE IN":PRINTCW$".":GOTO2650
2630 IF SD$="2"THENIFVAL(MN$)<VA
L(P$)THENPRINT:PRINT" YO
U'VE GOT IT!!!!":GOTO2650
2640 GOTO2590
2650 PRINT@384,STRING$(32,159)+""
TOUCH <ENTER> FOR ANOTHER
QUESTION OR THE SPACE BAR TO
EXIT THE TEST.";
2660 HN$=INKEY$:IFHN$=""THEN2660

2670 IF HN$=CHR$(13)THEN 1580
2680 IF HN$=CHR$(32)THEN250
2690 GOTO 2660
```



ADDRESS

A good Data Base program to keep your name and addresses plus more. Very easy to use, just follow the screen prompts.

```

10 PCLEAR1:CLEAR8000:POKE65497,0
:DIMF$(101),L$(101),A$(101),C$(1
01),S$(101),Z$(101),P$(101),SP$(1
01),D1$(101),D2$(101),DA$(101),
CO$(101):N=0
15 PALETTE RGB:PALETTE0,0:PALETT
E10,25:PALETTE12,60:PALETTE13,54
:PALETTE14,61:V$="T20003EADGBE":
WIDTH40:CLS1:SS$=STRING$(40,"-")
16 ON BRK GOTO6002
17 GOTO20
18 LOCATE0,3:ATTR7,0:PRINT"Rec.
";:PRINTUSING"##";N,:LOCATE(0+(39-
LEN(FG$))/2),3:PRINTFG$:LOCAT
E31,3:PRINT"Left ";:PRINTUSING"#
##";100-N,:ATTR0,0:PRINT" ";:RET
URN
19 ON ERR GOTO6002
20 POKE65497,0:T=4:M=2:B=3:D$="A
DDRESS BOOK,ADD....DATA.,LIST...
DATA.,SORT...DATA.,PRINT..DATA.,
SEARCH.DATA.,SAVE...DISK.,LOAD..
.DISK.,END....PROG.":GOSUB5000
25 ONI GOTO100,200,300,400,500,6
00,700,6000
100 '** ADD DATA **
102 IFN>100THEN20
105 T=5:M=1:B=3:D$="ADD NEW DATA
,Add New Data,Exit/Menu":GOSUB50
00
110 ONI GOTO115,20
115 D$="ADD NEW DATA":GOSUB5000:
N=N+1:Q$="Record # ":LOCATE(0+(39-
LEN(Q$))/2),3:ATTR7,0:PRINTQ$:
:LOCATE22,3:PRINTN
120 LOCATE0,6:ATTR1,0:LINEINPUT"
FIRST NAME: ";F$(N):LINEINPUT"LA
ST NAME.: ";L$(N):LINEINPUT"ADDR
ESS...": "A$(N):LINEINPUT"CITY..
...": "C$(N):LINEINPUT"STATE...
": "S$(N):LINEINPUT"ZIP CODE..
": "Z$(N):LINEINPUT"PHONE #...":
:P$(N)

```

```

125 LINEINPUT"SPOUSE....: ";SP$(N):
LINEINPUT"DOB#1.....: ";D1$(N):
LINEINPUT"DOB#2.....: ";D2$(N):
LINEINPUT"ANNIV.....: ";DA$(N):
LINEINPUT"CODE.....: ";CO$(N)
130 PRINT:ATTR3,0:PRINT"Is this
correct? (Yes or No)":ATTR0,0:F
RINT:GOSUB4005:IFI$="Y"THEN135E
SEN=N-1
135 GOTO100
200 '** LIST DATA **
201 R=1
202 IFN=0THEN20ELSEGOSUB205:GOT
220
205 CLS:PLAYV$:Q$="Record # ":
LOCATE(0+(39-LEN(Q$))/2),0:ATTR7,
0:PRINTQ$:LOCATE22,0:PRINTR:ATT
0,0:PRINT
210 LOCATE0,5:ATTR1,0:PRINTF$(R)
;" ";L$(R):PRINTA$(R):PRINTC$(R)
;", "S$(R);";Z$(R):PRINT"Ph
ne ";P$(R):PRINT:IFSP$(R)=""THE
PRINT:GOTO211ELSEPRINT"Spouse -
";SP$(R)
211 IFD1$(R)=""THENPRINT:GOTO211
ELSEPRINTF$(R);"'s date of birth
is: ";D1$(R)
212 IFD2$(R)=""THENPRINT:GOTO211
ELSEPRINTSP$(R);"'s date of birth
is: ";D2$(R)
213 IFDA$(R)=""THENPRINT:GOTO211
ELSEPRINT"Anniv. date is: ";DA$(R)
215 PRINT"Code: ";CO$(R):RETURN
220 PRINT:PRINT:ATTR4,0:PRINTSS:
:ATTR2,0:PRINT" <ENT>=Next Recor
d <F>=First Record":PRINT" <L
=Last Record <E>=Edit Recor
:&PRINT" <D>=Delete Record <
>=Main Menu <B>=Back-Prev
ous <C>=Copy Record":ATTR0,0
LOCATE38,22
225 GOSUB4005
230 IFI$=CHR$(13)THENR=R+1:IFR>
THENR=N:GOTO202ELSE202
235 IFI$="F"THEN201
240 IFI$="L"THENR=N:GOTO202
245 IFI$="E"THEN800
250 IFI$="D"THEN900
255 IFI$="M"THEN20
257 IFI$="B"THENR=R-1:IFR<1THE
N=1:GOTO202ELSE202

```

```

258 IFI$="C"THENGOSUB4700:GOT020
2
260 GOT0225
300 '** SORT DATA **
302 IFN=0THEN20
305 T=3:M=1:B=6:D$="SORT DATA,FI
RST NAME, LAST NAME,CITY,STATE,ZI
P CODE,PHONE #,EXIT/MENU":GOSUB5
000
310 ONI GOT0315,320,325,330,335,
340,20
315 GOSUB4050:V=1:GOSUB4065:GOSU
B4060:GOSUB4030:GOT020
320 GOSUB4050:V=2:GOSUB4065:GOSU
B4060:GOSUB4030:GOT020
325 GOSUB4050:V=3:GOSUB4065:GOSU
B4060:GOSUB4030:GOT020
330 GOSUB4050:V=4:GOSUB4065:GOSU
B4060:GOSUB4030:GOT020
335 GOSUB4050:V=5:GOSUB4065:GOSU
B4060:GOSUB4030:GOT020
340 GOSUB4050:V=6:GOSUB4065:GOSU
B4060:GOSUB4030:GOT020
400 '** PRINTER DATA FOR DMP110
**
402 IFN=0THEN20ELSEX1=1:POKE150,
41:POKE65496,0:PRINT#-2,CHR$(27)
;CHR$(66);:JK=6
405 W=0:T=3:M=5:B=1:D$="PRINTER
DATA,PRINT ADD. LABELS,PRINT ADD
. LIST,PRINT RECORD(S),TYPE (PRI
NT) HEADER,EXIT/MENU":GOSUB5000
410 ONI GOT0415,425,435,464,20
415 T=6:M=7:B=2:D$="PRINT ADDRES
S LABELS,ALL RECORDS,SELECT RECO
RD(S),EXIT/MENU":GOSUB5000:ONI G
OT0416,420,405
416 A=1:GOT04300
420 A=2:D$="SELECT LABEL(S) SEAR
CH":GOSUB5000:LOCATE0,7:ATTR1,0:
LINEINPUT"ENTER SEARCH> ";0$:PRI
NT:PRINT:ATTR3,0:PRINT"Is this c
orrect? (Yes or No)":ATTR0,0:P
RINT:GOSUB4005:IFI$="Y"THENGOT04
300ELSE405
425 D$="PRINT ADDRESS LIST,ALL R
ECORDS,SELECT RECORD(S),EXIT/MEN
U":GOSUB5000:ONI GOT0426,430,405
426 A=3:GOT04300
430 A=4:D$="SELECT LIST SEARCH":
GOSUB5000:LOCATE0,7:ATTR1,0:LINE
INPUT"ENTER SEARCH> ";0$:PRINT:P
RINT:ATTR3,0:PRINT"Is this corre
ct? (Yes or No)":ATTR0,0:PRINT:
GOSUB4005:IFI$="Y"THENGOT04300EL
SE405
435 D$="PRINT FULL RECORD(S),ALL
RECORDS,SELECT RECORDS,EXIT/MEN
U":GOSUB5000:ONI GOT0436,440,405
436 A=5:GOT0444
440 A=6:D$="SELECT RECORD(S) SEA
RCH":GOSUB5000:LOCATE0,7:ATTR1,0
:LINEINPUT"ENTER SEARCH> ";0$:PR
INT:PRINT:ATTR3,0:PRINT"Is this
correct? (Yes or No)":ATTR0,0:P
RINT:GOSUB4005:IFI$="Y"THEN444EL
SE405
444 '** PRINT ALL RECORDS **
445 X1=1:IFA=5THENR=1:GOT0446ELS
EIFA=6THENGOSUB4120:GOT0446
446 GOSUB205:PRINT#-2,TAB(JK+15)
;:PRINT#-2,TAB(19);F$(R);";L$(R)
:PRINT#-2,TAB(19);A$(R):PRINT#
-2,TAB(19);C$(R);";S$(R);"
;Z$(R):PRINT#-2,TAB(19);"Phone "
;P$(R):PRINT#-2:PRINT#-2,TAB(19)
;"Spouse - ";SP$(R)
447 PRINT#-2,TAB(19);F$(R);"'s d
ate of birth is: ";D1$(R):IFSP$(R)
=""THENPRINT#-2:PRINT#-2ELSEPR
INT#-2,TAB(19);SP$(R);"'s date o
f birth is: ";D2$(R):IFDA$(R)=""
THENPRINT#-2ELSEPRINT#-2,TAB(19)
;"Anniv. date is: ";DA$(R)
448 PRINT#-2:IFR=N THENA=0:GOT02
0ELSEIFA=6THENX1=X1+1:GOSUB4610:
NEXTR:GOT04134ELSER=R+1:X1=X1+1:
GOSUB4610:GOT0446
450 '** (1) WIDE **
451 IFA=3OR A=1THENR=1:GOT0452EL
SEIFA=4 OR A=2THENGOSUB4120:GOTO
452
452 GOSUB205:PRINT#-2,TAB(JK);:P
RINT#-2,TAB(4);L$(R);";";F$(R);
:JK=4:IFSP$(R)=""THENPRINT#-2:GO
TO454ELSEPRINT#-2," & ";SP$(R)
454 PRINT#-2,TAB(4);A$(R):PRINT#
-2,TAB(4);C$(R);";S$(R);"
;Z$(R)
456 IFA=3 OR A=4THENPRINT#-2,TAB
(4);"Phone # ";P$(R)
458 IFA=3 OR A=1THENR=R+1:IFR>N
THEN462ELSEIFA=3THENX1=X1+1:PRIN
T#-2:GOSUB4600:GOT0452ELSEIFA=1T
HENPRINT#-2:PRINT#-2:PRINT#-2:GO
TO452
460 IFA=4THENX1=X1+1:GOSUB4600:P
RINT#-2:NEXTR:PRINT#-2:A=0:GOT04
134ELSEIFA=2THENPRINT#-2:PRINT#-
2:PRINT#-2:NEXTR:PRINT#-2:PRINT#
-2:PRINT#-2:A=0:GOT04134
462 IFA=3THENPRINT#-2:GOT020ELSE
IFA=1THENPRINT#-2:PRINT#-2:PRINT
#-2:GOT020ELSE20
464 T=4:D$="TYPE (PRINT) HEADER"
:GOSUB5000:Q$="Type Out Header T
o Printer":LOCATE(0+(39-LEN(Q$))
/2),7:ATTR1,0:PRINTQ$:LOCATE0,11
:LINEINPUTQ$

```

```

466 PRINT#-2,TAB(0+(79-LEN(Q$))/2);Q$:PRINT#-2:PRINT#-2:JK=4:GOT
0405
475 ** (2) WIDE **
477 IFA=3 OR A=1THENFORR=1TO N S
TEP2:GOSUB205:PRINT#-2,TAB(JK);:
PRINT#-2,TAB(4);L$(R);", ";F$(R)
;:IFSP$(R)=""THEN478ELSEPRINT#-2
," & ";SP$(R);
478 IFA=3OR A=1THENIFR+1>N THENP
RINT#-2:GOT0479ELSEIFA=3OR A=1TH
ENPRINT#-2,TAB(JK+40);:PRINT#-2,
TAB(44);L$(R+1);", ";F$(R+1);:JK
=4:IFSP$(R+1)=""THENPRINT#-2:GOT
0479ELSEPRINT#-2," & ";SP$(R+1)
479 IFA=3 OR A=1THENPRINT#-2,TAB
(4);A$(R);:PRINT#-2,TAB(44);A$(R
+1):PRINT#-2,TAB(4);C$(R);", ";S
$(R);", ";Z$(R);:IFR+1>N THENPRI
NT#-2:GOT0480ELSER=R+1:GOSUB205:
R=R-1:PRINT#-2,TAB(44);C$(R+1);"
, ";S$(R+1);", ";Z$(R+1)
480 IFA=3THENPRINT#-2,TAB(4);"Ph
one # ";P$(R);:IFR+1>N THENPRINT
#-2:GOT0481ELSEPRINT#-2,TAB(44);
"Phone # ";P$(R+1)ELSEIFA=1THENP
RINT#-2
481 IFA=3THENX1=X1+1:PRINT#-2:GO
SUB4600:NEXTR:GOT020ELSEIFA=1THE
NPRINT#-2:PRINT#-2:NEXTR:GOT020
482 H=0:L=0:IFI=2THENGOSUB4120
484 IFI=2THENIFH=0AND L<>1THENF1
=R:H=H+1:GOT0485ELSEIFI=2THENIFH
=1AND L<>1THENF2=R:H=H+1:GOT0487
ELSEIFI=2THENIFH=1AND L=1THEN487

```

