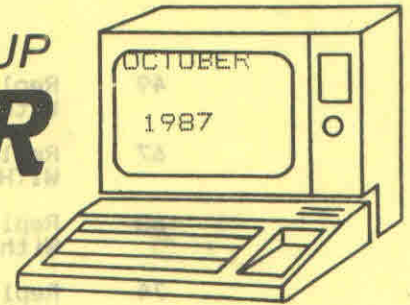


The following changes for Ralph Holzer's "ASSEMBLY LANGUAGE FOR THE 80 HOME COMPUTER" were cleaned from articles in 11-BITS (by Rob Williams) from Park, Westville and the CENTRAL IOWA NEWSLETTER. Our thanks to these groups and the authors.

Lines 11 & 12 should be: PAGE 25

# CEDAR VALLEY 99'ER USER GROUP

# NEWSLETTER



CEDAR RAPIDS/MARION, IOWA

\*\*\*\*\*

## OFFICERS

### PRESIDENT:

Jerry Canady  
6616 Kent Dr. NE  
Cedar Rapids Iowa 52402  
(319) 377-9382 (Home) or  
(319) 395-2494 (Office)

### VICE PRESIDENT:

Bruce Winter  
702 Fernwood Dr. NE  
Cedar Rapids, Iowa 52402  
(319) 393-0610

### SECRETARY:

Bill Paeth  
923 Owen St. NW  
Cedar Rapids, Iowa 52405  
(319) 396-6470

### TREASURER:

Jim Harrington  
4420 Tama St. SE #15  
Marion, Iowa 52302  
(319) 377-1865

## COMMITTEES

### PROGRAM:

Ed Edwards  
102 N. Davis St.  
Anamosa, Iowa 52205

### PUBLICITY:

Paul Mortensen  
3179 Country Park Dr.  
Toddville, Iowa 52341  
393-6022

### EDUCATION:

John Johnson  
398 Forest Dr. SE  
Cedar Rapids, Iowa 52403  
366-4541

### EDITOR:

Jim Green  
288 Windsor Dr. NE  
Cedar Rapids, Iowa 52402  
377-4073 (Home) or  
395-1898 (Office)

### \*\*\*\*NEWSLETTER TOPICS\*\*\*\*

1. Future Meeting Dates
2. Next Meeting Notes
3. Minutes From October Meeting
4. From the Mailbox
5. Library Corner
6. For Sale/Wanted
7. 720K Disk Storage?
8. Tips from the Tigercub #45
9. Membership Renewal Form

### \*\*\*\*FUTURE MEETING DATES\*\*\*\*

Please mark the following dates on your calendar for future meetings:  
NOVEMBER 10, DECEMBER 8, JANUARY 11.

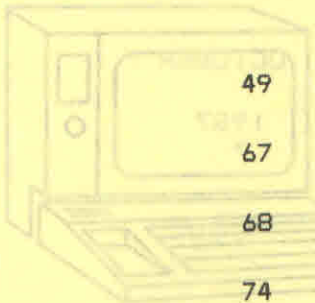
### \*\*\*\*\*NEXT MEETING\*\*\*\*\*

Tuesday, November 10, 7:00 PM at the JA building, 330 Collins Rd. NE. The Diehn's will be with us to demonstrate the Myarc 9640 computer! Don't miss this one! We will also hold a swap meet while we renew our annual memberships. Bring your 4A items you want to sell or trade.

The following changes for Ralph Molesworth's ASSEMBLY LANGUAGE FOR THE TI HOME COMPUTER were gleaned from articles in TIT-BITS (by Rob Williams) from Perth, Australia and the CENTRAL IOWA UG newsletters. Our Thanks to these groups and the authors.

PAGE 25 Lines 11 & 12 should be:

```
11 START MOV R11,@SAVRTN
12 LWPI WSPREG
```



