MURPHY'S LAW

IF IT'S BASIC, ADVANCED, SAFE AND EASY TO WORK WITH, IT PROBABLY DOESN'T DO ANYTHING

Voice of the '80 Newsletter

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Model 4 TRSDOS 6.0

New DOS Commands and New Basic Commands

by Alan Abrahamson

All the commands and syntax listed are ONLY for those commands that did NOT exist under Model III TRSDOS 1.3. Where the new commands may have additional options or functions, they are listed. NOTE: [ ] indicate optional command or parameter.

TRSDOS COMMANDS & FILTERS

AUTO [:drive,?:drive,=:drive][*][command line]
  Stores a command line for automatic execution each time TRSDOS starts up. (AUTO) by itself deletes the current AUTO command line.)
    AUTO BASIC AUTO *DO INIT/JCL:1

BOOT [<CLEAR>,<ENTER>,<D>]
  Resets the system.
    BOOT

CLICK/FLT
  Set device [TO] CLICK/FLT
    FILTER *KI device
      Establishes the key-click filter.

COM/DVR
  SET *CL [TO] COM/DVR
    Prepares the Communications Line (*CL) for use.

COMM device [(XLATES=X'aabb',XLATER=X'aabb',XON=X'cc',
  XOFF=X'cc',NULL=OFF)]
    Lets two computers communicate via a device.

DO [$,=,*] file [(@label,parm=value)][;]
  Compiles and executes a DO file.
    DO DRIVE/JCL DO = DRIVE/JCL

FILTER device [USING] phantom device
  Filters data to or from a device, using a filter program.
    FILTER *PR USING *DU

FORMS/FLT
  SET *PF [TO] FORMS/FLT
  FILTER *PR *PF
    Prepares the Printer Filter (*PF) for use

JOBLOG
  ROUTE *JL [TO] file
  ROUTE *JL [TO] device
    Establishes the JobLog device (*JL), which sends certain information to a file or device.
      ROUTE *JL TO LISTER/JBL
      ROUTE *JL TO *PR

```
KSM/FLT
  SET device KSM/FLT [USING] file [(ENTER=value)]
  FILTER *KI device
    SET *DU KSM/FLT USING ROUTINE/KSM
    FILTER *KI *DU

LINK device1 [TO] device2
  Links two logical devices.
    LINK *DO *PR

MEMDISK/DCT
  SYSTEM (DRIVE=drive,DRIVER="MEMDISK")
    Adds to the system a pseudo floppy memory disk.
      SYSTEM (DRIVE=2,DRIVER="MEMDISK")

REMOVE file [file]...
  Deletes files from the directory.
    REMOVE ALPHA/DAT:0 BREAKER/DAT:0

REPAIR :drive
  Updates system info on Model I TRSDOS disks.
    REPAIR :1

RESET device
RESET file
  Returns a device to its start up condition, closes a file.
    RESET *PR        RESET PRINTER/DAT

SPOOL [device] [TO] [file] (NO,MEM=number,BANK=number,DISK=
  number,PAUSE,RESUME,CLEAR)
    Establishes an output buffer for a device.
      SPOOL *PR TO TEXTFILE:0 (MEM=5,DISK=15)
      SPOOL *PR (NO)

SYSGEN [(switch)] [(DRIVE=drive)]
  Stores current system options to file (CONFIG/SYS).
    SYSGEN (YES) (DRIVE=4)

SYSTEM (parameters)
  Selects certain options of your TRSDOS system.
    SYSTEM (ALIVE [=switch])
      Displays a moving character when system active.
    SYSTEM (BLINK=switch)
    SYSTEM (BLINK=number)
    SYSTEM (BLINK,[LARGE,SMALL])
      Control the cursor character.
    SYSTEM (BREAK [=switch])
      Enables or disables the BREAK key.
    SYSTEM (DATE [=switch])
      Turns on or off the date start-up prompt.
    SYSTEM (DRIVE=drive,[CYL=number,DELAY=switch,DISABLE,
            ENABLE,DRIVER="file",WP=switch])
      Sets parameters for drive.
    SYSTEM (SYSRES=number)
      Adds TRSDOS overlays to high memory.
```

SYSTEM (SYSTEM=drive)
Assigns drive as system drive.
SYSTEM (TIME [=switch])
Turns on or off the start-up time prompt.
SYSTEM (TRACE [=switch])
Displays contents of Program Counter.
SYSTEM (TYPE [=switch])
Turns on the KI/DVR type-ahead feature.