```

485 IFI=2THENIFH=0AND L=1THEN492
ELSEIFI=2THENGOSUB205:PRINT#-2,T
AB(JK);:PRINT#-2,TAB(4);L$(F1);"
, ";F$(F1);:IFSP$(F1)=""THEN486E
LSEPRINT#-2," & ";SP$(F1);
486 IFI=2THENIFH=1AND L<>1THENNE
XTR:L=1
487 IFI=2THENH=0:IFL=1THENPRINT#
-2:GOT0488ELSEPRINT#-2,TAB(JK+40
);:PRINT#-2,TAB(44);L$(F2);", ";
F$(F2);:JK=4:IFSP$(F2)=""THENPRI
NT#-2:GOT0488ELSEPRINT#-2," & ";
SP$(F2)
488 IFI=2THENPRINT#-2,TAB(4);A$(F
1);:IFL=1THENPRINT#-2:GOT0489EL
SEPRINT#-2,TAB(44);A$(F2)
489 IFI=2THENPRINT#-2,TAB(4);C$(F
1);", ";S$(F1);", ";Z$(F1);:IFL
=1THENPRINT#-2:GOT0490ELSEGOSUB2
05:PRINT#-2,TAB(44);C$(F2);", ";
S$(F2);", ";Z$(F2)
490 IFA=4THENPRINT#-2,TAB(4);"Ph
one # ";P$(F1);:IFL=1THENPRINT#-
2:GOT0491ELSEPRINT#-2,TAB(44);"P
hone # ";P$(F2)
491 IFA=2THEN494ELSEIFA=4AND R=N
-1 THEN492ELSEIFA=4AND L=1THEN49
2ELSEIFA=4THENX1=X1+1:GOSUB4600:
PRINT#-2:NEXTR:GOT0492
492 IFA=4THENA=0:PRINT#-2:GOT041
34ELSEIFA=2THENA=0:PRINT#-2:PRIN
T#-2:PRINT#-2:GOT04134
494 IFA=2AND R=N-1 THEN492ELSEIF
A=2AND L=1THEN492ELSEIFA=2THENPR
INT#-2:PRINT#-2:PRINT#-2:NEXTR:G
OT0492

```

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```

500 '** SEARCH DATA **
502 IFN=0THEN20
505 T=1:M=2:B=5:D$="SEARCH DATA
,SEARCH DATA,EXIT/MENU":GOSUB500
0
510 ONI GOT0515,20
515 GOSUB4100:LOCATE0,7:ATTR5,0:
PRINT"Enter search data":PRINT:L
INEINPUT"> ";0$:ATTR0,0:PRINT:GO
SUB4120:GOT020
600 '** SAVE (DISK) **
602 IFN<1THEN20
605 T=6:M=4:B=7:D$="SAVE TO DISK
,Save New Data File,Save Old Dat
a File,Directory of Files,Exit/M
enu":GOSUB5000:ONI GOT0610,615,6
40,20
610 D$="SAVE TO DISK":GOSUB5000:
Q$="Enter New File Name":LOCATE(
0+(39-LEN(Q$))/2),7:ATTR2,0:PRIN
TQ$:Q$="Do NOT Enter Ext (.DAT)"
:LOCATE(0+(39-LEN(Q$))/2),20:PRI
NTQ$:LOCATE14,11:LINEINPUTNN$:IF
LEN(NN$)>8THENNN$=LEFT$(NN$,8)+".
DAT"ELSENN$=NN$+".DAT"
615 IFNN$=""THEN605ELSE$="SAVE
TO DISK":GOSUB5000:Q$=NN$:LOCATE
(0+(39-LEN(Q$))/2),7:ATTR2,0:PRI
NTQ$:Q$="Saving To Disk":LOCATE(
0+(39-LEN(Q$))/2),11:ATTR7,0,B:P
RINTQ$:ATTR0,0:LOCATE0,12:POKE65
496,0
620 OPEN"O",#1,NN$
625 FORX=1TO N:WRITE#1,F$(X),L$(X)
,A$(X),C$(X),S$(X),Z$(X),P$(X)
,SP$(X),D1$(X),D2$(X),DA$(X),CO$(X)
630 NEXT:CLOSE#1
635 POKE65497,0:Q$="File Saved T
o Disk":PLAYV$:LOCATE(0+(39-LEN(
Q$))/2),15:ATTR5,0:PRINTQ$:ATTR0
,0:LOCATE0,16:GOSUB4030:GOT020
640 CLS:DIR:PRINT:PRINT"FREE GRA
NS (";FREE(0);:PRINT)":ATTR0,0:
PRINT:GOSUB4005:GOT0605
700 '** LOAD (DISK) **
705 T=2:M=4:B=1:D$="LOAD FROM DI
SK,Load File,Directory Of Files,
Exit/Menu":GOSUB5000:ONI GOT0710
,750,20
710 D$="LOAD FROM DISK":GOSUB500
0:Q$="Enter File Name":LOCATE(0+
(39-LEN(Q$))/2),7:ATTR4,0:PRINTQ
$:Q$="Do NOT Enter Ext (.DAT)":L
OCATE(0+(39-LEN(Q$))/2),20:PRINT
Q$:LOCATE14,11:LINEINPUTNN$:FG$=
"- "+NN$+" -":NN$=NN$+".DAT"
715 D$="LOAD FROM DISK":GOSUB500
0:Q$=NN$:LOCATE(0+(39-LEN(Q$))/2
),7:ATTR4,0:PRINTQ$:Q$="Loading

```

```

From Disk":LOCATE(0+(39-LEN(Q$))
/2),11:ATTR7,0,B:PRINTQ$:ATTR0,0
:LOCATE0,8
716 FORX=1TO N:F$(X)=F$(0):L$(X)
=L$(0):A$(X)=A$(0):C$(X)=C$(0):S
$(X)=S$(0):Z$(X)=Z$(0):P$(X)=P$(0
):SP$(X)=SP$(0):D1$(X)=D1$(0):D
2$(X)=D2$(0):DA$(X)=DA$(0):CO$(X
)=CO$(0):NEXTX:N=1:POKE65496,0
720 OPEN"I",#1,NN$
725 IF EOF(1)=-1THEN740
730 INPUT#1,F$(N),L$(N),A$(N),C$(
N),S$(N),Z$(N),P$(N),SP$(N),D1$(
N),D2$(N),DA$(N),CO$(N)
735 N=N+1:GOT0725
740 CLOSE#1:N=N-1
745 POKE65497,0:Q$="File Loaded
From Disk":PLAYV$:LOCATE(0+(39-L
EN(Q$))/2),15:ATTR5,0:PRINTQ$:AT
TR0,0:LOCATE0,16:GOSUB4030:GOT02
0
750 CLS:DIR:PRINT:PRINT"FREE GRA
NS (";FREE(0);)":ATTR0,0:PRINT:
GOSUB4005:GOT0705
800 ** EDIT ROUTINE **
805 T=7:M=2:B=3:D$="EDIT DATA,E
DIT DATA,EXIT/MENU":GOSUB5000
810 ONI GOT0812,20
812 GOSUB815:GOT0820
815 CLS:PLAYV$:Q$="Record # ":
LOCATE(0+(39-LEN(Q$))/2),0:ATTR7,
0:PRINTQ$:LOCATE22,0:PRINTR:Q$=
"PRESS <ENTER> = NO CHANGE":LOCA
TE(0+(39-LEN(Q$))/2),21:ATTR5,0:
PRINTQ$:RETURN
820 LOCATE0,3:ATTR1,0:PRINT"FI
RS T NAME: ";F$(R):LINEINPUTQ$:IFQ$=
""THEN821ELSE$((R)=Q$
821 PRINT"LAST NAME.: ";L$(R):LI
NEINPUTQ$:IFQ$=""THEN822ELSE$((R
)=Q$
822 PRINT"ADDRESS...: ";A$(R):LI
NEINPUTQ$:IFQ$=""THEN823ELSE$((R
)=Q$
823 PRINT"CITY.....: ";C$(R):LI
NEINPUTQ$:IFQ$=""THEN824ELSE$((R
)=Q$
824 PRINT"STATE.....: ";S$(R):LI
NEINPUTQ$:IFQ$=""THEN825ELSE$((R
)=Q$
825 PRINT"ZIP CODE..: ";Z$(R):LI
NEINPUTQ$:IFQ$=""THEN826ELSEZ$((R
)=Q$
826 PRINT"PHONE .:. : ";P$(R):LI
NEINPUTQ$:IFQ$=""THEN827ELSEP$((R
)=Q$
827 PRINT"SPOUSE....: ";SP$(R):L
INEINPUTQ$:IFQ$=""THEN828ELSESP$(
R)=Q$
828 GOSUB815:LOCATE0,3:ATTR1,0

```

```

829 PRINT"DOB#1.....: ";D1$(R):L
INEINPUTQ$:IFQ$=""THENB30ELSED1$
(R)=Q$
830 PRINT"DOB#2.....: ";D2$(R):L
INEINPUTQ$:IFQ$=""THENB31ELSED2$
(R)=Q$
831 PRINT"ANNIV DATE: ";DA$(R):L
INEINPUTQ$:IFQ$=""THENB32ELSEDA$-
(R)=Q$
832 PRINT"CODE.....: ";CO$(R):L
INEINPUTQ$:IFQ$=""THENGOSUB205:G
OT220ELSECO$(R)=Q$:GOSUB205:GOT
0220
900 '** DELETE ROUTINE **
905 T=7:M=3:B=6:D$="DELETE THIS
RECORD":GOSUB5000:Q$="(Yes or No
)":LOCATE(0+(39-LEN(Q$))/2),2:AT
TR5,0:PRINTQ$:ATTR0,0:PRINT:GOSU
B4005:IFI$="Y"THEN910ELSEGOSUB20
5:GOTO220
910 Q$="DELETING THIS RECORD":LO
DATE(0+(39-LEN(Q$))/2),7:ATTR1,0
,B:PRINTQ$:ATTR0,0:PRINT
915 FORX=R TO N-1
920 F$(X)=F$(X+1):L$(X)=L$(X+1):
A$(X)=A$(X+1):C$(X)=C$(X+1):S$(X
)=S$(X+1):Z$(X)=Z$(X+1):P$(X)=P$-
(X+1):SP$(X)=SP$(X+1):D1$(X)=D1$-
(X+1):D2$(X)=D2$(X+1):DA$(X)=DA$-
(X+1):CO$(X)=CO$(X+1)
925 NEXTX:N=N-1
930 Q$="Finished":LOCATE(0+(39-L
EN(Q$))/2),15:ATTR4,0:PLAYV$:PRI
NTQ$:ATTR0,0:PRINT:GOSUB4030:GOT
020
4000 ** SUBROUTINES **
4005 I$=INKEY$:IFI$=""THEN4005EL
SERETURN
4030 FORX=1TO1200:NEXT:RETURN
4050 T=3:D$="SORT DATA":GOSUB500
0
4055 Q$="SORTING":LOCATE(0+(39-L
EN(Q$))/2),9:ATTR7,0,B:PRINTQ$:A
TTR0,0:PRINT:RETURN
4060 PLAYV$:Q$="Sort Finished":
LOCATE(0+(39-LEN(Q$))/2),17:ATTR
4,0:PRINTQ$:ATTR0,0:PRINT:RETURN

4065 FORX=1TO N-1:FORJ=X+1TO N
4067 IFV=1THENIFF$(X)<=F$(J)THEN
4079
4068 IFV=2THENIFL$(X)<=L$(J)THEN
4079
4069 IFV=3THENIFC$(X)<=C$(J)THEN
4079
4070 IFV=4THENIFS$(X)<=S$(J)THEN
4079
4071 IFV=5THENIFZ$(X)<=Z$(J)THEN
4079
4072 IFV=6THENIFP$(X)<=P$(J)THEN
4079
4075 AA$=F$(X):AB$=L$(X):AC$=A$(X
):AD$=C$(X):AE$=S$(X):AF$=Z$(X
):AG$=P$(X):AH$=SP$(X):AI$=D1$(X
):AJ$=D2$(X):AK$=DA$(X):AL$=CO$(X
)
4076 F$(X)=F$(J):L$(X)=L$(J):A$(X
)=A$(J):C$(X)=C$(J):S$(X)=S$(J
):Z$(X)=Z$(J):P$(X)=P$(J):SP$(X)=
SP$(J):D1$(X)=D1$(J):D2$(X)=D2$(J
):DA$(X)=DA$(J):CO$(X)=CO$(J)
4077 F$(J)=AA$:L$(J)=AB$:A$(J)=A
C$:C$(J)=AD$:S$(J)=AE$:Z$(J)=AF$-
:P$(J)=AG$:SP$(J)=AH$:D1$(J)=AI$-
:D2$(J)=AJ$:DA$(J)=AK$:CO$(J)=AL
$
4079 NEXTJ
4080 LOCATE18,13:ATTR7,0:PRINTUS
ING"###";X,:ATTR0,0:PRINT" ";:NE
XTX
4081 RETURN
4100 D$="SEARCH ON <1> FIELD":G0
SUB5000:RETURN
4120 FORR=1TO N
4121 IFINSTR(F$(R),0$)THEN4140
4122 IFINSTR(L$(R),0$)THEN4140
4123 IFINSTR(A$(R),0$)THEN4140
4124 IFINSTR(C$(R),0$)THEN4140
4125 IFINSTR(S$(R),0$)THEN4140
4126 IFINSTR(Z$(R),0$)THEN4140
4127 IFINSTR(P$(R),0$)THEN4140
4128 IFINSTR(SP$(R),0$)THEN4140
4129 IFINSTR(D1$(R),0$)THEN4140
4130 IFINSTR(D2$(R),0$)THEN4140
4131 IFINSTR(DA$(R),0$)THEN4140
4132 IFINSTR(CO$(R),0$)THEN4140
4133 NEXTR:IFW=2THENL=1:GOT0484
4134 W=0:T=4:D$="SEARCH DATA":G
OSUB5000:Q$="ALL RECORDS FOUND"
:LOCATE(0+(39-LEN(Q$))/2),7:ATTR
7,0:PRINTQ$:Q$="PRESS <ENTER>":
LOCATE(0+(39-LEN(Q$))/2),20:ATTR
6,0:PRINTQ$:ATTR0,0:PRINT:GOSUB4
005:IFI$=CHR$(13)THEN20ELSE4134
4140 IFW=1THEN452ELSEIFW=2THEN48
4ELSEIFA=6THEN446ELSEGOSUB205:PR
INT:PRINT:ATTR4,0:PRINTSS$:PRINT
:ATTR2,0:PRINT" <ENT>=NEXT
<M>=MAIN MENU":PRINT" <E>=ED
IT RECORD    <D>=DELETE RECORD"
:ATTR0,0:LOCATE38,22
4145 GOSUB4005:IFI$=CHR$(13)THEN
NEXTR:GOT04134ELSEIFI$="M"THEN20
ELSEIFI$="E"THENB00ELSEIFI$="D"T

```

```

HEN900ELSE4145
4300 T=5:M=2:B=6:D$="PRINTER COL
UMNS,(1) WIDE,(2) WIDE,EXIT/MENU
":GOSUB5000:W=I:ONI GOT0450,475,
405
4600 IFX1=11THENFORG=1TO16:PRINT
#-2:NEXTG:X1=1:RETURNELSERETURN
4610 IFX1=6THENFORG=1TO16:PRINT#
-2:NEXTG:X1=1:RETURNELSERETURN
4700 IFN+1>100THEN20ELSEPLAYV$:N
=N+1:F$(N)=F$(R):L$(N)=L$(R):A$(N)=A$(R):C$(N)=C$(R):S$(N)=S$(R)
:Z$(N)=Z$(R):P$(N)=P$(R):SP$(N)=SP$(R):D1$(N)=D1$(R):D2$(N)=D2$(R):DA$(N)=DA$(R):CO$(N)=CO$(R):RETURN
5000 '** MENU ROUTINE **
5002 LN=0:LL=0:MG=0:MD=1:WIDTH40
::GOSUB5008:CLS:PLAYV$:TB=INT((39-LEN(DT$))/2):LOCATE0,0:ATTRT,0
:PRINTTAB(TB)DT$:PRINTTAB(TB)STR
ING$(LEN(DT$),CHR$(158)):IF INSTR(D$,",")=0 THEN ATTRM,0:RETURN
5004 GOSUB5008:LN=LN+1:IF LEN(DT$)>LL THEN LL=LEN(DT$)
5006 DT$(LN)=DT$:IF CM=0 THEN 50
14 ELSE 5004
5008 CM=INSTR(MID$(D$,MD),","):IF CM=0 THEN DT$=MID$(D$,MD):GOTO
5012
5010 DT$=MID$(D$,MD,CM-1):MD=MD+
CM
5012 RETURN
5014 ATTR0,0:MG=INT((32-LL)/2):MG$=STRING$(MG," "):FORX=1TO (18-
LN)/2:PRINT:NEXT:ATTRM,0:FORX=1T
O LN:PRINTMG$;X"- ";DT$(X):NEXT:
GOSUB18:QQ$="YOUR CHOICE ":LOCATE(0+(39-LEN(QQ$))/2),22:ATTRB,0:
PRINTQQ$;
5016 ATTRB,0,B:PRINTCHR$(63):ATTR0,0:LOCATE39,22
5018 I$=INKEY$:IFI$=""THEN5018
5020 I=VAL(I$):IF I<1 OR I>LN THEN SOUND100,2:GOT05018
5022 ATTR1,0:RETURN
6000 '** END PROGRAM **
6002 CLS:PLAYV$:PLAYV$:ATTR7,0:P
RINT" ARE YOU SURE YOU WANT TO E
ND PROGRAM?":PRINT:PRINT"
(Yes or No)":ATTR7,0,B:P
RINT" ?":ATTR0,0:LOCATE0,4
6004 GOSUB4005:IFI$="Y"THENCLS:P
OKE65496,0:ATTR1,0:ENDELSEGOT020

```

PEEKING AND POKEING

By: Michael E. Salsbury
 177 Sunview Drive
 Beaver Falls, PA 15010

I think about a year or two ago I ran a big list of PEEKs, POKEs, and EXECs for the CoCo. Since there have been several new subscribers since then, and since I may not have run the whole list back then, I've decided to give it to you again. It shoul

Ever wondered if you could fool your computer into thinking it was just turned on again without flipping the switch? You can. Just type:

POKE 113,0 : EXEC 40999

The CoCo now thinks you have turned it off and on again. This is nice when a machine language game louses up the computer a little but still allows you to type commands in. Or for those of you who have trouble formatting more than one disk at a time

How about disabling the BREAK key during the running of a Basic program? I know how to do that, too. So far I know this works on a CoCo I and a CoCo II. Since I have not had access to a CoCo III I can't say it still does. Anyway, to disable the brea

1 POKE &HF8,&H32:POKE &HF9,&H62:POKE
 &HF4,&H1C:POKE &HFB,&HAF:POKE &HFC,&H7E:POKE
 &HFD,&HAD:POKE &HFE,&HA5:POKE &H19A,&H39:POKE
 &H19B, &H0:POKE &H19C,&HFB:POKE &H19A,&H7E
 2 FOR K=1 TO 2:NEXT K

How would you like to be able to send your DIRectory directly from disk to printer? You can, if you set up the printer so that PRINT#-2 works, then type this:

POKE 111,254:DIR

And away the directory goes to the printer, which should be printing by now, unless the disk is blank...