- 49 Replace: VDP RAM ADDRESS DECIMAL=((ROW-1)\*(COLUMN-1))  
With: VDP RAM ADDRESS DECIMAL=((ROW-1)+(COLUMN-1))
- 67 Replace the 11th line of the program reading: C R7,4  
WITH: CI R7,4
- 68 Replace the 4th line of th program reading: CI R3,R7  
With: C R3,R7
- 74 Replace the 16th line of the program reading: BYTE >OF  
With: BYTE >05  
in order to make the program to branch to the Main Title  
Screen when Quit is pressed.
- 76 Replace the 1st line of the program reading: AORG>7DOC  
With: AORG>7D30  
This is because enough space has not been allocated in  
the book for the Symbol Table. For further information  
read page 36 of the book.
- Replace the 15th line of the program reading: DATA >0F00  
With: DATA >0500  
in order to make the program to branch to the Main Title  
Screen when Quit is pressed.
- Replace the 5th line from the bottom of page: BLWP @KS N  
With: BLWP @KS
- 89 Replace the 13th line of the program reading: JLE CPUT  
With: JL CPUT  
Otherwise 11 records will be written, not 10.
- 112 LABEL SG2 should be MSG2
- 115 PBASIC SEGMENT should be:
- 121 PBASIC MOVB \*R2+,R1 ; DEC R3  
AB @OFFST,R1 ; JNE PBASIC  
BLWP @VSBW ; RT  
INC R0 ;
- 118 Replace the 8th line of the program reading: CLR STATUS  
With: CLR @STATUS
- 119 Replace the 2nd line from the bottom of page: LI R0,0755  
With: LI R0,>0755
- 121 Insert after line 4 these two lines: CB @KEYVAL,@ESCV  
JEQ ESCAP
- 122 Replace the 10th line of the program: 100 FOR LOOP=0 TO 16  
With: 100 FOR LOOP=0 TO 14
- 123 Replace the 4th line of the program reading: SBUFF BSS 256  
With: SBUF BSS 256
- 124 Replace the 25th line of the program reading: ERROR LI 0,>1300  
With: ERROR LI R0,>1300
- Replace the 26th line of the program reading: BLWP @ER R  
With: BLWP @ERR
- 127 Delete three words from the 7th line of text: "or equal to"
- 130 Add one new line after line 20, ie. between char 90 and 91:  
DATA >0000,>0000  
I have discovered that 4 bytes of zero's must be added here to  
force correct loading in the Pattern Description Table of all  
characters from 91 to 143.
- 131 Replace the 4th line from page bottom reading: LI R2,904  
With: LI R2,912



Copies of the articles/mailings summarized below may be obtained from any of the officers--but you have to ask!

A review of STAR (Super TI Assembly Routines); program listing for a 3x5 inch disk catalog printer. (SFV 99er Times, July 1987)

A short program that will check each of the 4116 chips in your memory expansion card (not useful for the club's 32K expansion project); remarks on REM statements. (SFV 99er Times, August 1987)

An article and program for simple file processing in Basic; Mini-memory cartridge power; type in program EFONT for a new character set; a review of Super Extended Basic V.120; a review of the PC Connection from CorComp. (MICROpendium, September 1987)

A beginner's tutorial on FORTH; type in program PRINT A MEMO which prints multiple copies of a short memo. (QB Monitor, September 1987)

A load program to automatically include the copy utilities in PRBASE; a collection of articles (reprints) on Multiplan. (Byte-Line, October 1987)

Great Lakes Software markets several programs for the 4A; Joy Paint '99 has been reduced to \$24.95. They also now stock to Myarc 9640 computer.

DataBioTics sends word of new cartridge software just released for the TI, including new games at \$17.88 each.

Getting the most from your cassette system; instructions for copying a ROM cartridge to disk (unproven); a prototyping PC board now available for your PEB; a review of the Harrisburg, PA computer show. (PUG Peripheral, October 1987)

A short key-in program to make the computer sing; building your own disk drive power supply; installing a second, external drive; transferring PRBASE files to IBM format. (Cin-Day News, September 1987)

A key-in program to keep track of and print Lotto number histories (data statements need to be modified for Iowa). (Cin-Day News, October 1987)

Step-by-step instructions for cleaning your 99/4A inside-out; a review of XB\*TOOLS, a programmer's utility package. (Central Iowa 99ers, October 1987)

TI to IBM file transfers via cable or modem; an overview of PRINT-IT; a key-in program for a Christmas crossword; a review of SPAD XIII. (Cleveland Area 99ers, October 1987)

Instructions for cleaning one's computer/modules. (Edmonton 99ers, October 1987)

Help with reading those long download files; a hardware addition to delete the need for the AlphaLock key to be up during game play; information on the upcoming TIExpo 88 in Las Vegas. (SNUGLETter, October 1987)

A review of Funnelweb V4.0 (now under Beta testing); using CALL LOAD for faster speech execution. (San Diego TI-SIG, October 1987)