BASIC STATEMENTS & FUNCTIONS

CALL address [parameter list]
Transfers program control to machine language routine at address. The parameters are the values to be passed.

CHAIN [MERGE] filespec [,line] [,ALL] [,DELETE line-line]
Loads a Basic program named filespec, chains it to a "main" program, and begins running it. The line is the first line to be run in the CHAINed program. The ALL option passes every variable in the main program to the CHAINed program. The MERGE option "overlays" the lines of filespec with the main program. The DELETE option erases lines in the overlay so that you can MERGE in a new overlay.

CLEAR [,memory location] [,stack space]
Clears the value of all variables and closes all open files. Optionally, it also sets the highest memory location for Basic to use and the amount of stack space.

```
CLEAR    CLEAR, 75    CLEAR ,61000, 200
```

COMMON variable,...
Passes one or more variables to a CHAINed program.

```
100 COMMON A, B, C, D(), G$
110 CHAIN "PROG3", 10
```

DATE$
Returns the current date.

```
PRINT DATE$
```

ERASE array,...
Erases one or more arrays from a program.

```
ERASE C,F
```

ERR$
Returns a system error number and message.

```
PRINT "Last error was ";ERR$
```

HEX$ (number)
Calculates the hexadecimal value of a number.

```
PRINT HEX$(30), HEX$(50), HEX$(90)
```

INPUT$ (number [,buffer])
Inputs a string of number characters from either the keyboard or a sequential disk file. The number must be a value between 1 and 255.

```
    A$ = INPUT$(5)      A$ = INPUT$(11,3)
```

LPOS (number)
Returns the position of the line printer's head within the line printer's buffer.

```
    100 IF LPOS(X) > 60 THEN PRINT CHR$(13)
```

NAME old filespec AS new filespec
Renames old filespec as new filespec.

```
    NAME "FILE" AS "FILE/OLD"
```

OCT$ (number)
Computes the Octal value of a number.

```
    PRINT OCT$(30), OCT$(40), OCT$(50)
```

OPTION BASE number
Sets number as the minimum value for an array subscript.

```
    OPTION BASE 1
```

PRINT @ (row,column)
Specifies X, Y coordinate for printing to CRT.

ROW (number)
Returns the row position of the cursor, number is dummy.

```
    X = ROW(Y)
```

SPACE$ (number)
Returns a string of number spaces. Number must be from 0-255.

```
    PRINT "DESCRIPTION" SPACE$(10)
```

SPC (number)
Prints a line of number blanks. Number must be from 0 to 255.

```
    PRINT "HELLO" SPC(15) "THERE"
```

SWAP variable1,variable2
Exchanges the values of two variables.

```
    SWAP F1#, F2#       SWAP A$, B$       SWAP A(1), A(2)
```

SYSTEM [command]
Returns to TRSDOS. If you specify a command it executes it and then returns you to Basic.

TIME$
Returns the time in 24 hour format.

```
    A$ = TIME$
```

WAIT port, integer1 [,integer2]
Suspends program execution until a machine input port developes a specified bit pattern.

```
    100 WAIT 32,2
```

WHILE expression
.
WEND
Executes a series of statements in a loop as long as condition is true.

WHILE ..... WEND

WRITE data,...
Prints data on the display.
WRITE A,B,C$

WRITE# buffer, data,...
Writes string data to a sequential file with implicit commas as delimiters.
WRITE#1, A$, B$

CONTROL KEYS

<CONTROL><J>
Line feed. Starts a new physical line without ending the current logical line. Like Model I/III Down Arrow.