Maybe you are writing a program that needs to know if the user's system has a disk drive or not. There are two ways of finding out in your program. One is to ask the user, but that's really kind of unnecessary. His computer will tell you if you don't.

X = PEEK(188)

If the system has a disk drive, you'll get a 14 in X, if it isn't, you should get a 6. So rather than ask, set up the PEEK, and IF X = 14 THEN he's got a disk system!

Have you seen those fancy, expensive programs that tell you if you buy them they can make the computer beep every time you press a key? I'll bet you didn't know you could get that result with a few POKEs, did you? Here's how:

```
POKE1536,52:POKE1537,86:POKE1538,198:POKE1539,  
,1:POKE1540,134  
:POKE1541,4:POKE1542,61:POKE1543,253:POKE1544,  
,0:POKE1545,141  
:POKE1546,189:POKE1547,169:POKE1548,86:POKE1549,  
,53:POKE1550,  
86:POKE1551,57:POKE360,6:POKE361,0
```

Own any ROMpaks? Would you like to look at the memory inside of them? You can. One way, they tell me, which is the safer way, is to cover pin 3. If you aren't sure which is pin 3 on the ROMpak, there is another way.
WARNING: This may cause damage to

Would you like to keep others from listing your programs? Sure you would. Try this:
POKE 383,158

Ought to work. Also disables the DIR command on disk systems. If that doesn't work, you can try:

```
POKE&H180,PEEK(114):POKE&H181,PEEK(115)
```

If you're a prankster, and you want to confuse the poor Radio Shack salesmen, you might want to walk up to a CoCo on display and:

```
POKE 359,255
```

This will cause the computer to more or less pretend it's asleep and ignore key presses.

Program you wrote too slow? Like to speed it up? Well, if you're NOT a disk user, try:
POKE 65495,0

This puts the CoCo into double speed mode and you will notice, for example, that the cursor flashes much faster. You can reset this by:
POKE 65494,0

But you say that's still not fast enough for you? Well, if you are doing, say, a sorting program, or something which does NOT require the keyboard to work, you can include the "triple speed" POKE:

```
POKE 65497,0
```

However, if you execute that POKE, your screen is going to go haywire because the computer is working faster than the chip that sends out the video signals. The computer will continue running your program, and as 20

soon as it comes to the POKEs below,
POKE65496,0:POKE65494,0

That's about as fast as it gets without machine language, so if that's no good, buy a book and learn it!

Ever used the TRON command to follow the execution of a Basic program? This POKE turns on TRON:

```
POKE 175,79
```

And this little piggy shuts the TRON function off so you aren't annoyed by it if you turned it on:

```
POKE 175,0
```

Here's an interesting one. It shows you where program execution will begin if you have BREAKed the program and want to CONTINUE:
PEEK(41)*256+PEEK(42)

Or how about a quick RENUM command? This will renumber all the lines in a program with an increment of 10:

```
EXEC 35337
```

For lower case without a border:

```
POKE359,57:POKE65314,85
```

For those of you who don't know what "system variables" are, let me give you a brief definition. They are the little things, like TIMER value, cursor position, disk drive track number, and so forth that the computer has to keep constant track of who

```
POKE &H167,57:POKE65480,0
```

This will return you to normal:

```
POKE65481,0
```

If you have a machine language program on tape and would like very much to make a backup, these POKEs may help. If, however, the program autostarts, you'll have to look elsewhere. Here's how to use them. First, CLOADM your program. Then, type:

```
A=PEEK(487)*256+PEEK(488)
```

```
B=PEEK(126)*256+PEEK(127)
```

```
C=PEEK(157)*256+PEEK(158)
```

```
CSAVEM"filename",A,B,C
```

And you should be saving a working copy to tape.

Those are most of the useful ones I have at this time. If you have any POKEs, PEEKs, or EXECs that you feel are useful, then by all means drop me a letter. If I use them in an article, I'll place your name in capital letters in that article.

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```

1 CLS:PRINT@12,"HI-DICE"
2 PRINT:PRINT"NEED INSTRUCTIONS"

3 PRINT"... Y = YES"
4 PRINT@384,"PROGRAM BY TOM LEHA
NE 1985"
5 I$=INKEY$:IF I$=""THEN 5
6 IF I$="Y" THEN GOSUB 110
7 CLS 3
8 ZZ=74
9 PB=1000
10 HB=1000
11 PRINT@257,"BANK      ";
12 PRINT@276,"BANK      ";
13 PRINT@12,"HI DICE";
14 IF HB=2000 OR PB=2000 THEN GO
TO 90
15 PRINT@65," BANKER    ";
16 PRINT@84,"  PLAYER   ";
17 PRINT@129,"DICE TOLAL";
18 PRINT@161,"    BB"    ";
19 PRINT@148,"DICE TOTAL ";
20 PRINT@180,"    S"    ";
21 PRINT@225,"BANKER'S  ";
22 PRINT@244,"PLAYER'S  ";
23 GOSUB 88
24 FOR Y=1 TO 200
25 PRINT@ZZ,CHR$(RND(4)+145);
26 NEXT
27 BANKER=BA+1
28 FOR X=109 TO 173 STEP 32
29 PRINT@X,"      ";
30 PRINT@X+131,"      ";
31 NEXTX
32 K=RND(6)
33 ROLL=ROLL+1
34 IF ROLL=1 THEN X=109
35 IF ROLL=2 THEN X=240
36 ON K GOTO 40,37,40,37,40,50
37 PRINT@X,"*";:PRINT@X+66,"*";
38 IF K=4 OR K=5 OR K=6 GOSUB 48
39 GOTO 43
40 PRINT@X+33,"*";
41 IF K=3 THEN 37
42 IF K=5 GOTO 37
43 PRINT@232,K;
44 '
45 IF ROLL=2 THEN GOSUB 52
46 A=K
47 GOTO 32
48 PRINT@X+2,"*";:PRINT@X+64,"*"
;
49 RETURN
50 PRINT@X+32,"* *";
51 GOTO 37
52 S=A+K
53 IF BA=1 THEN 61
54 IF BA>1 THEN 72
55 PRINT@352,""
56 FOR WIPE=1 TO 3
57 SOUND200,1:PRINT
58 NEXT WIPE
59 RETURN
60 '
61 BB=S:S=0
62 PRINT@164,BB;
63 GOSUB 55
64 IF BB=12 THEN 99
65 PRINT@352,"YOU WILL NEED"
66 PRINT"A DICE TOTAL OF ("BB+1"
) OR MORE...TO WIN"
67 INPUT"PLACE YOU BET $";W
68 IF W<1 OR W>100 THEN 104
69 ROLL=0
70 ZZ=ZZ+20
71 GOTO 24
72 GOSUB 55
73 PRINT@184,S;
74 PRINT@352,""
75 IF BB>S THEN PRINT" YOU LOSE"
:GOTO 82
76 IF BB=S THEN PRINT"FOR HOUSE"
:GOTO 83
77 IF BB<S THEN PRINT"YOU win":G
OTO 86
78 PRINT@416,"ANOTHER TRY";
79 X$=INKEY$:IF X$="" THEN 79
80 IF X$="N" THEN 90
81 ZZ=74:BA=0:S=0:BB=0:RO=0:GOTO
13
82 PB=PB-W:HB=HB+W:GOSUB 88:GOTO
78
83 AV=W/100:H=AV*10
84 PB=PB-H:HB=HB-H
85 GOSUB 88:GOTO 78
86 PB=PB+W:HB=HB-W
87 GOSUB 88:GOTO 78
88 PRINT@261,HB;:PRINT@281,PB;
89 RETURN
90 CLS:PRINTTAB(7)"HOUSE STATEME
NT"

```

```

91 FOR Y=96 TO 127:PRINT@Y,CHR$(131):NEXT
92 PRINT"YOU STARTED WITH $1000"
:PRINT:PRINT"AND FINISHED WITH $"
"PB
93 PRINT
94 PRINT"BANKER'S TOTAL..$"HB
95 PRINT
96 PRINT"HOUSE % ..$"H
97 IF PB=2000 OR HB=2000 THEN PR
INT"GAMES LIMIT HAS BEEN REACHED
"
98 GOTO 98
99 GOSUB 55:PRINT@352,"THE DICE
COUNT IS ... 12"
100 PRINT"TO HIGH FOR A BET .."
101 PRINT"PRESS ANY KEY FOR A RE
START"
102 IF INKEY$=""THEN102
103 GOTO 81
104 GOSUB 55
105 PRINT@352,"note THE BET MUST
BE NO SMALLER":PRINT"THAN $1.00
"
106 PRINT"AND NO LARGER THAN $10
0.00"
107 FOR Y=1 TO 200
108 PRINT@460,CHR$(RND(4)+128);
109 NEXT:GOSUB 55:GOTO 65
110 ' INSTRUCTIONS
600 CLS
610 PRINT"hi dice..BANKER ROLLS
FIRST.."
612 POKE1026,45
620 PRINT"THE OBJECT OF THE GAME
IS TO":PRINT"CAST A HIGHER TOTA
L THAN THE "
630 PRINT"BANKER. THE GAME IS AN
EVEN-UP":PRINT"PROPOSITION EXEC
PT FOR ANY DICE"
640 PRINT"ROLL THAT TIES WHICH C
ONSTITUE":PRINT"THE HOUSE PERcen
TAGE.BOTH YOU"
650 PRINT"AND THE BANKER START W
ITH $1000":PRINT"THE LEAST YOU C
AN BET IS $1.00"
660 PRINT"AND THE HIGHEST IS $10
0.00 ":PRINT"THE GAME ENDS WHEN
YOU DECIDE TO";
670 PRINT"OR WHEN BANKER OR YOU
GO BROKE.":PRINT"A PRINT OUT OF
THE HOUSE ACCOUNT";
680 PRINT" WILL SHOW HOW MUCH YOU
HAVE"
690 PRINT"WON OR LOST."
700 INPUT"-- PRESS ENTER TO STAR
T=-";A
710 RETURN

```

Hints And Tips On ROUGE

Here are some things Bill Dickhaus and I have discovered about the "Rogue" game from Tandy. If you're not really into Rogue, now's the time to stop reading.

I'll start off with a discussion of the items you'll find so that what follows afterward may be a bit clearer.

In the dungeon you can find:

- 10 kinds of weapons.
- 8 kinds of armor.
- 15 scrolls.
- 14 potions.
- 14 rings.
- 14 wands AND/OR staffs. More on this later.

The weapons and armor have only one name associated with them. For example the weapons are:

- 0 Mace
- 1 Long sword
- 2 Short bow
- 3 Arrows
- 4 Dagger
- 5 Two handed sword
- 6 Dart
- 7 Crossbow
- 8 Crossbow bolt
- 9 Spear

The armor types are:

- 0 Leather armor
- 1 Ring mail
- 2 Studded leather armor
- 3 Scale mail
- 4 Chain mail
- 5 Splint mail
- 6 Banded mail
- 7 Plate mail

Why the numbers before the items? Read on McDuff...

The Scrolls, Potions, Rings, Wands, and Staffs all have 2 names associated with them. The first name is the name of the item before it has been identified. The second name is its "identified" name. For example, you may find an Amber potion which may become a "potion of poison" after it's identified.

The "first" name for these 5 types of items is selected at random from tables within Rogue itself. There are:

- 25 possible names for the 14 potions
- 26 possible names for the 14 rings
- 20 possible names for the staffs
- 20 possible names for the wands

What about the scrolls? Rogue makes up 15 names at random when you start a new (not a saved) game and uses them for the "first names" for the scrolls.

What about the staffs/wands? You can have a total of 14 wands/staffs. Whether it's a wand or a staff is determined when you pick it up. One time it may be a "staff of light", next time it may be a "wand of light".

There are 14 "indentified" or second names for wands/staffs and they are:

- 0 Light
- 1 Striking
- 2 Lightning
- 3 Fire
- 4 Cold
- 5 Polymorph
- 6 Magic missile
- 7 Haste monster
- 8 Slow monster
- 9 Drain life
- A Nothing
- B Teleport away
- C Teleport to
- D Cancellation

The second or "identified name" for these 5 items is picked at random from its associated table of second names when a new (not saved) game is started. This is why an Amber potion may be a potion of healing in one game and be a potion of poison in another.

Here are the "identified" names for the rest of the items.

15 Scrolls:

- 0 Monster confusion
- 1 Magic mapping
- 2 Hold monster
- 3 Sleep
- 4 Enchant armor
- 5 Identify
- 6 Scare monster
- 7 Food detection

- 8 Teleportation
- 9 Enchant weapon
- A Create monster
- B Remove curse
- C Aggravate monsters
- D Blank paper
- E Vorpalize weapon

14 Potions:

- 0 Confusion
- 1 Paralysis
- 2 Poison
- 3 Gain strength
- 4 See invisible
- 5 Healing
- 6 Monster detection
- 7 Magic detection
- 8 Raise level
- 9 Extra healing
- A Haste self
- B Restore strength
- C Blindness
- D Thirst quenching

14 Rings:

- 0 Protection
- 1 Add strength
- 2 Sustain strength
- 3 Searching
- 4 See invisible
- 5 Adornment
- 6 Aggravate monster
- 7 Dexterity
- 8 Increase damage
- 9 Regeneration
- A Slow digestion
- B Teleportation
- C Stealth
- D Maintain armor

Now the reason for those numbers in front of all the "identified" names. It seems that the authors of Rogue were kind enough to leave their de-bugging tools behind when they were finished with the dungeon and they can be fun to play with.

To enable this "command" mode you'll need to make a 1-byte zap to the Rogue program itself so be sure to only do this with a backup copy.

Use your favorite disk zapper and change the byte at +\$4AA9 in CMDS/ROGUE from a \$26 to a \$20 and be sure to re-verify Rogue so that the CRC gets fixed up else you won't be able to use it.

Now crank up Rogue. When you've got it going and you're at the point where you can enter commands, enter: <CTRL-O> immediately followed by <CTRL-up-arrow> and you'll see "cmd:" pop on in the upper left-hand corner of the screen.

You are now in "command mode". To see an expanded list of the commands, type a "?" and then another "?" for more of the menu. <spacebar> exits "command" mode.

A little (or a lot) of experimentation will reveal what the commands do but "<c>reate" can be tough to figure out so here are a couple of examples.

You want to create a Long sword. Look at the instructions that came with Rogue on page #4 and you'll see a list of the ascii characters used in the ascii version of the game.

Type "c" at the "cmd:" prompt and it'll ask:
"Type of thing:"

The ascii value for a weapon is a "carat" symbol and can be produced by typing <CTRL-3> at the "Type of thing:" prompt.

Next it'll ask:
"Which ^ do you want? (0-f)"

Look back at the list of weapons in this listing you're reading and you'll see that a Long sword is a "1". Type a "1" for a Long sword.

Next it'll ask:
"Blessing? (+,-,n)"

This is to make it a strong or weak weapon. Pick whatever makes you happy and type it in.

Creating items that have 2 names is tricky so let's create a "ring of see invisible".

At the "cmd:" prompt type "c". The "type of thing" is a ring which is lower-case "o" (from page #4 in the Rogue manual) so type an "o" for "Type of thing".

For "Which o do you want" look at the list above and you'll see that a "ring of see invisible" is a "4" so type a "4". It'll tell you that you "Now have a Emerald or jade or Topaz" or whatever ring. Use the <i>dent option and you'll see that no matter what "first name" Rogue gave it, it'll be a "ring of see invisible".

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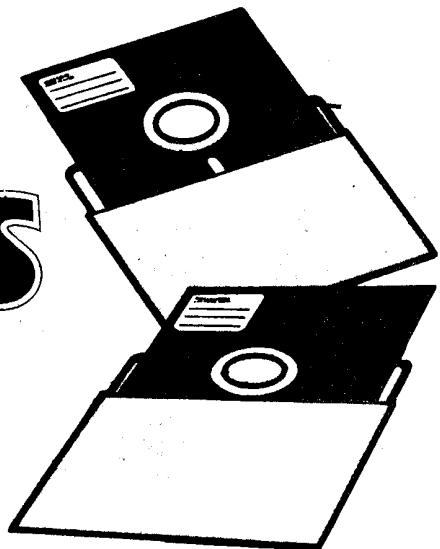
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ISSUE A8 DISKCOPY CERTIFY SCANNER TIME MUSIC PING PONG PHONDIALER PHONE SORT	UTILITY UTILITY UTILITY EDUCATION MAKE MUSIC GAME UTILITY UTILITY	COMPAC DISKLIST JEWELS CASSCAT TITLEPG CNGSQUAR MYSTILSD PIG	UTILITY DSK UTIL ADVENTURE TAPE UTIL SCHOOL GAME ADVENTURE GAME	ISSUE A10 ROMMAP ROLLOVER CODETABL MAZE ANIMALDK SOUNDRE DESTROY SAFECRK
ISSUE A11 TAX ESTIMATE M L T T D PARTS INVEN DATA MAKER KABOOM DEF MOV R/C AIRPLANE MATCH SQU	ESTIMATE TAX UTILITY INVENTORY FILE DATA STATEMENT INPUTS GAME GAME GAME GAME	PILOT TEST SCHOOL MINI-GEN DISK-CAL COCO-MON	UTILITY UTILITY ADVENTURE ADVENTURE MAKER SPREADSHEET UTILITY	ISSUE A12 PILOT TEST SCHOOL MINI-GEN DISK-CAL COCO-MON

ISSUE B1 CHESS TRUCKER CODEFIL FRACTIO 4-D TIC DRAWPK JUNGLE	GAME GAME GAME EDUCTION GAME CARD GAME ADVENTURE	ISSUE B2 CLOCK WORD PROC CASS FILE CASTLE HOME BGT DISK MAST ROAD RACE	A CLOCK PROCESSOR TAPE UTILITY ADVENTURE BUDGET DISK UTILITY GAME	ISSUE B3 AMORIT SPOOLER DISKCOPY PUZZLE STOCKKET WIDTHCGE BIORHYTHM TANK
ISSUE B4 RECOVER DATABOOK ROMTOTPE CALENDAR LETTER ANTI-TOP	UTILITY DATA BASE UTILITY UTILITY BUSINESS GAME	ISSUE B5 CANNON CRYPT BANNER FLASH CRD WORDS REPORTER	GAME ADVENTURE UTILITY EDUCATION GAME EDUC BUSINESS	ISSUE B6 RETRIEV POOL STATES DRAW DISKSPEED ML ADDR TRIANGLE NAMES HANGMAN
				UTILITY GAME EDUCATION GAME UTILITY UTILITY ART DATA BASE GAME

ISSUE B7	
CONQUEST	ADVENTURE
MTERMCON	UTILITY
LOSTREAS	ADVENTURE
DISKZAP	DSK UTIL
LOTTO	GAME
SPELLHLP	EDUCATION
UNSCRAMBL	EDUCATION

ISSUE B8	
STOCKMKT	GAME
DISKTCK	UTILITY
DRAW	DRAW
BRICKS	GAME
WATTS	UTILITY
DIARY	DATA BASE
ORBOUEST	ADVENTURE
ROM2ROM	UTILITY
CLOCK	UTILITY

ISSUE B9	
MEMTEST	UTILITY
ML CONVT	UTILITY
DATAENTY	UTILITY
ML-TTD	UTILITY
R P M	DKS UTIL
ALPHA	UTILITY
PERTTY	UTILITY
CHART	BUSINESS
DSK2TAPE	UTILITY
CASSINDX	UTILITY
UGLYWORD	GAME
VOICESYN	UTILITY
TIMERACE	GAME
DIRHELP	UTILITY

ISSUE B10	
GRADEBOOK	SCHOOL
WONDERBAR	BUSINESS
COCOKENNO	GAME
DSKENVEL	UTILITY
HORSES	GAME
SQUEEZE	UTILITY
DATAPRNT	UTILITY
PRNTDRIV	UTILITY
WATERCOST	UTILITY
ELECTRIC	EDUCATION

ISSUE B11	
PRESENT	UTILITY
AUTOBOOT	UTILITY
CERTIFY	DSK UTIL
CASSETTE	UTILITY
HOMEINVE	DATABASE
TYPING	EDUCATION
LOLLIPOP	GAME
SETUP	UTILITY
SUBS	GAME
CHICKEN	GAME