A review of REMIND ME!, a monthly calendar program; converting GRAPHX to TI-Artist; a mini-biography of Barry Traver; a review of TEXTLOADER. (L.A. 99'ers, October 1987)



\* \* \* THE LIBRARY CORNER \* \* \*

We now have Barry Boone's assembly language Archiver II shareware program. It is compatible with Barry Traver's Archiver program. Archiver II allows you to squeeze multiple files/programs into one file, saving space on your disk and also making for easy upload/download of programs on a bulletin board. Archiver II also goes in reverse to unsqueeze a compacted, archived file. This program has some unique options that let you catalog the list of files contained in the archived file, and it allows for selecting only a subset of the files to be retrieved from the archived file. A must-have program for those who download from Compuserve or Genie.

COMPACTOR is John Dow's public domain program that will change Basic programs to multiple statement lines. When I used it, the program put statements on the same line as a data statement; that was the only revised lines that I had to go back and edit. Otherwise, it worked fine. Of course, the new program will still not run in Extended Basic; you can use one of the programs that will run Basic programs in Extended Basic. We have the one that was printed in our newsletter, called UNRUN/BAS, and also a similar one from Jim Peterson called BXB. They both are in MERGE format, so you must first load your Basic program using Extended Basic, then merge one of these programs into yours. I tried both of these and they worked OK. If you would like any of these programs, please let me know. They are on library disk 162.

Bruce Winter

\* \* \* For Sale/Wanted \* \* \*

This column is available for free advertising to all members. Don't forget that the November meeting will include a swap meet, so come prepared to sell those TI hardware or software items that you no longer want. Buyers, bring money!

**FOR SALE:** Digital LA-36 printer; works excellently. Has full keyboard with additional keys for 110, 150, 300 baud, Line/Local, full and half duplex, auto line feed. Here is alternate character set and character set lock. Unit is on its own stand and measures 28" x 25" x 28". Dot matrix with no graphics capabilities and none available. Tractor feed and takes up to 15" wide paper. Would be perfect for modem use. \$70.00 or best offer. Also will trade for printer with graphics capabilities. Rev. Richard Walters, 1900 Hwy 64E, #C-13, Anamosa, Iowa 52205. (319) 462-3394.

\* \* \* 720K DISK STORAGE? \* \* \*

This ad was in the Sept. and Oct. COMPUTER SHOPPER. 3 1/2 conversion, drive and installation kit, \$129. Attention TI99/4A Owners: 3.5 conversion is just as easy. Works with your controller (Myarc or Cor Comp) and software.

If you are interested in doubling your disk storage capability write to: ALPHA SCIENTIFIC, P.O. BOX 626, CHESTERFIELD, MO 63006.

These folks also sell printer packages including interface and cables for most computers including the TI. If you are interested in seeing their ad see me at the next meeting.

Jerry Canady



TIPS FROM THE TIGERCUB

#45

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TIGERCUB SOFTWARE  
156 Collingwood Ave.  
Columbus, OH 43213

Distributed by Tigercub Software to TI-99/4A Users Groups for promotional purposes and in exchange for their newsletters. May be reprinted by non-profit users groups, with credit to Tigercub Software.

Over 130 original programs in Basic and Extended Basic, available on cassette or disk, now reduced to just \$2.00 each, plus \$1.50 per order for cassette or disk and PP&M. Cassette programs will not be available after my present stock of blanks is exhausted.

Descriptive catalogs, while they last, \$1.00 which is deductible from your first order.

Tigercub Full Disk Collections, reduced to \$10 postpaid. Each of these contains either 5 or 6 of my regular \$2 catalog programs, and the remaining disk space has been filled with some of the best public domain programs of the same category. I am NOT selling public domain programs - they are a free bonus!

TIGERCUB'S BEST, PROGRAMMING TUTOR, PROGRAMMER'S UTILITIES, BRAIN GAMES, BRAIN TEASERS, BRAIN BUSTERS!, MANEUVERING GAMES, ACTION REFLEX AND CONCENTRATION, TWO-PLAYER GAMES, KID'S GAMES, MORE GAMES, WORD GAMES, ELEMENTARY MATH, MIDDLE/HIGH SCHOOL MATH, VOCABULARY AND READING, MUSICAL EDUCATION, KALEIDOSCOPIES AND DISPLAYS

NUTS & BOLTS (No. 1), a full disk of 100 Extended Basic utility subprograms in merge format, ready to merge into your own programs. Plus the Tigercub Menuloader, a tutorial on using subprograms, and 5 pages of documentation with an example of the use of each subprogram. Reduced to \$15.00 postpaid.