OPERATORS

\ (a backslash) (performs integer division)
MOD (Modulus function) (Remainder after division)
XOR (eXclusive OR binary arithmetic function)
EQV (EQuivalent Value function)

INTERNAL CODES (Tokens)

Keyword	Code	Keyword	Code
ABS	65414	LPOS	65435
AND	248	LPRINT	157
ASC	65429	LSET	201
ATN	65422	MEM	225
AUTO	171	MERGE	197
CALL	182	MID$	65411
CDBL	65438	MKD$	65458
CHAIN	185	MOD	253
CHR$	65430	NAME	199
CINT	65436	NEW	148
CLEAR	146	NEXT	131
CLOSE	195	NOT	214
CLS	159	OCT$	65433
COMMON	184	ON	149
CONT	153	OPEN	191
COS	65420	OPTION	186
CSNG	65437	OR	249
CVD	65452	OUT	156
CVI	65450	PEEK	65431
CVS	65451	POKE	152
DATA	132	POS	65425
DATE$	222	PRINT	145

Keyword	Code	Keyword	Code
DEF	151	PUT	194
DEFDBL	176	RANDOM	187
DEFINT	174	READ	135
DEFSNG	175	REM	143
DEFSTR	173	RENUM	172
DELETE	170	RESTORE	140
DIM	134	RESUME	169
EDIT	167	RETURN	142
ELSE	162	RIGHT$	65410
END	129	RND	65416
EOF	65453	ROW	65459
EQV	251	TRON	163
ERASE	166	USING	218
ERL	215	USR	211
ERR	216	VAL	65428
ERROR	168	SIN	65417
ERR$	223	SOUND	205
EXP	65419	SPACE$	65432
FIELD	192	SPC	213
FIX	65439	SQR	65415
FN	212	STEP	210
FOR	130	STOP	144
FRE	65423	STR$	65427
GET	193	STRING$	217
GOSUB	141	SWAP	165
GOTO	137	SYSTEM	189
HEX$	65434	TAB	209
IF	139	TAN	65421
RSET	202	THEN	208
RUN	138	TIME$	226
SAVE	203	TO	207
SGN	65412	TROFF	164
IMP	252	VARPTR	221
INKEY$	224	WAIT	150
INP	65424	WEND	181
INPUT	133	WHILE	180
INSTR	219	WIDTH	161
INT	65413	WRITE	183
KILL	200	XOR	250
LEFT$	65409	+	243
LEN	65426	-	244
LET	136	*	245
LINE	177	/	246
LIST	147	^	247
LLIST	158	\	254
LOAD	196	'	220
LOC	65454	>	240
LOF	65455	=	241
LOG	65418	<	242

The following keywords (TOKENS) seem to exist, but I do not know the syntax for their construct. If not in your documentation, call Tandy Towers on these:

EQV, ERRS$, IMP, LINE, SOUND and WIDTH

The Mailbag

FROM: Dave McGlumphy
4429 Paula Lane
Red Bank, TN 37415

Oh me, oh my, how ah jes' luvs (!) piddlin' in yo' code, Al, ole buddy. Your listing on page 8 of the January '84 issue works fine. I interpreted the problem a bit differently than you did, though, so I came up with another solution which I thought I'd share with you. A problem occurs when the line to be printed is longer than 63 characters because the PRINT will generate a linefeed or wraparound or call it what you will. That is to say that if you print fifteen lines each of which is 100 characters long, you'll still get scrolling. I suspect that is what is happening to the person who wrote you the question. Maybe the following code will give him something to try.

```
10 CLS
20 TEXT$="THIS IS THE TEXT YOU ARE PRINTING ON THE SCREEN"
30 TL = LEN(TEXT$)
40 IF TL>191 THEN LC=LC+4
        ELSE IF TL>127 THEN LC=LC+3
        ELSE IF TL>63 THEN LC=LC+2
        ELSE LC=LC+1
50 IF LC>15 THEN LC=0 : GOSUB 70 : GOTO 40
        ELSE PRINT "LINE #"; LC; TEXT$
60 GOTO 20 '

70 PRINT @ 980,"PRESS <ENTER> TO CONTINUE"; 'PAUSE
80 IF INKEY$ = CHR$(13) THEN CLS : RETURN ELSE 80
```

Try making line 20 longer - much longer. Take it out as far as it will go if you want to. The actual line length is TL plus the nine bytes or so generated in line 50, so in practice, the programmer would want to compute the line length at the actual time of printing. This is close enough for government work. I didn't CLEAR a bunch of space because this program doesn't use it even if you make line 20 very long. Also, I didn't DEFINT A-Z because this program doesn't require concern for speed or space. "KISS".