```

ISSUE B12
FILECOPY UTILITY
XMASLIST DATABASE
TXTSCREEN PRINT UTIL
MTCC3 UTILITY CC3
DOS UTILITY CC3
LLISTER UTILITY
SIGNMAKER UTILITY
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Take turns and see who is the best typist or test yourself. When typing the program in place a space between each letter as shown in line numbers 190-210.

```

10 CLS
20 REM BY TOM LEHANE 1985
30 FOR P=483 TO 508
40 PRINT@P,CHR$(131);:NEXT
50 FOR X=7 TO 57
60 SET(X,22,0)
70 SET(X,20,0)
80 NEXT
90 PRINT@290,CHR$(130);
100 PRINT@354,CHR$(136);
110 PRINT@355,CHR$(130);
120 PRINT@356,CHR$(128);
130 PRINT@379,CHR$(129)+CHR$(131)
);

```

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```

140 PRINT@317,CHR$(129)+CHR$(131
);
150 PRINT@349,CHR$(133);
160 FOR Y=22 TO 29
170 SET(6,Y,0):SET(57,Y,0)
180 NEXT Y
190 PRINT@389,"Q W E R T Y U I O
P @";
200 PRINT@422,"A S D F G H J K L
:";
210 PRINT@453,"Z X C V B N M , .
/ ?";
220 FI=1
230 GOSUB 450
240 H=20:A=134:SEC=0:TEST=0
250 FOR Y=1 TO 15
260 FOR X=10 TO 51
270 SET(X,H,8)
280 NEXT X
290 H=H-1
300 NEXT Y
310 A=134
320 L=RND(26)+64
330 G$=INKEY$
340 PRINT@A,CHR$(L);
350 IF G$<>CHR$(L) THEN 420
360 IF G$=CHR$(L) THEN PRINT@A+6
4,CHR$(L);
370 A=A+2
380 TE=TE +1
390 IF FI=1 AND TE=10 THEN GOSUB
580
400 IF TE=10 THEN 520
410 GOTO 320
420 SE=SE+1
430 PRINT@25,SE
440 GOTO 330
450 PRINT@41,"TOUCH..TYPE";:PRIN
T@57,"timer";
460 PRINT@106,"TO PLAY";
470 PRINT@133,"TYPE IN THE LETTE
R";
480 PRINT@165,"DISPLAYED AS FAST
AS";
490 PRINT@197,"YOU CAN.A COUNTER
";
500 PRINT@229,"WILL KEEP COUNT O
F";
510 PRINT@261,"YOUR PROGRESS."
520 GOSUB 550:PRINT@295,"ANY KEY
TO START";
530 IF INKEY$=""THEN 530
540 GOTO 240
550 REM * KEEP SCORE *
560 LO=SE:IF LO< LA THEN LA=LO
570 LO=0:PRINT@6,"BEST TIME.":LA
:: LA=LA:RETURN
580 LA=SE
590 FI=0
600 RETURN

```

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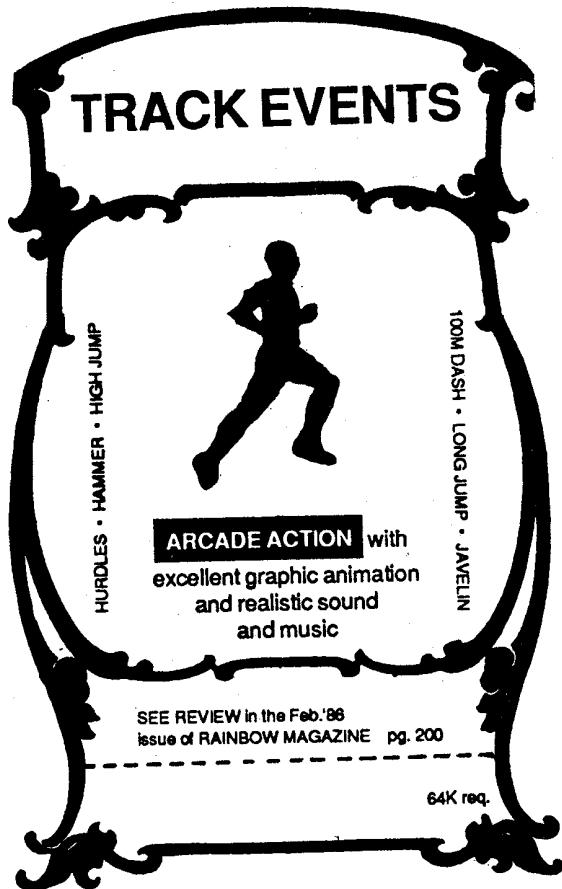
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64KTEST		MESSAGE	BAS	O B 1	DISK FIX	BAS	O B 1	DUNGEON	BAS	O B 2
UPPER32K		RELOCAT	BAS	O B 1	DISKTIME	BAS	O B 1	PIXDUMP	BAS	O B 1
HEXTODEC		COUNT	BAS	O B 1	DOS64A	BAS	O B 3	CONTOUR	BAS	O B 1
DEC<>HEX		CALENDAR	BAS	O B 1	GDS	BAS	O B 5	SLOSKROL	BAS	O B 1
BASECONV		DOGS	BAS	O B 1	PIXCMP	BAS	O B 2	COPYDIR	BAS	O B 1
DISKTEST		DOGFIGHT	BAS	O B 1	ROMPACK	BAS	O B 1	DIRLIST	BAS	O B 1
SOUNDDEM		BEAST	BAS	O B 1	SOUND	BIN	2 B 1	PILOT	BAS	O B 2
CONVERGE		DSKTAPE	BAS	O B 1	SPOOLER	BIN	2 B 1	INVITE	BAS	O B 1
TESTPATT					UT	BAS	O B 2	MATHPAL	BAS	O B 3
COMPLAWS					Z	BAS	O B 4	DUPER	BAS	O B 2
CHESS		BOXLABLE	BAS	O B 1	QUADDRAW	BAS	O B 1	IN-OUT	BAS	O B 1
CHECKERS		MONOL	BAS	O B 7	B	BAS	O B 1	GOLDMINE	BAS	O B 3
PATROL2		ATOMS	BAS	O B 2	CLOCK	BIN	2 B 1	HUSTLE	BAS	O B 1
ELECTMAZ		FLIP	BAS	O B 2	COPY DIR	BIN	2 B 1	HOBBIT	BAS	O B 2
ICE		POWER UP	BAS	O B 1	DDCOPY	BAS	O B 2	CONNECT4	BAS	O B 2
TANKS		DISKSORT	BAS	O B 1	FDCTST	BIN	2 B 3	OTHELLO	BAS	O B 3
DODGE-EM		READBIN	BAS	O B 1	FIND	BAS	O B 1	BIORYTHM	BAS	O B 1
SOISAYS		MACDATA	BAS	O B 1	ODIE	PIX	2 B 3	SIMON	BAS	O B 1
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LANDER		OHMS	BAS	O B 1	PATTERN	BAS	O B 2	COPTER	BAS	O B 2
WHERISIT		SPEDMATH	BAS	O B 3	CHEKBOOK	BAS	O B 4			
HANGMAN		SCRDUMP	BAS	O B 1				DISK # 7		
OTHELLO		DSKCLEAN	BAS	O B 1				D-ADV	BAS	O B 8
GOLDMINE		DIRGET	BAS	O B 1	MLDISK	BAS	O B 2	SWORDS	BAS	O B 4
STATCAP		DIRSAVE	BAS	O B 1	SORT	BAS	O B 1	TROLL	BAS	O B 6
PINGPONG		ML ADDR	BAS	O B 1	TELETERM	BIN	2 B 3	QUEST	BAS	O B 4
BIORYTHM		WALLHIT	BAS	O B 1	TOF	BIN	2 B 1	SURVIVE	BAS	O B 5
CALENDAR		TEMPCONV	BAS	O B 1	DSK EDIT	BAS	O B 4	SPELWORD	BAS	O B 1
MAILLIST		CHKBOOK	BAS	O B 1	HEALTH	BAS	O B 9	CUBIC	BIN	2 B 3
		DIS	BAS	O B 2	SOUND	BIN	2 B 1	DOTMAT	BIN	2 B 8
DISK # 2		LOCFIND	BAS	O B 1	TOF	ASM	1 A 2	FLIGHT	BIN	2 B 3
DISKLST		MISSLETT	BAS	O B 1	SOUND	ASM	1 A 1	GRID	BIN	2 B 2
DIRLIST		MEMORIE	BAS	O B 2	AIRPORT	BIN	2 B 6	TIGER	PIX	2 B 3
ML ADDR		FISH	BAS	O B 1	CUBE	BIN	2 B 3	ZIGGY	PIX	2 B 3
DISKDUMP		CIPHER	BAS	O B 1	OBJECTS	BIN	2 B 2	LABELPRT	BAS	O B 1
PRINUTIL		CARCAL	BAS	O B 1	TANK	BIN	2 B 4	PEEK	BAS	O B 1
CALPRINT		BIGHILL	BAS	O B 1	CIA	BAS	O B 6	ROMDUMP	BAS	O B 1
ALPHSONG		PROTECT	BAS	O B 2	TRIANGLE	BIN	2 B 2	DISASSY	BAS	O B 4
PAINT		STOCK	BAS	O B 3	WORLDMAP	BIN	2 B 4	MLFINDER	BAS	O B 1
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SPACE	BAS	O B 8	DSKLCK	BAS	O B 2	CHKBOOK	BAS	O B 3	KINGTUT
FARMING	BAS	O B 6	SELFMAIL	BAS	O B 1	SHAPES	BAS	O B 3	SURVIVAL
TREK	BAS	O B 5				VIPERS	BAS	O B 3	STARTREK
DSCOPY	BAS	O B 1	DISK # 11			POKING	BAS	O B 4	CASTLE
DSKSPEED	BAS	O B 1	COMBAT	BAS	O B 3	BUGS	BAS	O B 6	
EXREF	BAS	O B 3	MCONVERT	BAS	O B 2	GEOSTUDY	BAS	O B 4	DISK # 17
ALARM	BAS	O B 2	FRACTION	BAS	O B 4	USASTUDY	BAS	O B 4	HI
CLOCK	BAS	O B 1	BALONS	BAS	O B 3	HEALTH	BAS	O B 9	TONE
PHONE DIR	BAS	O B 2	DATA3	BAS	O B 3				COLOR
TICKTAPE	BAS	O B 3	LIFE	BAS	O B 4	DISK # 14			COUNTING
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DSKLIBRY	BAS	O B 3	OFFSET	BAS	O B 1	MASTMESS	BAS	O B 3	SECONDS
MESSAGE	BAS	O B 1	BATSHIP	BAS	O B 4	BIGPRINT	BAS	O B 3	WITHOUT
FLIPPAGE	BAS	O B 3	DUMPALL	BAS	O B 3	TRIVIA	BAS	O B 4	CLOCK
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GUITAR	BAS	O B 5	SOUNDS	BAS	O B 3	METCONV	BAS	O B 1	DATA
POKER	BAS	O B 4	DISTANCE	BAS	O B 4	CRACE	BAS	O B 2	VOCAB
TANK	BAS	O B 2	DATES	BAS	O B 2				GOSUB
TRIANGLE	BAS	O B 4	PHONEWRD	BAS	O B 1	DISK # 15			POWER
SHIPS	BAS	O B 2	ROBOTS	BAS	O B 3	DKTODK	BAS	O B 3	SQUARES
HANDBALL	BAS	O B 2	DIGGEM	BAS	O B 3	ATTACKER	BAS	O B 4	SAVING
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ASSMBLER	BAS	O B 6	DISK # 13			FISHING	BAS	O B 1	TYPETEST
DISMON	BAS	O B 7	CARDIOH	BAS	O B 5	MEMORY	BAS	O B 2	ERROR
SIMSAS	BAS	O B 1	HAUNTHSE	BAS	O B 6	HORSERAC	BAS	O B 3	STOP
DISKNAMS	BAS	O B 4	DISKHLP	BAS	O B 4	KRAKEN	BAS	O B 5	ON-GOSUB
SQUEEZE	BAS	O B 2	FIND-IT	BAS	O B 3	KINGS	BAS	O B 6	

ELSE	BAS	O B 1	ARC TANG	BAS	O B 1	SNOOPY	BIN	2 B 3	MARCH	BIN	2 B 2
ON-GOTO	BAS	O B 1	SPACEGUN	BAS	O B 1	MAX	BIN	2 B 3	NUTCRACK	BIN	2 B 2
AND-OR	BAS	O B 1	BOUNCE	BAS	O B 1	F-15	BIN	2 B 3	DISK # 24		
SGN	BAS	O B 1	BLK JACK	BAS	O B 1	ALIEN	BIN	2 B 3	SONGS	BAS	O B 2
ABS	BAS	O B 1	KALEIDOS	BAS	O B 1	EARTH	BIN	2 B 3	DISK	DAT	1 A 1
STR\$	BAS	O B 1	ELECDICE	BAS	O B 1	DISK # 22			2001	BIN	2 B 3
EXP-NOTE	BAS	O B 1	PLAYTUNE	BAS	O B 1	3DHAT	BAS	O B 1	ALFRED H	BIN	2 B 4
DIR	BAS	O B 1	LRN TUNE	BAS	O B 1	3DROTRATE	BAS	O B 2	ATEEM	BIN	2 B 2
			INV SHOP	BAS	O B 1	3DWORLD	BAS	O B 4	BOOGY	BIN	2 B 5
DISK # 18			BARGRAPH	BAS	O B 1	CCOG	BAS	O B 1	BUMBLE	BIN	2 B 2
CHR\$	BAS	O B 1	SPD READ	BAS	O B 1	CCOGLOGO	BAS	O B 5	CANTINA	BIN	2 B 6
TRAIN	BAS	O B 1	MUS COMP	BAS	O B 1	CHRISCAR	BAS	O B 1	CHARRIOT	BIN	2 B 2
RECORDER	BAS	O B 1	DIR	BAS	O B 1	CPAINT	BAS	O B 1	HILLSTRT	BIN	2 B 2
TALKER	BAS	O B 1	DISK # 19			DOG	BAS	O B 2	JONYBOUD	BIN	2 B 4
POINT	BAS	O B 1	PONG	BIN	2 B 1	FORMS	BAS	O B 1	JUMP	BIN	2 B 5
POINT2	BAS	O B 1	SRFIRE	BIN	2 B 3	IN-OUT	BAS	O B 1	MASH	BIN	2 B 2
ASTEROID	BAS	O B 1	TAPEDISK	BIN	2 B 1	KALIEDOS	BAS	O B 2	OHHOLY	BIN	2 B 3
GRAPHCHR	BAS	O B 1	BRICKPNG	BIN	2 B 2	KEYPAINT	BAS	O B 1	POLICE	BIN	2 B 7
BLUECAR	BAS	O B 1	GERM	BIN	2 B 1	LOGO#1	BAS	O B 1	RAIDER	BIN	2 B 4
TABLE	BAS	O B 1	FLYBY	BIN	2 B 2	PAPER	BAS	O B 1	STARTREK	BIN	2 B 6
TRAFFIC	BAS	O B 1	TTD	BIN	2 B 1	PATTERNS	BAS	O B 1	STARWARS	BIN	2 B 3
LARGER	BAS	O B 1	PACKMAZE	BIN	2 B 3	PICTURE	BAS	O B 4	MUSICBOX	BIN	2 B 2
DANCE	BAS	O B 1	FORESTAD	BIN	2 B 3	POLYGON	BAS	O B 1	CANNON	BIN	2 B 3
ARRAY	BAS	O B 1	40K-	BIN	2 B 1	POLYGONI	BAS	O B 1			
CANDAT-B	BAS	O B 1	D2T-COPY	BIN	2 B 1	PUMPKIN	BAS	O B 1			
INVNTORY	BAS	O B 1	TOOLZ	BIN	2 B 2	SHIPS	BAS	O B 2			
MEMTEST	BAS	O B 1	DISK # 20			SKETCHER	BAS	O B 2			
DEAL	BAS	O B 1	MTTERM	BIN	2 B 6	TUNNEL	BAS	O B 1	DISKMENU	BAS	O B 1
SHOPLIST	BAS	O B 1	COPY	BAS	O B 1	AMERICA	BAS	O B 1	BEATIT	MUS	2 B 4
SONG	BAS	O B 1	MCONFIG	BAS	O B 3	OPTICAL	BAS	O B 4	BTHFIFTH	BIN	2 B 7
ESSAY	BAS	O B 1	MODEMG	BIN	2 B 1	PICT2	BAS	O B 1	CIRCUS	MUS	2 B 5
WORDPROC	BAS	O B 1	MODEMG	BAS	O B 1	POLAR	BAS	O B 2	CIRCUS2	BIN	2 B 1
SAVEFILE	BAS	O B 1	MALB	BIN	2 B 7	SCOTT	BAS	O B 1	FEELINGS	BIN	2 B 2
CATALOG	BAS	O B 1	REMOTERM	BIN	2 B 1	XPAD	BAS	O B 2	GREMLIN	MUS	2 B 5
PICK	BAS	O B 1	TERM1-O	BIN	2 B 3	TRIANLES	BAS	O B 1	HPLESSLY	MUS	2 B 2
CHECKS	BAS	O B 1	ASCIIEX	BIN	2 B 4	DISK # 23			JOY	MUS	2 B 4
ABC	BAS	O B 1	ASCIIEX	DOC	1 A 3	A TEAM	BIN	2 B 2	LMOOD	MUS	2 B 7
ALPHATIZ	BAS	O B 1	PICTURE	NO2	O B 1	ALFIE	BIN	2 B 2	LOVELY	BIN	2 B 1
BOOK	BAS	O B 1	RUNME	BAS	O B 1	BEATIT	BIN	2 B 4	NADIA	BIN	2 B 1
2DIMARAY	BAS	O B 1	PHASER	BIN	2 B 3	CLOSETO	BIN	2 B 2	NIGHTS	MUS	2 B 3
3DIMARAY	BAS	O B 1	TREK3	BIN	2 B 3	D'AMOUR	BIN	2 B 2	NITEB4	MUS	2 B 2
2DIMCARD	BAS	O B 1	RELIANT	BIN	2 B 3	FATHER	BIN	2 B 2	PIANOMAN	MUS	2 B 5