NUTS & BOLTS NO. 2, another full disk of 108 utility subprograms in merge format, all new and fully compatible with the last, and with 10 pages of documentation and examples. Also \$15 postpaid.

\*\*\*\*\*  
\$ NUTS & BOLTS #3 is now \$ ready, another full disk \$ of 140 new merge-format \$ utility subprograms, all \$ compatible with the pre- \$ vious. With 11 pages of \$ documentation, \$15 ppd. \$  
\*\*\*\*\*

TIPS FROM THE TIGERCUB, a full disk containing the complete contents of this newsletter Nos. 1 through 14, 50 original programs and files, reduced to \$10 ppd.

TIPS FROM THE TIGERCUB VOL. 2, another diskfull, complete contents of Nos. 15 through 24, over 60 files and programs, also just \$10  
TIPS FROM THE TIGERCUB VOL. 3, another 62 programs, tips and routines from Nos. 25 through 32, \$10 postpaid.  
TIPS FROM THE TIGERCUB VOL. 4, another 48 programs and files from issues 33 through 41, also \$10 postpaid.

Here is a versatile printer utility which will accept all printer control codes, print in 1 to 5 columns with choice of column separation and margin width, allow alternate margins and pause at end of page to turn paper over, and will load and print a diskfull of

files one after another. It is set up for the Gemini 10X and may require modification for other printers.

```
100 DIM M$(400),F$(50)
110 GOTO 150
120 K,ST,SET,S,P$,P,CL,DW$,S
S$,I$,D$,E$,NC,CW,TC,TA,TX,A
V,CS,S$,LT,A$,LSP,LP,RM,OK$,
QQ$,X,F$( ),SL,F,IP,M$( ),T$,F
LAG,J,PP,LT$
```

```
130 CALL CLEAR :: CALL KEY :
: CALL COLOR :: CALL SCREEN
:: CALL SOUND
140 !@P-
150 CALL CLEAR :: CALL KEY(3
,K,ST):: ON WARNING NEXT
160 FOR SET=0 TO 14 :: CALL
COLOR(SET,2,8) :: NEXT SET ::
CALL SCREEN(5)
```

```
170 DISPLAY AT(3,6):"TIGERCU
B PRINTALL":TAB(7);"Copyri
ght 1987":TAB(6);"Tigercub S
oftware"!programmed by Jim
Peterson
```

```
180 DISPLAY AT(12,1):"May be
distributed without":"restr
iction providing that":"no p
rice or copying fee is":"cha
rged."
```

```
190 DISPLAY AT(18,7):"TURN P
RINTER ON!"
```

```
200 DISPLAY AT(20,8):"PRESS
ANY KEY" :: DISPLAY AT(20,8)
:"press any key" :: CALL KEY
(0,K,S):: IF S=0 THEN 200 EL
SE CALL CLEAR
```

```
210 DISPLAY AT(12,1):"PRINTE
R DESIGNATION?" :: ACCEPT AT
(14,1)BEEP:P$ :: IF POS(P$,"
.LF",1)=0 THEN P$=P$&".LF"
220 ON ERROR 230 :: OPEN #1:
P$,VARIABLE 255 :: ON ERROR
STOP :: PRINT #1:CHR$(27);"E
" :: CALL CLEAR :: GOTO 240
```

```
230 DISPLAY AT(20,1):"CANNOT
OPEN PRINTER!" :: RETURN 21
0
```

```
240 DISPLAY AT(12,1):"PRINT
SIZE?": (1) PICA:" (2)
ELITE:" (3) CONDENSED"
250 ACCEPT AT(12,13)VALIDATE
("123")SIZE(1):P :: PRINT #1
:CHR$(27);"B";CHR$(P);
```

```
260 !The values 80, 96 and 1
36 in the next line are the
maximum number of pica, elit
e and condensed characters p
er line on Gemini 10X
```

```
270 !Change as necessary for
your printer!
```

```
280 CL=(P=1)*80+(P=2)*96+(P=
3)*136 :: CL=ABS(CL)
```

```
290 DISPLAY AT(12,1)ERASE AL
L:"DOUBLE-WIDTH? (Y/N) N" ::
```

```
ACCEPT AT(12,21)SIZE(-1)VAL
IDATE("YN")BEEP:DW$ :: IF DW
```

```
$="Y" THEN PRINT #1:CHR$(27)
;"N";CHR$(1);:: CL=CL/2