Line 40 is the "key" in this version of a "screenful" program. While I may not completely fill a screen, at least I won't scroll stuff off the top, and scrolling is the problem your questioner was trying to solve.

"IF/ELSE" statements are tricky and can take novice programmers for an unexpected ride. It's important to understand that if the first "IF" in line 40 is true, none of the remaining ELSEs are even considered. Therefore, if the line length is 200, LC=LC+4, and even if it is true that 200 is greater than 127, the LC=LC+3 statement is NOT done. (If someone reading this is confused now, let them be SURE to talk to Alan or another good programmer to get straightened out lest it cost them hours of frustration. I repeat: IF/ELSEs are tricky.)

I do something a little bit different than you do, Alan, about figuring when to do the "pause" subroutine. Rather than comparing A/B to INT(A/B) to see if they are the same, I just see if I've printed B lines already. In the case of this particular code, it wouldn't be good enough to check for exactly 15 lines, so I check to see if I would print MORE THAN 15 lines and act accordingly.

Another difference - check out line 80. Sometimes, I don't bother to stuff the INKEY$ value into a variable. I didn't use A$ in line 80 like you did in line 530 of your code. In effect, I combined your lines 520 & 530 into one line.

Everybody's a critic. Remember - if it weren't for leaders like you presenting information, there wouldn't be anything for critics to piddle with. On the other hand, if a critic makes a mistaique, he really gets jomped onn. Yas/no? Keep up the good work.

Your secret admirer,

Humble Dave

"Henry! Did you deposit 993 million dollars today, or did I get into the First National Bank's computer again?"

UNDOCUMENTED COMMANDS IN 2.0 BASIC
I B M / P C

Reprinted from CSRA Newsletter
by Jim Graves

ENVIRON "name=(parameter)"

This command apparently functions the same as the SET command used at the DOS level. See page 10-21 of 2.0 guide.

SHELL "dos command"

This command apparently executes the DOS command contained within the quotes, keeping BASIC resident. The cursor is returned to the position where it was prior to executing the command. If used by itself (no arguments) it will take you to the DOS shell. To return from the DOS to BASIC, type EXIT.

IOCTL channel #,"argument"

This function is used to communicate with device drivers that use the IOCTL functions. The only reference to IOCTL is on page 14-6 of the 2.0 guide.

B U G R E P O R T

Patch for DOS 1.1 DISKCOPY and DISKCOMP bugs: DISKCOPY and DISKCOMP 1.1 has a bug which only manifests itself when you've got 320K or more memory and double sided drives. Diskcopy will get into an error loop and try to read past the end of the source drive. This short patch corrects the problem:

```
A> DEBUG DISKCOPY.COM
-E861 E8 74 00
-E8D8 3D 51 00 72 02 B0 50 A2 36 05 C3
-RCX
(Debug should now display CX 07D8)
Now enter: 7E3 (you enter 7E3)
-W
-Q
```

The patch for DISKCOMP is:

```
A> DEBUG DISKCOMP.COM
-E6EC E8 79 00
-E768 3D 51 00 72 02 B0 50 A2 95 04 CE
-RCX
(Debug should now display CX 0668)
```

Now enter: 673
-W
-Q

You Know You Are Getting Older When:

Contributed by: John Roy

Almost everything hurts. What doesn't hurt, doesn't work anymore.

It feels like the morning after the night before and you haven't been anywhere.

All the names in your little black book end in M.D.

You get winded playing chess.

You look forward to a dull evening.

You still chase women, but have forgotten why.

You turn out the lights for economic, not romantic reasons.

Your knees buckle and your belt won't.

You are 17 around the neck, 42 around the waist and 126 around the golf course.

You sink your teeth into a steak and they stay there.

You try to straighten the wrinkles in your socks and you find you aren't wearing any.

A little old grey-haired lady tries to help you across the street. She's your wife.

'Repair? Our Computer Just Sprung a Leak!'

'I'm Going to Lunch — Keep an Eye on Things.'