PRG#1	BAS	O B 1	STRIBE	BIN	2 B 3	GREMLINS	BIN	2 B 5	PINBALWZ	MUS	2 B 5
PRG#1A	BAS	O B 1	GBUSTER	BIN	2 B 3	JUMP	BIN	2 B 5	STARS	MUS	2 B 5
PRG#2	BAS	O B 2	F-18	BIN	2 B 3	KHAN	BIN	2 B 6	SUNSHINE	BIN	2 B 2
PRG#3	BAS	O B 1	TIESHIP	BIN	2 B 3	LUVSTORY	BIN	2 B 2	SWEET16	MUS	2 B 4
MLSUBRTN	BAS	O B 1	WSHIP	BIN	2 B 3	MUSIC	BAS	O B 2	USA	MUS	2 B 2
BASICPRG	BAS	O B 1	X-WING	BIN	2 B 3	ROMEO &	BIN	2 B 2	DISK # 26		
BASICPR1	BAS	O B 1	SAUCER	BIN	2 B 3	WRITEMUS	BAS	O B 3	MCPAINT	BIN	2 B 11
SQR ROOT	BAS	O B 1	PIGYBACK	BIN	2 B 3	CHORALE	BIN	2 B 2	ICONS	SYS	2 B 3
EXPON-Y	BAS	O B 1	TIGER	BIN	2 B 3	LUTE	BIN	2 B 2	MCDOC	DOC	1 A 11
LOG	BAS	O B 1	PANZER	BIN	2 B 3	LONELY	BIN	2 B 2	PRINTDOC	BAS	1 A 1
EXPON-X	BAS	O B 1	VINCENT	BIN	2 B 3	FUGE	BIN	2 B 4	GLASDEMO	BIN	2 B 6
TANGENT	BAS	O B 1				MINUET	BIN	2 B 2	STARS	BIN	2 B 2
COSINE	BAS	O B 1				SONATA	BIN	2 B 2	1940S	SET	2 B 1
ARC COS	BAS	O B 1									
ARC SINE	BAS	O B 1									

BLOON	SET	2 B 1	SPEEDMTH	BAS	0 B 3	GRAPDUMP	BAS	0 B 1	FREE301D	BAS	0 B 1
BOLD	SET	2 B 1	MATHDRIL	BAS	0 B 2	GRAPDUMP	BIN	2 B 1	PRINTDOC	BAS	0 A 1
FANCY	SET	2 B 1	EGYPT8	BAS	0 B 2	BOOT	BAS	0 B 1	PCOPY	BAS	0 B 1
FIGURE	SET	2 B 1	MUSIC	BAS	0 B 3	SKETCH	PAD	0 B 4	HELLO	BAS	0 B 2
FUTURE	SET	2 B 1				SKETCH	PIC	2 B 3	DISKOPY	BAS	0 B 2
GREEK	SET	2 B 1			DISK # 28	BOOTGRAP	BAS	0 B 1	CERTIFY	BAS	0 B 3
GREEKU	SET	2 B 1	DENOTE	BAS	0 B 3	BOOTGPII	BAS	0 B 1	SCANNER	BAS	0 B 1
HEBREW	SET	2 B 1	DENOTE	DAT	1 A 2	BOOTHARD	BAS	0 B 1	MINIGEN	BAS	0 B 5
OLDENG	SET	2 B 1	CNFG43	BAS	0 B 4	GRAPHCOM	PIC	2 B 3	COCOMMON	BAS	0 B 2
SCRIPT	SET	2 B 1	MTRM43	BIN	2 B 8	GRAPHPII	PIC	2 B 3			
TYPING	SET	2 B 1	MTADD	TXT	1 A 1	HARDCOPY	PIC	2 B 3	DISK # 33		
EPSON	DRV	2 B 1	MTDOC1	TXT	1 A 11	PICDOS	BIN	2 B 2	DICT	TXT	1 A 33
EPSON2	DRV	2 B 1	MTDOC2	TXT	1 A 8	PICDOS	DOC	1 A 6	SPELLFX2	BIN	2 B 6
ANIMATE	BAS	0 B 1	MTDOC3	TXT	1 A 7	MODPDS1	BAS	0 A 1	SPELLFX2	BAS	0 B 1
ANIMAT	BIN	2 B 1	MTDIAL	BAS	0 B 1	RUNCOPY	BAS	0 B 2	SPELLFIX	BIN	2 B 5
BANNER	BAS	0 B 2	MT450	BAS	0 B 1	AMORT	BAS	0 B 3	SPELLFIX	BAS	0 B 1
GARFIELD	BIN	2 B 3	NCHG	BAS	0 B 1	ESP	BAS	0 B 3	MANUAL	TXT	1 A 12
MCUTIL	BIN	2 B 1	TAPCNV	BAS	0 B 2	175	BAS	0 B 9	COREDICT	TXT	1 A 1
			RTERM	BAS	1 A 1	EXT22	BAS	0 B 5	SAMPLE	TXT	1 A 1
			RTERM	BIN	2 B 3				BUILD	BAS	0 B 1
		DISK # 27	RTERM	DOC	1 A 9				LIST	BAS	0 B 1
ADD-TAB	BAS	0 B 5				LANDER	BAS	0 B 2	APPEND	BAS	0 B 1
MULT-TAB	BAS	0 B 4				LAND1	BIN	2 B 3	ADDWORDS	BIN	2 B 3
SPELL	BAS	0 B 2				LAND2	BIN	2 B 3	RUN-THIS	BAS	0 B 1
BST 1	BAS	0 B 2	SCRTHPAD	BAS	0 B 1	LAND3	BIN	2 B 3			
BST 2	BAS	0 B 2	LABELS	BAS	0 B 1	LAND4	BIN	2 B 3	DISK # 34		
BST 3	BAS	0 B 2	AE	BIN	2 B 4	LAND5	BIN	2 B 3	TAPELIST	BAS	0 B 1
INCOME	BAS	0 B 1	AE	HLP	1 A 3	BLANK	BIN	2 B 3	FGRAPH	BAS	0 B 4
ALG PLOT	BAS	0 B 1	AE	DOC	1 A 5	DISKCHCK	BIN	2 B 2	ABCPOP	BAS	0 B 3
ALG WR I	BAS	0 B 2	DUMBAE	DOC	1 A 6	GRPHLBLR	BAS	0 A 2	TEENMONY	BAS	0 B 3
ALGEBRA	BAS	0 B 3	MASTER	BAS	0 B 3	PRINTRDY	BAS	0 A 1	ABSTRACT	BAS	0 B 1
O T	BAS	0 B 1	LABELS2	BAS	0 B 2	BASIC	BAS	0 B 8	JOUST	BAS	0 B 4
BAS MATH	BAS	0 B 3	MAILER	BAS	0 B 1	BASIC2	BAS	0 B 9	COCO	BAS	0 B 1
TIPS	BAS	0 B 1	MORTDATA	BAS	0 B 1	BASIC3	BAS	0 B 3	ANALYSIS	BAS	0 B 3
COMM	BAS	0 B 1	DB-INSTR	BAS	0 B 3	EXT1	BAS	0 B 9	TRIXDEV	BAS	0 B 2
DEDUCT	BAS	0 B 1	DB	BAS	0 B 6	EXT2	BAS	0 B 5	YANKEE	BAS	0 B 2
DEC-FRAC	BAS	0 B 1	DB1	BAS	0 B 1				DRIVER	BAS	0 B 1
CHECK	BAS	0 B 1	DB2	BAS	0 B 1	DISK # 32			THEWIZ	BAS	0 B 1
CHECK II	BAS	0 B 1	DB3	BAS	0 B 4	DIRBACK3	BAS	0 B 2	COLODYE	BAS	0 B 3
BUDGET	BAS	0 B 1	PROGLIST	BAS	0 B 2	DS-DIR	BAS	0 B 1	SORTDYE	BAS	0 B 1
LOG	BAS	0 B 1	CATPRT2	BAS	0 B 2	DSKINDEX	BAS	0 B 1	RVWRTR	BAS	0 B 2
SALESTAX	BAS	0 B 1	CATPRT3	BAS	0 B 2	DSKCBL4	BAS	0 B 3	QUIZ	BAS	0 B 2
FRAC-DEC	BAS	0 B 1	CATPRT4	BAS	0 B 2	DSKCBL5	BAS	0 B 3	CALC	BAS	0 B 1
GRADEAV	BAS	0 B 1	PROGLIST	DAT	1 A 3	BOOT35	BAS	0 B 3	TUTORIAL	BAS	0 B 4
GRADEREP	BAS	0 B 1	!-C	LIB	1 A 1	RAMLOOK	BAS	0 B 4	CHEKANA	BAS	0 B 4
METRIC	BAS	0 B 1	D-F	LIB	1 A 1	DIR	BAS	0 B 1	COLCONT	BAS	0 B 1
MID TERM	BAS	0 B 1	G-L	LIB	1 A 1	INSTDB35	BAS	0 B 1	ASTROIDS	BAS	0 B 1
NUMBER	BAS	0 B 1	M-R	LIB	1 A 1	DIRBAC35	BAS	0 B 1	DSKDIRTY	BAS	0 B 1
PASCHAL	BAS	0 B 1	S->	LIB	1 A 1	INIT35	BIN	2 B 1	DISKLKER	BAS	0 B 1
POLY WR	BAS	0 B 1	MABEL	BIN	2 B 8	SETCLMS	BAS	0 B 1	A TO C	BAS	0 B 7
PT-SLOPE	BAS	0 B 1				CONVERT	BAS	0 B 3	D TO F	BAS	0 B 8
RELATION	BAS	0 B 1			DISK # 30	FREE351A	BAS	0 B 4	G TO I	BAS	0 B 5
SLOPE	BAS	0 B 1	BATON	BAS	0 B 5	FREE351B	BIN	2 B 1	SOCCOR	BAS	0 B 1
STATS WR	BAS	0 B 1	DUMP115	BAS	0 B 3	FREE301A	BAS	0 B 8			
TEMPCONV	BAS	0 B 1	DUMP220	BAS	0 B 2	FREE301B	BAS	0 B 6	DISK # 35		
BAR GR	BAS	0 B 1	GEMDUMP	BAS	0 B 1	FREE301C	BAS	0 B 6	PTEST	BAS	0 B 1
ELEMATH	BAS	0 B 1	GEMSRNDP	BIN	2 B 1						

REFLEX	BAS	O B 1	PERFINAN	BAS	O B 5	CAGE	BAS	O B 2	DISK # 39
MAZE2	BAS	O B 1	KEYBOARD	BAS	O B 1	4OLET	BAS	O B 3	C642COCO BAS O B 2
TAPEIN	BAS	O B 4	MATH	BAS	O B 3	CGPDEMO	BAS	O B 4	C64SUBS BIN 2 B 1
CHECKWRI	BAS	O B 2	MEMO	BAS	O B 2	LSPRINT	BAS	O B 1	C64SUBS TXT 1 A 3
HIDOT	BAS	O B 1	ORDER	BAS	O B 3	BACH	BAS	O B 1	C642COCO DOC 1 A 3
SQUARGRA	BAS	O B 1	DISKMAP	BAS	O B 1	MINIEDIT	BAS	O B 2	POLA DOD 1 A 5
GAMES	BAS	O B 5	PSUPPLY	BAS	O B 4	DEFEND	BAS	O B 3	PIRATE DOD 1 A 5
FIGURES	BAS	O B 2	JOYFOUR	BAS	O B 1	CHECKERS	BAS	O B 2	PAGODA DOD 1 A 5
FINDWORD	BAS	O B 1	RECORDS	BAS	O B 3	PEGWARS	BAS	O B 2	FREE101 BAS O B 4
QUIZ	BAS	O B 3	ADRESS	BAS	O B 2	CLOCK	BAS	O B 1	RELOADR BAS O B 1
FORESAPP	BAS	O B 3	LETEDIT	BAS	O B 3	TREKADV	BAS	O B 4	REMULAK BAS O B 6
FORESTRY	BAS	O B 3	BOOKS	BAS	O B 3	BACCARAT	BAS	O B 2	SHIPHUNT BIN 2 B 6
FOREST2	BAS	O B 2	MATH2	BAS	O B 2	ANIMAL	BAS	O B 1	SAVODSK1 BIN 2 B 5
TAPEINV	BAS	O B 2	SALES19	BAS	O B 4	MAZE	BAS	O B 3	SAVODSK2 BIN 2 B 2
CLOC2	BAS	O B 1	INVEST	BAS	O B 2				CASTEST BIN 2 B 3
BANKSTAT	BAS	O B 4	INVEST2	BAS	O B 1	DISK # 38			PHONE DAT 1 A 1
LOCKLOOK	BAS	O B 1	STOCKAN	BAS	O B 1	WAMPUS	BAS	O B 3	MASTER BAS O B 4
COLOTRAP	BAS	O B 1	CAROWN	BAS	O B 1	MINDER	BAS	O B 3	SIGN BAS O B 4
ARTHUR	BAS	O B 1	SIMEQ	BAS	O B 2	MCJUMP	BAS	O B 3	
LOTTOON	BAS	O B 2	NEWTON	BAS	O B 2	SUNDANCE	BAS	O B 2	DISK # 40
LABELPRT	BAS	O B 1	SIMPSON	BAS	O B 1	PIVADERS	BAS	O B 1	FOZZI BAS O B 2
TELLTIME	BAS	O B 2	MONTHDU	BAS	O B 1	AREAVOL	BAS	O B 5	RNDGRAPH BAS O B 1
RIFLECOL	BAS	O B 1	CONVERT	BAS	O B 4	BOMBER	BAS	O B 2	PWRLOVE MUS 1 A 3
COPYCAM	BAS	O B 1				ICBM	BAS	O B 3	HOSTBST MUS 1 A 3
CAMERA	BAS	O B 1	DISK # 37			SCRPRINT	BAS	O B 2	ORCH90 BIN 2 B 8
EXKEY	BAS	O B 1	DONATION	BAS	O B 6	USASYMBL	BAS	O B 1	ORC90DOC DAT 1 A 3
CAPITALS	BAS	O B 1	PRECALEN	BAS	O B 1	BUBLSORT	BAS	O B 1	NEUTRON MUS 1 A 6
HOMONYMS	BAS	O B 1	SHORTDAT	BAS	O B 1	CARDFILE	BAS	O B 2	MATERIAL MUS 1 A 3
ABREV	BAS	O B 4	BLOCK	BAS	O B 1	FREEWAY	BAS	O B 1	AXELF MUS 1 A 2
MATHDRIL	BAS	O B 2	HORSE	BAS	O B 2	RELOCATE	BAS	O B 1	SHIPWREC BAS O B 5
SEQUENCE	BAS	O B 2	BRICKS	BAS	O B 1	DOC	BAS	O B 7	STOCKS BAS O A 2
ROUNDOFF	BAS	O B 2	PILLBOX	BAS	O B 2	ACCOUNT	BAS	O B 2	LINES BAS O B 1
CONVERTS	BAS	O B 3	ATACMAN	BAS	O B 3	ROTATE	BAS	O B 1	TEMPIST BAS O B 2
FARMSKP	BAS	O B 4	SLOTS	BAS	O B 4	LEDGER	BAS	O B 3	TREK BAS O B 5
			METERIC	BAS	O B 6	SEE	BAS	O B 4	BYTSCR16 BAS O B 2
			UFO	BAS	O B 2	CALENDAR	BAS	O B 1	RESTORE BAS O B 1
METRIC2	BAS	O B 1	LETWRITE	BAS	O B 3	ROLL IT	BAS	O B 2	TRACK BAS O B 2
TEMP	BAS	O B 2	LP7WRITE	BAS	O B 1	DRAW	BAS	O B 1	FORECAST BAS O B 4
TEMPCOMP	BAS	O B 1	40CALEN	BAS	O B 1	3 FILE	BAS	O B 2	TAPEFIX BAS O B 2
BASXREF	BAS	O B 3	BLOCK2	BAS	O B 1	DRAW2	BAS	O B 1	DIRSORT BAS O B 1
INENTOR	BAS	O B 4	ISSUSSION	BAS	O B 1	MEMBER	BAS	O B 5	TELE1 BAS O B 5
ACCREC1	BAS	O B 5	32COLBEP	BAS	O B 1	BUSIN	BAS	O B 2	TELE2 BAS O B 5

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```

5 PCLEAR1:CLS:GOTO100
15 *** EXECUTE A PCLEAR1 BEFORE
CLOADING THIS PROGRAM ***
20 Y=INT((J-MP)/L1):X=J-MP-Y*L1:
HV=99:FORZ=1TOQ:V=INT(A(Z)/L1)
22 H=A(Z)-V*L1-X:V=V-Y:U=ABS(H)+
ABS(V):IFU>HV GOTO28
24 IFU<HV THENHV=U:H=V1=V:GOT
028
26 IFRND(10)<6THENH1=H:V1=V
28 NEXT:GOTO1400
29 '-- TEST FOR PATH
30 X=P1:Z=D1:IFZ=4THENX=X-L1:Z=Z
-2
32 IFZ=3THENX=X-1:Z=Z-2
34 T=0:Y=PEEK(X):IFY-Z=1460RY-Z=
1470RY=145THENT=1
36 RETURN
39 '-- TURN RIGHT
40 D1=D+1:IFD1>4THEND1=D1-4
42 RETURN
44 '-- TURN LEFT
45 D1=D-1:IFD1<1THEND1=D1+4
47 RETURN
49 '-- MOVE
50 IFD>2GOTO56
52 IFD=1THENP1=J+1:RETURN
54 P1=J+L1:RETURN
56 IFD=3THENP1=J-1:RETURN
58 P1=J-L1:RETURN
59 '-- CLEAR GRAPH SCREEN
60 PMODE0,1:PCLS:SCREEN1,1:RETUR
N
69 '-- FIND R
70 P1=J:D1=D:GOSUB30:IFT=0THENRE
TURN
72 GOSUB50:Y=P1-MP:T=0:FORX=1TOQ
:IFY=A(X)THENT=1:R=X
74 NEXT:RETURN
75 '-- PRINT X$ AT P,PY
76 FORY=1TOLEN(X$):X=ASC(MID$(X$
,Y,1))-42:GOSUB86:NEXT:RETURN
79 '-- DISPLAY X AT P,PY
80 Y=X-INT(X/10)*10:X=INT(X/10):
LINE(P,PY)-(P+14,PY-14),PRESET,B
F
82 DRAW"BM"+STR$(P)+","+STR$(PY)
+"+"+DR$(Y):P=P-16:IFX>0GOTO80
84 RETURN