```

```
300 DISPLAY AT(12,1)ERASE AL
L:"SUPERScript? (Y/N) N" ::
```

```
ACCEPT AT(12,20)SIZE(-1)VALI
DATE("YN")BEEP:SS$ :: IF SS$
```

```
="Y" THEN PRINT #1:CHR$(27);
;"S";CHR$(0);
```

```
310 DISPLAY AT(12,1)ERASE AL
L:"ITALICS? (Y/N) N" :: ACCE
```

```
PT AT(12,16)VALIDATE("YN")SI
ZE(-1)BEEP:I$ :: IF I$="Y" T
```

```
HEN PRINT #1:CHR$(27);"4";
```

```
320 DISPLAY AT(12,1)ERASE AL
L:"DOUBLE-STRIKE? (Y/N) Y" ::
```

```
ACCEPT AT(12,22)VALIDATE("
YN")SIZE(-1)BEEP:D$ :: IF D$
```

```
="Y" THEN PRINT #1:CHR$(27);
"6";
```

```
330 IF P<3 AND P<4 THEN DI
SPLAY AT(12,1):"EMPHASIZED?
```

```
(Y/N) Y" :: ACCEPT AT(12,19)
```

```
VALIDATE("YN")SIZE(-1)BEEP:E
$ :: IF E$="Y" THEN PRINT #1
```

```
:CHR$(27);"E";
```

```
340 DISPLAY AT(12,1)ERASE AL
L:"NUMBER OF COLUMNS? (1-5)"
```

```
:: ACCEPT AT(12,26)VALIDATE
("12345")SIZE(1)BEEP:NC
```

```
350 DISPLAY AT(12,1):"COLUMN
WIDTH (NUMBER OF": "CHARAC
```

```
TERS?" :: ACCEPT AT(14,13)VA
LIDATE(DIGIT)BEEP:CW
```

```
360 TC=NC*CW :: TA=CL-TC ::
TX=TC+NC*2-2
```

```
370 IF TX<=CL THEN 390 :: DI
SPLAY AT(18,1):STR$(NC)&" co
```

```
lumn of "&STR$(CW)&" charac
```

```
ters":"plus 2-column spacing
```

```
equals"
380 DISPLAY AT(20,1):STR$(TC
```

```
)&" characters; maximum":"av
```

```
ailable in print size":"sele
```

```
cted is "&STR$(CL)&".": "###
Please reselect###" :: GOTO
240
```

```
390 IF NC=1 THEN 410 :: AV=I
NT(TA/(NC-1)):: DISPLAY AT(1
```

```
2,1)ERASE ALL:"COLUMN SEPARA
```

```
TION?": "MINIMUM 2": "MAXIMUM
"&STR$(AV)&" AVAILABLE ": "2"
400 ACCEPT AT(15,1)VALIDATE(
```



```

DIGIT)SIZE(-2)BEEP:CS :: IF
CS<2 OR CS>AV THEN 400 ELSE
S=RPT$(" ",CS)
410 TA=TA-CS*(NC-1):: IF TA<
2 THEN 450
420 DISPLAY AT(12,1)ERASE AL
L:"LEFT MARGIN WIDTH?": "MA
XIMUM "&STR$(TA)&" AVAILABLE
" :: ACCEPT AT(12,20)VALIDAT
E(DIGIT)BEEP:LT :: IF LT>TA
THEN 420
430 DISPLAY AT(12,1):"ALTERN
ATING LEFT/RIGHT?": "MARGIN?
(for pages to be": "later re
produced on both": "sides) (Y
/N) N"
440 ACCEPT AT(16,14)VALIDATE
("YN")SIZE(-1):A$
450 LSP=12 :: DISPLAY AT(10,
1):" ": " ": "LINES PER PAGE?
60": " ": " ": " ": " :: ACCEP
T AT(12,17)VALIDATE(DIGIT)SI
ZE(-3):LP :: IF LP<70 THEN 4
90
460 DISPLAY AT(12,1):"LINE S
PACING - 72 INCH" :: DISPLAY
AT(11,16):"_" :: ACCEPT AT
(10,16)VALIDATE(DIGIT)BEEP:L
SP
470 IF LP/(INT(72/LSP))>11.5
THEN DISPLAY AT(20,1):"WON'
T FIT!" :: GOTO 450
480 PRINT #1:CHR$(27);"A";CH
R$(LSP);
490 RM=TA-LT
500 DISPLAY AT(12,1)ERASE AL
L:STR$(NC)&" columns of":STR
$(CN)&"-character width": "le
ft margin of "&STR$(LT)&" sp
aces"
510 DISPLAY AT(15,1):STR$(LP
)&" lines per page": "with "&
STR$(LSP)&"/72 line spacing"
520 DISPLAY AT(17,1):STR$(CS
)&" spaces between columns":
"right margin of "&STR$(RM)&
" spaces": "OK? (Y/N) Y"
530 ACCEPT AT(20,11)VALIDATE
("YN")SIZE(-1)BEEP:OK$ :: IF
OK$="N" THEN 240
540 DISPLAY AT(12,1)ERASE AL
L:"PAUSE AT END OF PAGE? N"
:: ACCEPT AT(12,23)VALIDATE(
"YN")SIZE(-1):Q$
550 DISPLAY AT(1,1)ERASE ALL
:"INPUT FILENAMES TO BE": "PR
INTED.": "PRESS ENTER WHEN DO
NE"
560 X=X+1 :: DISPLAY AT(X+3,
1):"FILENAME? DSK" :: ACCEPT