HEXDEC/BAS

by Jerry Dulin

```
10 'This program written September, 1981, by Jerry Dulin
20 'and runs in 8K, for Model 1, Level 2 TRS-80
30 'This program will both perform hexadecimal arithmetic
40 'and perform hex/decimal interconversions
50 'and will not accept error input.
60 '
70 CLS
80 CLEAR500
90 LN$=STRING$(64,".")
100 DEFDBLH,L,M,T,U
110 PRINT@79,"The HEX Arithmetic Scratchpad"
120 PRINT
130 PRINT"This program will let you put hexadecimal numbers
140 PRINT"and arithmetic operators directly, and will output
150 PRINT"the answer in HEX and additionally display the entire
160 PRINT"equation converted to decimal format.
170 PRINT
180 PRINT"The program will not accept any input involving a
190 PRINT"decimal point.  Invalid operators or hex inputs will
200 PRINT"simply result in the screen erasing itself and asking
210 PRINT"for a NEW input.
220 PRINT:PRINT"The program will  also  do direct HEX to DECIMAL
or
230 PRINT"DECIMAL to HEX conversions.
240 INPUT"    Hit <ENTER> to begin: ";E$
250 GOTO2090
260 STOP
270 C=1
280 U=0
290 K3=0:Y$="":J$="":B4=0
300 X$=""
310 FORK=1TOLEN(D$)
320 B$=MID$(D$,C,1)
330 IFB$=""THEN210
340 IFASC(B$)<=47THEN2180
350 IFASC(B$)>=58THEN2180
360 C=C+1
370 NEXT
380 U=VAL(D$)
390 IFU<=15THEN490
400 K3=INT(U/16)
410 B4=U-(K3*16)
420 IFB4>=10THEN470
430 J$=CHR$(B4+48)
440 Y$=Y$+J$
450 U=K3
460 GOTO390
470 J$=CHR$(B4+55)
480 GOTO440
490 IFU>=10THEN530
500 J$=CHR$(U+48)
```

```
510 Y$=Y$+J$
520 GOTO550
530 J$=CHR$(U+55)
540 Y$=Y$+J$
550 FORK=LEN(Y$)TO1STEP-1
560 F$=MID$(Y$,K,1)
570 X$=X$+F$
580 NEXT
590 'x$ now holds hex value of U
600 'U now holds what remans of original input
610 'D4 holds the original decimal input
620 RETURN
630 P$="":N=0:P=0:T=0:R=0
640 M=1
650 P=LEN(H$)-1
660 FORK=1TOLEN(H$)
670 P$=MID$(H$,M,1)
680 IFP$=""THEN2180
690 IFASC(P$)<=47THEN2180
700 IFASC(P$)<=57THEN760
710 IFASC(P$)<=64THEN210
720 IFASC(P$)<=70THEN740
730 IFASC(P$)>=71THEN2180
740 N=ASC(P$)-55
750 GOTO770
760 N=ASC(P$)-48
770 GOSUB850
780 P=P-1
790 T=T+R
800 M=M+1
810 NEXT
820 'H$ now holds the original Hex nput
830 'T now holds the converted decimal
840 RETURN
850 IFP=0THEN980
860 IFP=1THEN1000
870 IFP=2THEN1020
880 IFP=3THEN1040
890 IFP=4THEN1060
900 IFP=5THEN1080
910 IFP=6THEN1100
920 IFP=7THEN1120
930 IFP=8THEN1140
940 IFP=9THEN1160
950 IFP=10THEN1180
960 R=N*(16[P)
970 RETURN
980 R=N
990 GOTO1190
1000 R=N*16
1010 GOTO1190
1020 R=N*256
1030 GOTO1190
1040 R=N*4096
1050 GOTO1190
1060 R=N*65536
```

```
1070 GOTO1190
1080 R=N*1048576
1090 GOTO1190
1100 R=N*16777216
1110 GOTO1190
1120 R=N*268435456
1130 GOTO1190
1140 R=N*4294967296
1150 GOTO1190
1160 R=N*68719476736
1170 GOTO1190
1180 R=N*1099511627776
1190 RETURN
1200 CLS
1210 N$="":Z1=0:H$="":EQ$=""
1220   PRINT@64,"FORMAT:     (HEX)(1   Space)(+,-,X   or   *,/)(1