```

```

85 '-- DRAW DR$(X) AT P,PY
86 LINE(P,PY)-(P+14,PY-14),PRESE
T,BF
88 DRAW"BM"+STR$(P)+","+STR$(PY)
+"+"+DR$(X):P=P+16:RETURN
89 '-- GET KEY
90 IFT=4THEN=0:RETURN
92 X=0:X$=INKEY$:IFX$<>"THENX=A
SC(X$)
94 RETURN
95 '-- RANDOM PLACE
96 X=L1*RND(15)+RND(31):RETURN
98 '--
99 '-- INIT
100 SB=1E9:L1=32:DT=1535:PC=0T
110 C(1)=147:C(2)=149:C(3)=145:L
=L1*2:DIMA1(4,6),A2(4,6)
120 DIMDR$(48):FORX=0TO48:READDR
$(X):NEXT
130 PMODE0,1:PCLS:E=PEEK(X*L-17)
-L:GET(10,10)-(14,16),A1,G
135 E=18
140 DRAW"BM10,10D6BR4U6":GET(10,
10)-(14,16),A2,G
200 CLS:PRINT" YOU HAVE ENTE
RED THE":PRINT" LABYRINTH TO BAT
TLE THE
210 PRINT" IRON MONSTERS. THE
Y CAN":PRINT" BE SHOT ONLY BET
WEEN THE
220 PRINT" EYES. THE KEYS ARE
":PRINT:PRINT" LEFT ARROW or
Z --- TURN L
230 PRINT" RIGHT ARROW or / --
TURN R":PRINT" ^ or SPACE --- -
MOVE AHEAD
240 PRINT" DOWN ARROW --- TURN
AROUND":PRINT" M -----
--- SHOW MAP
250 PRINT" LEFT/RIGHT ARROWS -
AIM L/R":PRINT" 1 -----
----- SHOOT
260 PRINT" S ----- START N
EW GAME
270 PRINT:PRINT"DIFFICULTY (1-9)
?";:IF(L1-E)=14THENZ=L:Y=PC-43
280 X=RND(60):GOSUB90:IFX=0GOTO2
80
290 IFX<490RX>57THEN200ELSEDF=VA
L(X$)
300 GOSUB60:P=8:PY=32:X$="PLEASE
<WAIT>":GOSUB76
310 P=8:PY=64:X$="I<AM<LOOKING":_
GOSUB76
320 P=8:PY=86:X$="FOR<THE<DOOR<T
0":GOSUB76
330 P=8:PY=108:X$="THE<LABYRINTH
>":GOSUB76
340 CLS:S=0:MP=Z*(Y+1):DF=10-DF:

```

```

350 FORX=MP+L1 TOOT-L1:POKEX,C(1
+INT(RND(25)/10)):NEXT
360 POKEMP,C(3)
370 FORX=MP+1TOMP+31:POKEX,C(1):
POKEX+15*L1,C(1):NEXT
380 FORX=MP+L1 TOMP+15*L1 STEPL1
:POKEX,C(2):POKEX+31,C(2):NEXT
390 FORY=1T09:GOSUB96:A(Y)=X:NEX
T:J=DT:D=4:X$=INKEY$
399 '-- MAIN LOOP
400 GOSUB1300
409 '-- DRAW NEAR LEFT
410 GOSUB60:GOSUB45:P1=J:GOSUB30
:IFT=1GOT0430
420 DRAW"BM32,0F24D142G24":GOT05
00
430 DRAW"BM0,24R56D142L56"
499 '-- DRAW NEAR RIGHT
500 GOSUB40:GOSUB30:IFT=1GOT0520

510 DRAW"BM222,0G24D142F24":GOTO
600
520 DRAW"BM254,24L56D142R56"
599 '-- DRAW NEAR CENTER
600 D1=D:GOSUB30:IFT=1GOT0620
610 DRAW"BM56,24R144":DRAW"BM56,
166R144":DRAW"BM126,24D142":GOTO
1000
620 DRAW"BM56,24F40D62G40":DRAW"
BM198,24G40D62F40"
699 '-- DRAW FAR LEFT
700 IFOT<>J ORD<>2GOT0730
710 DRAW"BM96,96R62":DRAW"BM110,
104U6L2E6R2F6L2D6L6U4L2":PAINT(1
16,94)
720 PAINT(116,98):DRAW"BM142,98U
6L2E2F2L6E4F4":GOT01000
730 GOSUB50:GOSUB45:GOSUB30:IFT=
0GOT0750
740 DRAW"BM96,78R14D34L14":GOT08
00
750 DRAW"BM96,64F14D34G14"
799 '-- DRAW FAR RIGHT
800 GOSUB40:GOSUB30:IFT=0GOT0820

810 DRAW"BM158,78L14D34R14":GOTO
900
820 DRAW"BM158,64G14D34F14"
899 '-- DRAW FAR CENTER
900 D1=D:GOSUB30:IFT=1GOT0920
910 DRAW"BM110,78R34":DRAW"BM110
,112R34":GOT01000
920 DRAW"BM110,78F34":DRAW"BM110
,112E34"
999 '-- DRAW CP
1000 SN=-(10-DF)*7
1010 DRAW"BM82,190U20R92D20"
1020 X=Q:P=90:PY=188:GOSUB80:IFQ
=0GOT0260
1099 '-- NEXT KEY
1100 S=S+DF:P=146:PY=18:X=S:GOSU
B80:GOSUB20:IFT=3GOT0400
1110 FORS1=1T06:Y=RND(20):GOSUB9
0:IFX=83GOT0200
1120 IFX=80RX=90THEN GOSUB1300:AD
=D:GOSUB45:D=D1:GOT0410
1130 IFX=90RX=47THEN GOSUB1300:AD
=D:GOSUB40:D=D1:GOT0410
1140 IFX=10THEN GOSUB1300:AD=D:GO
SUB40:D=D1:GOSUB40:D=D1:GOT0410
1150 IFX=77GOT01210
1160 IFX<>94ANDX<>32GOT01190
1170 IFOT=J ANDD=2GOT01190
1180 P1=J:D1=D:GOSUB30:IFT=1THEN
GOSUB1300:AD=D:GOSUB50:J=P1:GOTO
410
1190 NEXT:GOSUB1300:SN=SN+(10-DF
)*7:IFSN>0THEN SOUNDSN,1:IFSN>180
THEN SN=180
1200 GOT01100
1209 '-- SHOW MAP
1210 SCREEN0
1220 S=S+DF:GOSUB1300:Z=PEEK(J):
POKEJ,Z+8:FORY=1T014:IFY=7THEN PO
KEJ,Z
1230 NEXT:POKE343,255:GOSUB90:IF
X=0GOT0400
1240 GOT01220
1299 '-- MOVE ROBOTS
1300 R=S/DF-INT(S/DF/10)*10:X=RN
D(2):IFJ<(A(R)+MP)THEN X=X+2
1310 D1=X:P1=A(R)+MP:GOSUB30:IFT
=0AND(D1=10RD1=3)THEN D1=D1+1:GOT
01330
1320 IFT=0AND(D1=20RD1=4)THEN D1=
D1-1
1330 GOSUB30:IFT=0THEN RETURN
1340 AD=D1+2:IFAD>4THEN AD=AD-4
1350 X=D:D=D1:Y=J:J=A(R):GOSUB50
:A(R)=P1:IFY=(P1+MP)THEN A(R)=J
1360 D=X:J=Y:RETURN
1399 '-- UPDATE CP CONT.
1400 P=152:PY=188:IFHV>9THEN X=18
:GOSUB86:P=P-48:GOSUB86:RETURN
1410 X=HV:GOSUB80:P=P-16:X=14:Y=
0:IFH1>0THEN Y=-1
1420 IFH1<0THEN Y=1
1430 IFV1>0THEN X=X+Y
1440 IFV1=0THEN X=X+2*Y
1450 IFV1<0THEN X=X+3*Y:IFH1=0THE
N X=10
1460 X=X+(4-D)*2:IFX>17THEN X=X-8
1470 IFHV>0THEN GOSUB86:IFHV>1THE
N RETURN
1499 '-- ACTION
1500 IFHV<>0THEN 1530:ELSE GOSUB28
00
1510 P=B:PY=116:X$="YOU<RANK<INTO
":GOSUB76:P=B:PY=140:X$="ONE>>"
```

```

1520 GOSUB76:GOTO1630
1530 D2=D:GOSUB70:IFT=1GOTO1700
1540 FORU=1T03:GOSUB40:D=D1:GOSU
B70:IFT=1THENEND=D2:GOTO1600
1550 NEXT:D=D2:RETURN
1599 '-- SIDE ACTION
1600 FORY=1T020*DF:GOSUB90:IFX<>
OTHENT=4:RETURN
1610 NEXT:GOSUB2800:P=8:PY=116:X
$="DIDN@T<YOU<SEE":GOSUB76:P=8:P
Y=140
1620 X$="HIM???"":GOSUB76
1630 X$="READY<TO":GOSUB76:P=8:P
Y=164:X$="TRY AGAIN?":GOSUB76
1640 FORX=1T0600:NEXT:P=64:PY=18
B:X$="==POOF==":GOSUB76
1650 FORX=255T01STEP-20:SOUNDX,1
:NEXT:T=3:D=RND(4):IFQ<9THENQ=Q+
1
1660 FORX=1T0400:NEXT:S=S+50*DF:
GOSUB96:J=X+MP:X$=INKEY$:RETURN
1699 '-- MAIN ACTION
1700 X=D-AD:IFABS(X)>1THENX=X+4:
IFX>1THENX=X-8:IFABS(X)>1THENX=0

1710 N=X+1:GOSUB50:D1=D:IFN=0THE
NGOSUB40
1720 IFN=2THENGOSUB45
1730 GOSUB30:IFT=0THENN=3
1740 N=N*5+1:P=126:PR=0:H=DF:GX=
102:GY=168:PUT(GX-2,GY-6)-(GX+2,
GY),A2,PSET
1799 '-- ACTION LOOP, ROBOT
1800 DNN GOTO1900,1930,1930,1930
,1990,2100,2110,2140
1810 DNN-96GOTD2000,1910,2050,206
0,2070,2080,2200,2240,2300
1899 '-- SIDE ROBOTS
1900 RD=-12:GOTO1920
1910 RD=12
1920 H=H/2:N=RND(4):P=P-RD*3
1930 P=P+RD:LINE(P-4,94)-(P+6,12
2),PSET,BF:Y=P+RD:X=P-RD
1940 IFRD=12THENDRAW"BM"+STR$(P-
4)":,92U10F10L10":GOTO1960
1950 DRAW"BM"+STR$(P+6)":,92U10G
10R10"
1960 PAINT(P,90):IFX<101ANDX<151
THENLINE(P-RD-4,82)-(P-RD+6,92),
PSET,BF
1970 IFY<150ANDY>102GOTO2240
1980 LINE(P-3*RD-4,82)-(P-3*RD+6
,122),PRESET,BF:GOTO2240
1990 N=9:GOTO1930
1999 '-- ROBOT TURNING
2000 X=P-RD:IFX<1140RX>138THEN20
40:ELSELINE(P-2*RD-4,82)-(P-2*RD
+6,92),PRESET,BF
2010 IFRD=12THENDRAW"BM"+STR$(P-
2*RD+6)":,92U10G10R10":GOTO2030
2020 DRAW"BM"+STR$(P-2*RD-4)":,9
2U10F10L10"
2030 PAINT(P-2*RD,90)
2040 P=P+1.5*RD:GOSUB2700:N=N+2:
GOTO2400
2050 PR=1:GOSUB2700:GOTO2240
2060 GOSUB2700:GOTO2240
2070 GOSUB2700:GOTO2240
2080 GOSUB2700:N=18:GOTO2400
2099 '-- CENTER ROBOT
2100 LINE(P-4,94)-(P+6,102),PSET
,BF:RD=RND(3)-2:GOTO2240
2110 PR=1:P=P+6*RD:LINE(P-10,94)
-(P+12,110),PSET,BF
2120 LINE(122,104)-(132,110),PSE
T,BF:RESET(P-4,98):RESET(P+6,9
8)
2130 RESET(P-10,94):RESET(P+12
,94):LINE(P-6,92)-(P+8,92),PSET:
GOTO2240
2140 N=17:P=P+6*RD:LINE(P-16,94)
-(P+18,122),PSET,BF
2150 LINE(P-4,82)-(P+6,92),PSET,
BF:DRAW"BM"+STR$(P-6)":,92U10G10
R10"
2160 PAINT(P-12,90):DRAW"BM"+STR
$(P+8)":,92U10F10L10"
2170 PAINT(P+12,90):RD=0:GOSUB27
00:GOTO2400
2199 '-- STANDING ROBOT
2200 PR=1:RD=0:P=P+(RND(3)-2)*12
:LINE(P-16,94)-(P+18,122),PSET,B
F
2210 LINE(P-4,82)-(P+6,92),PSET,
BF:DRAW"BM"+STR$(P-6)":,92U10G10
R10"
2220 PAINT(P-12,90):DRAW"BM"+STR
$(P+8)":,92U10F10L10"
2230 PAINT(P+12,90):GOSUB2700:N=
17:GOTO2400
2240 N=N+1:GOTO2400
2299 '-- ROBOT FIRE
2300 FORY=124T0168STEP2:PSET(P,Y
):NEXT
2310 GOSUB2800:P=8:PY=116:X$="YO
U<LOST<THAT":GOSUB76
2320 P=8:PY=140:X$="ONE>>":GOSU
B76:GOTO1630
2399 '-- PLAYER ACTION
2400 FORU=1T02*T:GOSUB90
2410 IFX=320RX=940RX=900RX=470RX
=10THENT=4:RETURN
2420 IFPEEK(339)=239GOTD2480
2430 IFPEEK(343)=247THEN2440ELSE
IFPEEK(344)=247THEN2460ELSENEXT:
GOTO1800
2440 PUT(GX-2,GY-6)-(GX+2,GY),A1
,PSET:GX=GX-12:IFGX<102THENGX=10
2:GOTO2550

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2450 GOTO2470
2460 PUT(GX-2,GY-6)-(GX+2,GY),A1
,PSET:GX=GX+12:IFGX>150THENGX=15
0:GOTO2550
2470 PUT(GX-2,GY-6)-(GX+2,GY),A2
,PSET:FORX=1TO10*(DF-1):NEXT:GOT
02420
2480 U=2*H:FORY=164TO104STEP-4:P
RESET(GX,Y):PSET(GX,Y-2):NEXT
2490 IFPPPOINT(GX+2,100)=0DRPR=0D
RGX<(P-6)ORGX>(P+6)GOTO2530
2500 GOSUB2800:FORX=1TO300:NEXT:
T=3:Q=Q-1:IFR>Q GOTO2520
2510 Y=A(R):FORX=R TOQ:A(X)=A(X+
1):NEXT:A(X)=Y
2520 PLAY"1I03T32CDET16GT32ET8G"
:RETURN
2530 FORY=164TO100STEP-2:IFPPIN
T(GX+4,Y)=0THENPRESET(GX,Y):ELSE
PSET(GX,Y)
2540 NEXT
2550 PUT(GX-2,GY-6)-(GX+2,GY),A2
,PSET:NEXT:GOTO1800
2599 '-- GAME END
2600 CLS:SCREEN0,0:PRINT:PRINT:P
RINT:PRINT:PRINT:PRINT:IFS<SB TH
ENSB=S
2610 PRINT" YOU HAVE COMPLETED Y
OUR TASK.":PRINT:PRINT" YOUR
TIME WAS -"S
2620 PRINT" THE BEST TIME IS
-#S
2630 FORX=1TO12:X$=STR$(X):PLAY"
L1T12BV3104XX$;02XX$;"NEXT
2640 POKE345,255:GOSUB90:IFX=320
RX=83GOTO200
2650 GOTO2640
2699 '-- EYE MOVEMENT
2700 IFPPPOINT(P-8,100)<>0THENPSE
T(P-8,94):PSET(P-8,96):PSET(P-8,
98)
2710 IFPPPOINT(P+10,100)<>0THENPSE
T(P+10,94):PSET(P+10,96):PSET(P
+10,98)
2720 P=P-(RD/2):PRESET(P-8,94):P
RESET(P-8,96):PRESET(P-8,98)
2730 PRESET(P+10,94):PRESET(P+10
,96):PRESET(P+10,98):RETURN
2799 '-- SHOT
2800 FORX=1TO2:PLAY"1I255V3101A
BDGCFEBBCGDEFCGAEDF":NEXT:RETURN
2999 '-- ALPHA-NUMERIC ARRAY
3000 DATA"BR2BU4U8E2R4F2D8G2L4"
3010 DATA"BE2BR2R4L2U12G2"
3020 DATA"BR2BU12E2R4F2D2G2L2G4D
2R8"
3030 DATA"BE2BU12R8D2G4R2F2D2E2L
4H"
3040 DATA"BR8BU2U12G6D2R8"
3050 DATA"BE14BL4L8D4R6F2D4G2L4H
2"
3060 DATA"BE14BL4L4G4D6F2R4E2U2H
2L4"
3070 DATA"BR4BU2U4E6U2L8"
3080 DATA"BE10U2H2L4G2D2F2R4F2D2
G2L4H2U2"
3090 DATA"BE2R4E4U6H2L4G2D2F2R4"
3100 DATA"BR6U14G4E4R2F4H4D14"
3110 DATA"BU2BE2E10L4R6D6U4G10"
3120 DATA"BU6R14G4E4U2H2F2L14"
3130 DATA"BR8R6U6D4H10G2F10"
3140 DATA"BR6H4F4U14R2D14E4"
3150 DATA"U6D4E10F2G10R4"
3160 DATA"BU6F4H4R14U2L14E4"
3170 DATA"BU8U6R6L4F10G2H10"
3180 DATA"BU2"
3190 DATA"BU8BR2R8"
3200 DATA"BR6BU2U0"
3210 DATA"BR6BU2U0BU4U2E4H2L2G2"
3220 DATA"BR6BU10U4"
3230 DATA"BE2U8E4F4D4NL6D4"
3240 DATA"BE2U12R6F2D2G2NL4F2D2G
2L4"
3250 DATA"BU2"
3260 DATA"BE2U12R6F2D8G2L4"
3270 DATA"BE2NR8U6NR6U6R8"
3280 DATA"BE2U6NR6U6R8"
3290 DATA"BE14BL4L6G2D8F2R6U4L2"
3300 DATA"BE2U6NU6R8ND6U6"
3310 DATA"BU2BR4R4L2U12R2L4"
3320 DATA"BU2"
3330 DATA"BE2U6NU6R2NE6F6"
3340 DATA"BE2NU12R8"
3350 DATA"BE2U12F4ND2E4D12"
3360 DATA"BE2U12D2F8D2U12"
3370 DATA"BR2BU4U8E2R4F2D8G2L4"
3380 DATA"BE2U12R6F2D2G2L4"
3390 DATA"BU2"
3400 DATA"BE2U12R6F2D2G2L4F6"
3410 DATA"BU4BR2D0F2R4E2U2H2L4H2
U2E2R4F2"
3420 DATA"BU14BR2R8L4D12"
3430 DATA"BU14BR2D10F2R4E2U10"
3440 DATA"BU2"
3450 DATA"BE2NU12E4NU2F4U12"
3460 DATA"BU2"
3470 DATA"BU14BR2D2F4ND6E4U2"
3480 DATA"BU2"

```

LAUNCH

A space ship game you steer your ship through tight caverns and if you hit the sides, you blow up. Joystick. Very well done.

```

0 GOT091
1 COLOR6,8:LINE(88,184)-(252,186
),PSET,B:LINE(251,185)-(FUEL+1,1
85),PRESET
2 LINE(255,176)-(0,176),PSET:DRA
W"S8;BD15"
3 IF AUTO=1 THEN DRAW"C8"+AUTO$:
AU=0:GOT05
4 WR$=STR$(PS):WR$=RIGHT$(WR$,LE
N(WR$)-1):GOSUB114
5 RETURN
6 COLOR6,8:Y=RY:PLAY"T255;V31;01
"
7 PCLS5:DRAW"S4;C7;"+SC$(SC)+"C6
"
8 FX=-1
9 IF SC=5 OR SC=6 THEN FX=200:FY
=-1
10 IF SC=1 OR SC=2 THEN FX=104:FY
=-1
11 IF FX=-1 THEN FY=96:FX=104+(R
ND(10)*4)
12 IF FY=-1 THEN IFRND(2)=1 THEN
FY=48 ELSE FY=144
13 IF SC=7 THEN FY=40:FX=B0+(RND(
8)*7)
14 LINE(FX,FY)-(FX+8,FY+8),PRESE
T,BF
15 PS=PS+5:GOSUB1
16 J0=JOYSTK(0):J1=JOYSTK(1)
17 FUEL=FU+1:PSET(FU,185,5):IFFU
=251THENFU=250:YN=4:GOT020
18 IF J0<35 THEN XN=4ELSE XN=8
19 IF J1<N2 THEN YN=-4 ELSE IF J1>
N1 THEN YN=4 ELSE YN=0
20 IF X>231 GOT035
21 TX=X+XN+SI:TY=Y+YN
22 IF YN=0 AND X>16 THEN N30
23 PUT(X,Y)-(X+SI,Y+EI),BL
24 P1=PPOINT(TX,TY)+PPOINT(TX,TY
+8)
25 IF P1<>10 THEN N76
26 X=X+XN:Y=Y+YN
27 IF Y<4 THEN YN=4ELSE IF Y>160 THEN YN=
160

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```

28 PUT(X,Y)-(X+SI,Y+EI),SH
29 PLAYPL$:GOT016
30 P1=PPOINT(TX,TY)+PPOINT(TX,TY
+8)
31 IF P1<>10 THEN N25
32 X=X+XN:PUT(X-16,Y)-(X+SI,Y+EI
),RI
33 GOT029
34 'new screen
35 NO=NO+1:IF NO=10 THEN SC=8:GOT04
3
36 IF NO=11 THEN N45
37 IF FS=2 THEN 41
38 SC=RND(3)+4:IF SC=CHECK THEN 3
8
39 IF SC<7 THEN FS=2 ELSE FS=1
40 GOT043
41 SC=RND(4):IF SC=CHECK THEN 41
42 IF SC<3 THEN FS=2 ELSE FS=1
43 X=0:CHECK=SC:GOT07
44 'beginning of mother ship
45 CLS0:SCREEN0,0:PCLS5
46 DRAW SC$(9)
47 AUTO=1:GOSUB1
48 FOR CO=1 TO 4:PAINT(255,CO*40),8
,6:NEXT:SCREEN1,1
49 IF RY<140 THEN FOR CO=RY+40 TO 1
40 STEP 40:PUT(232,CO)-(248,CO+EI)
,SH:NEXT
50 FOR X=0 TO 224 STEP 4
51 IF Y>RY THEN Y=Y+4 ELSE IF Y>RY
THEN Y=Y-4
52 PUT(X,Y)-(X+SI,Y+EI),SH
53 PLAY"T255;01;4;5;6;7;8;9"
54 PUT(X,Y)-(X+SI,Y+EI),BL:NEXT
55 PUT(X,Y)-(X+SI,Y+EI),SH
56 PLAY"T10;02;1;12;2;11;3;10;4;
9;5;8;6;7;P1;03;1;1;2;1;1;T1"
57 FOR FUEL=FU TO 90 STEP -4:AUTO=1
:GOSUB1:PLAY"T255;12":NEXT:PLAY"
P255;1"
58 'start new ship
59 CLS0:SCREEN0,0:PCLS5:DRAW"S4;
C6;BMO,183;M0,B;M136,59;L136;BMO
,69;XSH$;BMO,109;XSH$;BMO,149;M1
36,149;M0,175"
60 FUEL=90:AUTO=1:GOSUB1
61 FOR CO=1 TO 4:PAINT(4,CO*40),8,6
:NEXT
62 FOR CO=RY TO 140 STEP 40:PUT(8,C
O)-(24,CO+8),SH:NEXT
63 SCREEN1,1
64 'start action
65 Y=RY
66 PK=PEEK(65280):IF PK<>126 AND P
K<>254 THEN PLAY"T10;01;1;T255":G
OT066
67 FOR X=8 TO 200 STEP 4
68 PUT(X,Y)-(X+32,Y+8),RI:NEXT

```

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```

69 PCLS5:AU TO=1:GOSUB1
70 FOR X=8TO200STEP8:PUT(X,Y)-(X+
32,Y+8),RI
71 PLAY PL$ 
72 FOR CO=1TO (X/4):NEXT CO,X
73 PUT(X,Y)-(X+32,Y+EI),RI:PLAY"
T3;01;1;04;1"
74 X=0:FS=2:SC=0:GOTO6
75 'crash or points
76 '
77 IF P1<>13 AND P1<>16 THEN83
78 FU=FU-30:IFFU<90THENFU=90
79 FOR CO=8TO5STEP-1:COLOR CO:LIN
E(FX,FY)-(FX+8,FY+8),PSET,BF
80 SOUND250,2
81 NEXT CO:COLOR6,B:LINE(251,185
)-(FUEL+1,185),PRESET
82 GOTO23
83 FOR CO=1TO20STEP2:CIRCLE(X+B,Y
+4),CO,7:NEXT:FOR CO=1TO20STEP2:C
IRCLE(X+B,Y+4),CO,5:NEXT
84 FOR CO=1TO12:PLAY" T255;01;4;2;
5;3;3;1;2;6":NEXT
85 RY=RY+40:IF RY=180 THEN 87 ELS
RY=RY:GOTO59
86 'end game
87 SCREEN1,0:DRAW" BM76,16;C2"+OV
ER$
```