```

```

AT(X+3,14)SIZE(-12)BEEP:F$(
X)
570 IF F$(X)="" THEN X=X-1 :
: GOTO 600 ELSE F$(X)="DSK"&
F$(X)
580 ON ERROR 590 :: OPEN #2:
F$(X):: CLOSE #2 :: GOTO 560
590 ON ERROR STOP :: CALL SO
UND(1000,110,0,-4,0):: DISPL
AY AT(20,1):"CANNOT OPEN "&F
$(X):: X=X-1 :: RETURN 560
600 SL=1
610 F=F+1 :: IF F>X THEN 700
:: ON ERROR 620 :: OPEN #2:
F$(F),INPUT :: DISPLAY AT(22
,1):"READING ";F$(F):: ON ER
ROR STOP :: GOTO 630
620 CALL SOUND(1000,110,0,-4
,0):: DISPLAY AT(20,1):"COUL
D NOT OPEN "&F$(F):: STOP
630 FOR IP=SL TO LP*NC :: LI
NPUT #2:M$(IP):: IF LEN(M$(I
P))=0 THEN 670 :: IF NC>1 AN
D POS(M$(IP),CHR$(13),1)<>0
THEN M$(IP)=SEG$(M$(IP),1,LE
N(M$(IP))-1)
640 IF ASC(M$(IP))>126 OR AS
C(M$(IP))<32 THEN IP=IP-1 ::
GOTO 680
650 IF LEN(M$(IP))<=CN THEN
670 :: T$=SEG$(M$(IP),1,CN):
: CALL SOUND(1000,110,0,-4,0
):: DISPLAY AT(12,1):M$(IP);
" OVER";CN;"CHARACTERS": "TRU
NCATED TO ";T$;"OK?"
660 CALL KEY(3,K,S):: IF S=0
THEN 660 ELSE IF K<>89 THEN
STOP ELSE M$(IP)=T$
670 M$(IP)=M$(IP)&RPT$(" ",C
N-LEN(M$(IP)))
680 IF EOF(2)=1 THEN CLOSE #
2 :: SL=IP+1 :: GOTO 610
690 NEXT IP :: IF EOF(2)=1 T
HEN CLOSE #2 :: GOTO 720 ELS
E GOTO 720
700 ON ERROR 710 :: FLAG=1 :
: FOR J=IP+1 TO NC*LP :: M$(
J)="" :: NEXT J :: GOTO 720
710 STOP
720 PP=PP+1 :: IF PP/2=INT(P
P/2)AND A$="Y" THEN LT=RPT$(
" ",RM)ELSE LT=RPT$(" ",LT
)
730 FOR J=1 TO LP :: ON NC 6
OSUB 750,760,770,780,790 ::
NEXT J :: PRINT #1:CHR$(12):
: SL=1 :: IF F>X THEN STOP E
LSE IF Q$="N" THEN 630
740 DISPLAY AT(24,1)BEEP:"PR
ESS ANY KEY TO CONTINUE" ::