Space)(HEX)
1230 PRINT"For Example:  A0FF / 2
1240 PRINTLN$
1250 U=0:X$="":K3=0:Y$="":J$="":B4=0
1260 H=0:L=0:M=0
1270 PRINT@320,""
1280 INPUT"The Hex Equation is:   ";EQ$
1290 IFEQ$=""THEN1200
1300 FORK=1TOLEN(EQ$)
1310 N$=MID$(EQ$,K,1)
1320 Z1=Z1+1
1330 IFASC(N$)=32THEN1360
1340 H$=H$+N$
1350 NEXT
1360 GOSUB630
1370 H=T
1380 Z1=Z1+1
1390 H$=""
1400 O$=MID$(EQ$,Z1,1)
1410 IFO$=""THEN1200
1420 Z1=Z1+2
1430 FORK=Z1TOLEN(EQ$)
1440 N$=MID$(EQ$,K,1)
1450 IFN$=CHR$(32)THEN1480
1460 H$=H$+N$
1470 NEXT
1480 GOSUB630
1490 L=T
1500 IFO$="+"THEN1560
1510 IFO$="-"THEN1620
1520 IFO$="*"THEN1750
1530 IFO$="X"ORO$="x"THEN1750
1540 IFO$="/"THEN1810
1550 GOTO1200
1560 M=H+L
1570 U=M
1580 GOSUB390
1590 PRINT@512,"The HEX Answer is:     ";X$
1600 PRINT@640,H;O$;L;"=";M
1610 GOTO1890
```

```
1620 M=H-L
1630 IFM<0THEN1690
1640 U=M
1650 GOSUB390
1660 PRINT@512,"The HEX Answer is:     ";X$
1670 PRINT@640,H;O$;L;"=";M
1680 GOSUB1890
1690 M=ABS(M)
1700 U=M
1710 GOSUB390
1720 PRINT@512,"The HEX Answer is:      ";X$
1730 PRINT@640,H;O$;L;"=";M
1740 GOTO1890
1750 M=H*L
1760 U=M
1770 GOSUB390
1780 PRINT@512,"The HEX Answer is:      ";X$
1790 PRINT@640,H;O$;L;"=";M
1800 GOTO1890
1810 M=H/L
1820 M=M+.5
1830 M=INT(M)
1840 U=M
1850 GOSUB390
1860 PRINT@512,"The HEX Answer is:      ";X$;"
(To the nearest INTEGER)"
1870 PRINT@640,H;O$;L;"=";M"
(To the nearest INTEGER)"
1880 GOTO1890
1890 PRINT@832,"     Simply hit <ENTER> if you wish to continue,
or"
1900 E$="":INPUT"     Type the letter  'M'  if you wish the Menu
";E$
1910 IFE$="M"ORE$="m"THEN2090
1920 GOSUB2180
1930 CLS
1940 PRINT@4,"Enter H to convert Hex to Decimal"
1950 PRINT@192,"Enter D to convert Decimal to Hex"
1960 PRINTLN$
1970 E$="":PRINT@448,"NEXT: ";:INPUTE$
1980 IFE$="H"ORE$="h"THEN2010
1990 IFE$="D"ORE$="d"THEN2050
2000 GOTO1930
2010 PRINT@448,"Hex to Decimal: HEX= ";:INPUTH$
2020 GOSUB630
2030 PRINT@576,"Decimal value=";T
2040 GOTO1890
2050 PRINT@448,"Decimal to Hex : DECIMAL= ";:INPUTD$
2060 GOSUB270
2070 PRINT@576,"Hex value= ";X$
2080 GOTO1890
2090 IND=0:CLS
2100 PRINT@89,"MENU:"
2110 PRINT@192,"A: Hex Arithmetic
2120 PRINT@256,"B: Decimal to Hex Conversion
2130 PRINT@320,"C: Hex to Decimal Conversion
```

```
2140 E$="":PRINT@448,"Your Choice is: ";:INPUTE$
2150 IFE$="A"ORE$="a"THENIND=1
2160 IFE$="B"ORE$="b"THENIND=2
2170 IFE$="C"ORE$="c"THENIND=3
2180 ONINDGOSUB1200,2270,2200
2190 GOTO2090
2200 CLS
2210 PRINT@64,"Hex to Decimal Conversions:"
2220 PRINT@128,LN$;
2230 PRINT@320,"Your Hex Number is: ";:INPUTH$
2240 GOSUB630
2250 PRINT@448,"The Decimal Answer is: ";T
2260 GOTO1890
2270 CLS
2280 PRINT@64,"Decimal to Hex Conversions:"
2290 PRINT@128,LN$;
2300 PRINT@320,"Your Decimal Number is: ";:INPUTD$
2310 GOSUB270
2320 PRINT@448,"The Hex Answer is: ";X$
2330 GOTO1890
60000 SAVE"HEXDEC/BAS
```