```

88 DRAW"BM72,12;C3"+OVER$:I$=INK
EY$
89 PLAY" T2;01;1;2"
90 IF INKEY$(<) " THEN89ELSE RUN
91 CLEAR500:DIM SH(9),RI(9),BL(9
),NU(9):CLSO:GOSUB139
92 NS=9: DIM SC$(NS)
93 PL$="1":FUEL=90
94 E$="NR4;U3;NR2;U3;R4;BM+3,+6"
95 OVER$="S8;BM+2,+0;U6;NL2;R2;B
M+3,+6;U3;NU3;R4;NU3;D3;BM+3,+0;
XE$;BM+7,+0;XE$;U6;F1;D1;F2;D1;F
1;NU6;BM+3,+0;U6;R3;F1;D4;G1;L3;
S4"
96 AUTO$="S8;U4;E2;F2;D2;NL4;D2;
BM+3,-1;NU5;F1;R2;E1;U5;BM+5,+6;
U6;NL2;R2;BM+4,+6;H1;U4;E1;R2;F1;
D4;G1;L2;S4"
97 D1$="BM0,64;R8;M48,100;M8,136
;L8;"
98 D2$="R8;U8;R80;D8;R8"
99 D3$="R8;U4;R8;D4;R8;U8;R8;DB;
R8;U4;R16;D4;R8"
100 D4$="BM255,64;L16;D8;L8;D16;
R8;D8;L8;D8;R8;D16;L8;D8;R8;D8;R
16"
101 FOR R=0TO9:READ NU$(R):NEXT
```

```

102 FORR=0TO NS:READ SCENE$(R):N
EXT
103 EIGHT=B:N1=45:N2=14:MINUS=-B
:SIXTEEN=16
104 PMODE3,1:COLOR6,5:PCLS
105 XN=B:YN=4
106 GET(0,0)-(16,8),BL
107 DRAW"BM140,0;R3D3L2D1R2D3L2;
BM+4,-6;R3NR2D5NL3R2;BU2R7U1L7"
108 PAINT(144,4),8,6
109 GET(140,0)-(156,8),SH
110 GET(124,0)-(156,8),RI
111 SH$="M+136,+0M-56,+11D8M+56,
+11M-136,+0"
112 RY=60:GOT059
113 'drawing numbers
114 DR$="":FOR CO=1TOLEN(WR$)
115 DR$=DR$+NU$(VAL(MID$(WR$,CO,
1)))
116 NEXT CO:DRAW DR$:RETURN
117 'numbers zero to nine
118 DATA"BR1;H1;U4;E1;R2;F1;D4;G
1;L2;BR6"
119 DATA"BR1;R1;NR1;U6;G1;BM+6,+
5"
120 DATA"NR4;U1;E1;R1;E2;U1;H1;L
2;G1;BM+7,+5"
121 DATA"BU1;F1;R2;E1;H2;E2;H1;L
3;BM+7,+6"
122 DATA"BR3;U2;NR1;L3;U1;E3;D3;
BM+4,+3"
123 DATA"BU1;F1;R2;E1;U2;H1;L3;U
2;R4;BM+3,+6"
124 DATA"BM+4,-5;H1;L2;G1;D4;F1;
R2;E1;U1;H1;L3;BM+7,+3"
125 DATA"U1;E4;U1;L4;BM+7,+6"
126 DATA"BR1;H1;U1;E1;H1;U1;E1;R
2;F1;D1;G1;NL2;F1;D1;G1;L2;BR6"
127 DATA"BU1;F1;R2;E1;U4;H1;L2;G
1;D1;F1;R2;BM+4,+3"
128 'scene draw statements
129 DATA"BM80,0;M80,8;M160,8;M16
0,24;M208,24;M208,40;M255,40;BM2
55,64;M208,64;M208,136;M255,136;
BM255,160;M80,160;M80,176"
130 DATA"BM0,40;M255,40;XD1$;BM0
,160;M255,160;BM255,64;M160,64;M
160,136;M255,136"
131 DATA"BM0,40;RB;M20,16;M160,1
6;M160,40;M255,40;BM0,64;RB;M20,
88;M208,88;M208,64;M255,64;BM0,1
36;RB;M20,112;M208,112;M208,136;
M255,136;BM0,160;M255,160"
132 DATA"BM0,40;SB;XD3$;S4;XD3$;
M248,40;M248,88;RB;XD1$;BM0,160;
R32;XD3$;SB;XD3$;S4;M248,160;M24
8,112;RB"
133 DATA"BM0,40;M120,40;M120,88;
S8;XD3$;S4;M255,88;XD1$;BM0,160;
M120,160;M120,112;XD3$;XD3$;M255
,112"
134 DATA"BM0,88;RB;M32,40;XD3$;S
8;XD3$;S4;M255,40;XD4$;BM0,112;R
B;M32,160;SB;XD3$;S4;XD3$;M255,1
60"
135 DATA"XD4$;BM0,88;RB;M8,12;M2
48,12;M248,40;RB;BM0,112;RB;M8,1
60;M255,160;BM104,60;M132,60;M13
2,128;M104,128M104,60"
136 DATA"BM0,88;RB;M8,8;M248,8;M
248,88;RB;BM0,112;M104,112;M104,
64;M104,172;XD3$;XD3$;M248,172;M
248,112;RB"
137 DATA"BM0,40;M48,40;M48,16;M6
4,16;U16;BM0,160;M20,160;DB;M104
,168;D4"
138 DATA"S4;C6;A2;BM255,139;XSH$
;BM255,99;XSH$;A0;BM255,0;M120,5
9;M255,59;BM255,149;M120,149;M25
5,175"
139 CLS7:PRINT"instructions
140 PRINT" USE THE RIGHT JOYS
TICK TO STEER YOUR SHIP FROM Y
OUR MOTHERSHIP, THROUGH THE ENEMY
BASE, AND BACK TO YOUR MOTHER SH
IP. LEFT IS SLOW, RIGHT IS FAST, UP
IS UP, AND DOWN IS DOWN.":INPUTA$:
:CLS8
141 PRINT" PRESS THE FIRE BUT
TON TO LAUNCH. WHEN IT READS 'A
UTO' IN THE LOWER LEFT, YOUR SH
IP IS UNDER AUTO-CONTROL SO
YOU DO NOT HAVE TO STEER. WHEN THE
SCORE IS THERE, YOU MUST STEER B
EING CAREFUL NOT TO TOUCH THE E
NEMY BASE WALLS.":INPUTA$:CLS
142 PRINT" IN THE LOWER RIGHT
IS YOUR FUEL GAUGE. IN THE MAZE
, RUN OVER THE ORANGE FUEL TANKS
TO GET THE FUEL YOU NEED. IF YOU R
UN OUT OF FUEL, OR TOUCH ANY WALL
, THAT SHIP DIES. YOU GET THREE SHI
PS. PRESS SPACE FOR ANOTHER GAME
.GOOD LUCK ":INPUTA$:CLS4
143 PRINT"BY STEVE HARTFORD.
****3120 GRANGEMONT RD.
****GLENDALE, CA 91206
144 INPUTA$:CLSO:RETURN

```

MAD EDITOR

Our editor has been making a mess of some sentences and has got all the words jumbled. Your job is to re-type in the sentence correctly. There are 10 jumbled sentences to a game. The computer keeps tally of all the right and wrong answers and prints the score. Any wrong answers are correctly typed to the screen by the computer. There are a possible 26 sentences that can be randomly chosen by CoCo. All are 32 characters or less in length so as to fit the color computers 32 characters text screen with out breaking words. If you change any data statements to suit your needs try to make them 32 chr\$ or less sentences.

Each randomly picked sentence is jumbled by the computer, this prevents the sentence been displayed the same for each new game. The routine for this is from lines 620 to 690. No one sentence from the possible 26 will be shown twice in the same game this is because line 320 fills x\$(p) with a (*) after it has been chosen by P=RND(26) in line 480. The program makes use of EXT. COLOR BASIC'S STRING\$(#, #) command. If typing this program into a COLOR BASIC computer change the lines that have PRINT STRING\$(#, #) to a FOR X=1 TO 32:PRINT CHR\$(#);:NEXT x.

```
10 CLS
20 PRINTSTRING$(32,156)
30 PRINT@43,"MAD EDITOR";
40 PRINT@64,STRING$(32,156)
50 PRINT@164,"DO YOU NEED INSTRU
CTIONS"
55 PRINT
60 PRINTTAB(12)"Y = YES"
62 PRINT@356,CHR$(139)+CHR$(129)

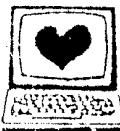
63 PRINT@390,CHR$(132)
64 PRINT@392,"PROGRAM BY TOM LEH
ANE
70 I$=INKEY$:IF I$="" THEN 70
75 IF I$<>"Y" THEN 260
80 CLS
90 PRINTTAB( 10)"MAD EDITOR"
100 PRINTSTRING$(32,131);
110 PRINT"OUR EDITOR HAS MADE A
MESS OF"
120 PRINT"THE SENTENCE THAT IS P
RINTED IN"
```

```
130 PRINT"THE JUMBLED LINE BELOW
....."
140 PRINT""
150 PRINTTAB( 4)"WENT A COURTING
FROG"
160 PRINT""
170 PRINT"YOUR JOB IS TO TYPE TH
E SENTENCE";
180 PRINT"CORRECTLY.SEE EXAMPLE.
...."
190 PRINTTAB( 4)"FROG WENT A COU
RTING"
200 PRINTTAB( 4)STRING$(20,131)
210 PRINT"THE COMPUTER WILL KEEP
SCORE OF"
220 PRINT"THE TEN JUMBLED SENTEN
CES AND"
230 PRINT"RECORD ALL CORRECT AND
WRONG"
240 PRINT"ANSWERS.. enter to st
art.";
250 INPUTZZ$
260 DIM X$(26),Y$(10),Z$(10)
270 FOR P=1 TO 26
280 READ X$(P)
290 NEXT P
300 P=0
310 CLS0
320 X$(P)="*"
330 T$=CHR$(128)
340 PRINT@0,STRING$(32,156);
350 PRINT@392,"right";:PRINT@402
,"wrong";
360 PRINT@449,"score";
370 PRINT@457,SR;:PRINT@467,SW;
380 PRINT@320,""
390 PRINT@11,"mad"T$"editor";
400 PRINT@43,STRING$(10,156);
410 PRINT@128,STRING$(32,234);
420 PRINT@136,"jumbled"T$"senten
ce";
430 PRINT@160,STRING$(32,252);
440 PRINT@192,""
450 PRINT@224,STRING$(32,252);
460 PRINT@257,"type"T$"sentence"
T$"in"T$"correct"T$"order"T$;
470 IF SR+SW=10 THEN 1280
480 P=RND(26)
490 IF X$(P)="*" THEN 480
500 L=LEN(X$(P))
510 FOR Y=1 TO L
520 IF MID$(X$(P),Y,1)=" " THEN
580
530 B$=B$+MID$(X$(P),Y,1)
540 ' return point
550 NEXT Y
560 W=W+1:Z$(W)=B$+" "
570 GOTO 620
580 W=W+1
```

```

590 Z$(W)=B$+" "
600 B$=""
610 GOTO 540
620 PRINT@192,"";
630 FOR SH=1 TO W
640 S=RND(W)
650 IF Z$(S)="*" THEN 640
660 Y$(S)=Z$(S)
670 Z$(S)=""
680 PRINTY$(S);
690 NEXT
700 PRINT@224,STRING$(32,252);
710 PRINT@320,"";:LINEINPUTZZ$
720 IF ZZ$=X$(P) THEN 850
730 PRINT@192,STRING$(32,197);
740 PRINT@205,"WRONG";
750 GOSUB 1260
760 PRINT@192,"";
770 FOR SH=1 TO LEN(X$(P))
780 PRINT MID$(X$(P),SH,1);
790 SOUND200,RND(2)
800 NEXT
810 GOSUB 1260
820 SW=SW+1
830 GOTO 950
840 GOSUB 1260
850 PRINT@192,STRING$(32,159);
860 FOR SH=1 TO 10
870 PRINT@204,"-----";
880 GOSUB 930
890 PRINT@204,"CORRECT";
900 GOSUB 930
910 NEXT SH
920 GOTO 940
930 FOR Y=1 TO 50:NEXT Y:RETURN
940 SR=SR+1
950
960 'Y$(SH)=""':NEXT SH
970 W=0
980 B$=""
990 GOTO 310
1000 DATA THE JOURNEY BEGINS WITH ONE STEP
1010 DATA LIGHT YOUR LAMP BEFORE DARK
1020 DATA THE OAK TREE GREW FROM A SEED
1030 DATA FACTS ARE STUBBORN THINGS
1040 DATA THE ROOM IS IN HALF DARKNESS
1050 DATA BRING US UP TO DATE ON THE NEWS
1060 DATA LET US FILL OUR DRINKING GLASSES
1070 DATA KIM WENT TO TOWN SHOPPING
1080 DATA YOU WILL NEVER SEE A BETTER SHOW
1090 DATA A FIRE TO KEEP YOU WARM
1100 DATA WHEN THE SKY WAS OVERCAST
1110 DATA GIVE BOLD ROBIN HOOD HIS BOW
1120 DATA SHE SECRETLY STOLE AWAY
1130 DATA SHOW ME FIRST YOUR PENNY
1140 DATA SIMPLE SIMON MET A PIE MAN
1150 DATA ALL THE WORLD'S A STAGE
1160 DATA WHO KILLED COCK ROBIN
1170 DATA THE CITY MOUSE LIVES IN A HOUSE
1180 DATA MARY HAD A LITTLE LAMB
1190 DATA A FOX WENT OUT ONE CHILDLY NIGHT
1200 DATA PINOCCHIO WAS A WOODEN BOY
1210 DATA EVIL UNDER THE SUN
1220 DATA A DIAMOND IS A BRILLIANT STONE
1230 DATA KOALAS DOSE IN THEIR GUM TREES
1240 DATA FROG WENT A COURTING
1250 DATA KANGAROOS FEED ON GREEN GRASS
1260 FOR SH=1 TO 2000:NEXT
1270 RETURN
1280 FOR SH=256 TO 160 STEP-32
1290 PRINT@SH,"":NEXT
1300 PRINT"WOULD YOU LIKE TO PLAY AGAIN"
1310 INPUT ZZ$
1320 ZZ$=LEFT$(ZZ$,1)
1330 IF ZZ$="Y" THEN RUN
1340 PRINT@160," RETURN AGAIN AND HELP US WITH"
1350 PRINT TAB(8)STRING$(14,"-")
1360 PRINT TAB(8)"THE MAD EDITOR"

```



INTERNATIONAL COLOR COMPUTER CLUB

17710 MOSS POINT DR SPRING, TX 77379

The (all new) International Color Computer Club was formed to help people get to know the Color Computer and how it operates, to make available to its members all the information about the Color Computer that we can find, including information which Radio Shack isn't willing to give you. To make programs available so you may extend your library.

Programming is difficult to learn, and the club is a place you can turn to for help with problems you might have in writing a program or adapting a piece of hardware. We can-not solve all problems, but with hundreds of other members with expertise in every aspect of the Color Computer, we can solve most on them.

New members will receive a new member kit which contains all the programs which are in the current library of programs (165 programs to date), data on the CoCo, and a poke & peek book, all to help you along with your programming.

New members will receive a subscription to COCO ADS, (if you now have one, it will be extended) which is the clubs newsletter to its members. Members may place unlimited FREE classified ads in COCO ADS (one per month) and a discount on all display ads.

You are asked to donate some of your programs you wrote to help increase the library. These programs are available to you FREE, with a small charge for postage and blank tape or disk cost. You also may download programs from the clubs own BBS.

A list of other COCO members will be furnished to you that are in your area.

I hope you have found this informative and decide to join our club. We would really like to have you. I'm sure that you will find the benefits of the club worthwhile. All this for only \$30.00 per year.

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