```

```

CALL KEY(0,K,S):: IF S=0 THE
N 740 ELSE DISPLAY AT(24,1):
" " :: GOTO 630
750 PRINT #1:LT$&M$(J)&CHR$(
10):: RETURN
760 PRINT #1:LT$&M$(J)&S$&M$(
J+LP)&CHR$(10):: RETURN
770 PRINT #1:LT$&M$(J)&S$&M$(
J+LP)&S$&M$(J+LP*2)&CHR$(10
):: RETURN
780 PRINT #1:LT$&M$(J)&S$&M$(
J+LP)&S$&M$(J+LP*2)&S$&M$(J
+LP*3)&CHR$(10):: RETURN
790 PRINT #1:LT$&M$(J)&S$&M$(
J+LP)&S$&M$(J+LP*2)&S$&M$(J
+LP*3)&S$&M$(J+LP*4)&CHR$(10
):: RETURN
800 CALL CLEAR :: RANDOMIZE
110 B=INT(5*RND+2):: IF B=B2
THEN 110 ELSE B2=B
120 F=INT(5*RND+2):: IF F=F2
THEN 120 ELSE F2=F
130 D=INT(5*RND+2):: IF D=D2
THEN 130 ELSE D2=D
140 X=F*B*D
150 BB=INT(5*RND+2):: IF BB=
BB2 OR BB=B THEN 150 ELSE BB
2=BB
160 DD=INT(5*RND+2):: IF DD=
DD2 OR DD=D THEN 160 ELSE DD
2=DD
170 F=F*BB*DD
180 DISPLAY AT(3,1)ERASE ALL
:"IF";B;"BOYS CAN CATCH";X;"
FROGS IN";D;"DAYS,"
190 DISPLAY AT(6,1):"HOW MAN
Y FROGS CAN";BB;"BOYS": "CATC
H IN";DD;"DAYS?"
210 ACCEPT AT(7,19):Q
220 IF Q=F THEN DISPLAY AT(9
,1):"THAT'S RIGHT!" :: GOTO
110
230 DISPLAY AT(9,1):"NO, THA
T'S WRONG."
240 DISPLAY AT(11,1):"IF";B;
"BOYS CAN CATCH";X;"FROGS IN
";D;"DAYS"
250 DISPLAY AT(13,1):"THEN O
NE BOY CAN CATCH";X/B;"FROGS
IN";D;"DAYS"
260 DISPLAY AT(15,1):"AND ON
E BOY CAN CATCH";X/B/D;"FROG
S IN ONE DAY."
270 DISPLAY AT(17,1):"60, IF
ONE BOY CAN CATCH";X/B/D;"F

```

```

ROGS IN ONE DAY,"
280 DISPLAY AT(19,1):"THEM";
BB;"BOYS CAN CATCH";X/B/D*BB
;"FROGS IN ONE DAY"
290 DISPLAY AT(21,1):"AND";B
B;"BOYS CAN CATCH";X/B/D*BB$
DD;"FROGS IN";DD;"DAYS."
300 DISPLAY AT(24,1):"PRESS
ANY KEY" :: CALL KEY(0,K,S):
: IF S=0 THEN 300 ELSE 110

```

Here's an idea for an unusual title screen -

```

100 CALL CLEAR :: FOR SET=1
TO 8 :: CALL COLOR(SET,1,1):
: NEXT SET :: CALL CHAR(100,
"0",101,"0")
110 X$(0)="404324181824420"
:: X$(1)="4021261818648402"
:: X$(2)="2020131C38C80404"
:: X$(3)="1010101FF8080808"
:: X$(4)="081010907E111020"
120 X$(5)="080808F81F101010"
:: X$(6)="0404C8381C132020"
:: X$(7)="0284641818262140"
130 A$=RPT$(CHR$(100)&CHR$(1
01),13):: FOR R=1 TO 24 :: C
=C+1+(C=2)*2 :: DISPLAY AT(R
,C):A$ :: NEXT R
140 CALL VCHAR(1,29,1,168)
150 CALL SCREEN(2):: CALL CO
LOR(9,5,16):: FOR S=1 TO 8 :
: CALL COLOR(S,16,2):: NEXT
S
160 DISPLAY AT(5,5):"TIGERC
UB SOFTWARE ";: DISPLAY AT(
8,6):"SQUIRMY SCREEN ";
170 FOR J=0 TO 7 :: CALL CHA
R(100,X$(J)): CALL CHAR(101
,X$(7-J)): NEXT J
180 CALL KEY(0,K,S):: IF S=0
THEN 170

```

MEMORY FULL

Jim Peterson