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HON	HARDWARE ACCESSORIES
BURROUGHS	FURNITURE

"Bits of Newsletters"

By Dave Pedersen

GENERIC BASIC: Having trouble remembering your math operators? Scan this column in the Dec. 83 issue of Tulsa Computer Society for some memory aid.

TAKE A CHANCE?: A pair of Shugart Drives less power supplies for $250! Association Of Personal Computer Users Dec. 83 will explain how to order them with a schematic and Detailed Parts List for the power supply.

SYSTEM POWER PROTECT: APCU Dec. 83 also describes a simple circuit to control momentary power dropout.

DISK PROTECT: Ever boot up a disk wondering if the protect tab was on or off? With a simple SPDT switch installed on your drive, forget about TABS! Once again, see the APCU Dec. 83 newsletter for how to.

BOOBY TRAP: Attempting to copy a protected diskette may damage your disk drive WPG users group, issue 17.0 tells us. A new technique to protect disks against copy is by punching holes around the perimeter. If the disk was copied, the drive would attempt to read the whole diskette, and, catch the holes, which could tear the diskette and/or bounce the recording head mechanism off the platter, permanently damaging the disk drive. This copy protection can be checked by rotating the diskette in its sleeve while checking for these "booby traps".

ANOTHER MAIL LIST: Check out ERCC News Dec. 83 for a simple Mail List program to run on TRSDOS with provision for titles and organizational names. Looks great as a demonstration program of how complex programs can be developed from a series of basic modules which can be tied together in an appropriate manner to perform the desired functions.

BETTER LATE THAN NEVER!: Although starting Jan. 26, 1984, prior to you receiving this newsletter,a twelve part series on computer knowledge will be aired at 8:30 P.M. on WNET, channel thirteen in New York. The rest of the series known as "Bits and Bytes" will be broadcasted weekly. Definite competion for some of the sit-coms around.

HEAVY INTO ASSEMBLY LANGUAGE?: A thorough review on MZAL-Editor/assembler is given in the TCUG oct 83 issue. Run on mod I/III, MZAL was designed for professionals to facilitate the development of large scale hierarchically organized programs such as an operating system while accomplishing ETASM'S feats as well. Tired of your present DOS? Read this article and design your own while I'll just stick to TRSDOS.

SCRIPSIT/LC ZAPS: Assortment of zaps are given in the Dec 83 issue of READY including locations to change default values.

DATABASE MARRIAGE: Jeff Levin of LLIST, the Rochester S-80 Club's Nov 83 newsletter explains how to remove the stumbling blocks of getting PROFILE+ and Z-BASIC to work together.

MORE MEM FOR IV: Dec 83 MIRCO 80 GROUP details the steps required to bring the standard 64k ram up to 128k in short order.

* * *

Governmental Cows

Socialism: If you have two cows, you give your neighbor one of them.

Communism: If you have two cows, you give them to the government, and the government gives you some milk.

Facism: If you have two cows, you give them to the government, and the government sells you some milk.

New Dealism: If you have two cows, you shoot one, milk the other, and pour the milk down the drain.

Nazism: If you have two cows, the government shoots you and keeps the cows.

Capitalism: If you have two cows, you sell one and buy a bull. (You might even sell the bull's service.)

"I think they're from the computer graphics section."

********** MINUTES OF JANUARY, 1984 MEETING **********

by Pat Brinson

Due to the impending departure of our president, John Krause, the meeting on January 3rd was begun by suspending the general procedures for election of officiers. Names were placed in nomination for terms of office that would extend until June, 1984 and a voice vote was taken immediately. The officers elected were;

President - Bob Jackson
Vice-President - Herman Parks
Treasurer - John Roy
Secretary - Patricia Brinson

Ed Hicks will continue to be corresponding secretary. Don Beverly is the refreshment chairman; Bob Gould acts as publicity chairman and Mike Ciferri continues as hardware and purchasing chairman. Some vacancies that still exist are; legal chairman, advertising chariman and associate editor.

It was announced that the board has been unable to locate a lawyer from inside the club and a lawyer needs to be hired to draw up articles of incorporation. The main reason for such incorporation being the present liability of the officiers.

Bob Jackson pointed out some good and not so good computer programs that are currently running on channel 13. There was some interest expressed by members who would like to see a 20 minute program titled Fast Forward.

The loss of John Krause as president also means the loss of our newsletter duplication. A motion was moved and passed that the club spend approximately $160 per month for the reproduction of the newletter in lieu of any member volunteering to do it for less.

Bob Jackson announced there will be a new policy of bringing the disk library to meetings where the disks will be available for immediate sale. The assistant director of the cassette library also has materials available at each meeting.

John Krause will become an Honorary Life Member at this time. (There was some suggestion that this membership be in force as long as John continues from Rochester his much valued service of indexing each newletter.)

At the last Board meeting a Steering Committee was formed which will consist of the following members;
Alan Abrahamson, Sid Gross, John Roy, Dave Pedersen, Herman Parks and Herb Kanter.

John Krause stayed in character and went out with one last presentation. This time he gave us lots of information on how to

edit a basic program from the word processing program, Scripsit.

The book, Using Scripsit, was recommended and passed around. It costs $21.95 from Wadsworth, Inc. 7625 Empire Dr., Florence, Kentucky, 41042. It can be purchased locally at Dalton Bookstores.

While still on the subject of Scripsit, Bob Jackson mentioned that he has a program which cross references all Scripsit commands (14 pages) and 2 Scripsit tutorials he will put in the library.

Perhaps Bob has been watching a familiar Thursday night television show which admonishes its members leaving the meeting to "Be careful out there!". As we were about to adjourn Bob was heard to say "Don't get involved in computers - wait awhile."

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********** MINUTES OF FEBRUARY, 1984 MEETING **********

by Pat Brinson

The meeting started at 7:45 on the seventh of February. Our president, Bob Jackson, asked for volunteers on two committees. Both the set up committee and clean up committee need regular support. A couple new members and some old regulars were recruited. (During the break I caught one of the members of the refreshment committee taking his responsibility so seriously that he was conducting an on the spot survey as to the popularity of the various types of cookies being eaten. Rest assured there will be more peanut butter cremes at the next meeting!).

Alan Abrahamson announced that he had heard rumors to the effect that IBM has not renewed the contract they had with Microsoft and IBM may well be coming out with a new PC that will be much more difficult to clone than the present one.

Help was sparce for the few questions that were asked during the information segment. From our knowledgable leader came the explanation that there is a small creature that lives in his computer and accounts for the otherwise unexplainable fact that programs do not run one day and yet run on the next.

The knowledge that our new video screen will be get its first run next month was great news.

One solution to the challenge in the newsletter had been carefully worked out ahead of time on a Model III while another solution was rapidly worked out on the spot by members who whipped out their Model 100's to make us all envious. Thanks to Marvin Ginsberg and Mike Brotherton for their efforts.

When Netta Stern began to explain the government rules for

deducting microcomputers from personal income tax all members paid great heed. The government would have been pleased at the exact and professional definitions she gave for each category. The typewritten breakdown she passed to each of us further clarified the breakdowns. (I know I have made a number of copies of it and distributed them to my friends who are proud owners of new computers.)

Mike Ciferri came forth with a faulty disk drive, diagnostic materials and a video camera to project the complete process onto the video screens. His talk on the alignment of the disk drive will encourage many to enter an area they have not entered before.

Although the meeting lasted until twenty minutes passed ten everyone left pleased with all the knowledge they had gained.

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Voice of the '80
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