

Mid Illinois

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MID-ILLINOIS
COMPUTER RESOURCE ORGANIZATION
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MICRO/99 Newsletter
Volume 4, Number 7
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MICRO/99 is a not-for-profit group dedicated to the sharing of information and public domain software for the Texas Instruments 99/4A home computer. Members have free access to our library of several hundred programs on cassette and diskette. Meetings are held at 7:00 p.m. on the third Thursday of each month at the Illinois Agriculture Association building, 1701 Towanda Avenue, Bloomington. Attendees sign in with the guard at employee entrance number 4 at the rear of the building. Turn left at the sign for the main reception area and go down the stairs on the far side of it. Visitors are especially welcome, and may attend one meeting free of charge. Annual dues are \$15 per family.

*** MEETINGS: SEPTEMBER 18 & OCTOBER 16, 1986 ***

The September 18, 1986 meeting will feature Sam Shank with a demonstration of the fairware data base program, PR-BASE. This data base manager and report writer has received much favorable comment in many TI publications lately. Much of the system is written in assembly language. Copies of it are available from the club library. If you use it, we strongly urge you to send author William Warren at least the token contribution of \$10 that he asks for.

Version 3.3 of FUNLWRITER, the remarkable TI Writer/Editor Assembler/Disk Manager 1000 control program is now available in our library. This version is said to be the final one. Anyone familiar with previous versions will certainly want to get the latest update. Authors Tony and Will McGovern have placed it in the public domain, but we join several other newsletters in suggesting that a monetary token of appreciation would still be appropriate from those who use it.

Time and money pressures caused the decision made at the last meeting to publish this newsletter only bi-monthly. We may get a post card reminder out before the next meeting, but in any case, we will still meet every third Thursday evening. The program for October 16 is yet to be determined. Any volunteers?

At all meetings members are encouraged to share any information gleaned from magazines, catalogs, bulletin boards, newsletters from other clubs, personal experience with products, etc. If you have a computer related question or problem, someone at the meeting may have an answer or suggestion for you. And, you are encouraged to bring and show any interesting program you found or wrote recently.

**** SMART REMARKS ****

Special thanks to Garth Bock, sysop of the local Prairie BBS for discussing telecommunications and demonstrating his BBS for us at the August meeting. Garth has the knowledge, the experience, and the contagious enthusiasm that make for an exceptional program.

The fourth annual Chicago TI-Faire will be held on Saturday, November 1, 1986, again at Triton College. I'll bet that all who went last year will want to go again. I'll be glad to take a station wagon full again, or maybe we'll have to arrange for a van this year.

Sid Smart, President

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PRINTGEMS

For \$19.99, the club has recently made available a disk containing my printer utilities, published in the newsletter over the past year and revised this summer. The disk itself contains an extensive documentation file, but I would like to give you a very shortened version here, in hopes that it will entice you to buy the disk. I AM NOT PROFITING IN ANY WAY from the sales of this disk - the funds are going directly to support this user group, which quite frankly is in desperate need of them. I hope that all the readers of the LA 99'er User Group Newsletter will in fact BUY this disk, and not copy it from a friend, or download it from a BBS, because we cannot continue to publish this fine newsletter without the funds to back it up!!

DSK1.PRINTGEMS Format 9 DSSD
 14 Files Used= 183 Free= 537

| Filename | Size | Type | Length | P |
|-------------|------|---------|--------|---|
| DATAEMERGE | 6 | DIS/VAR | 163 | |
| DATAEMERGE1 | 11 | DIS/VAR | 163 | |
| DATAEMERGE2 | 17 | DIS/VAR | 163 | |
| DOCS | 83 | DIS/VAR | 88 | |
| MAKE/DATA | 6 | PROGRAM | 1199 | |
| MAKE/DATA1 | 6 | PROGRAM | 1110 | |
| MAKE/DATA2 | 6 | PROGRAM | 1039 | |
| QUADCOL | 11 | PROGRAM | 2386 | |
| SWAYS | 9 | PROGRAM | 1919 | |
| SWAYS/NOOT | 5 | PROGRAM | 784 | |
| SWYS1/NOOT | 5 | PROGRAM | 784 | |
| SWYS2/NOOT | 5 | PROGRAM | 784 | |
| VARLISTER | 8 | PROGRAM | 1663 | |
| XBPRNTDOCS | 3 | PROGRAM | 271 | |

Following is an explanation of all the programs on this disk:

First, the documentation file is called DOCS. It may printed by any of three methods: (1) load it into the editor of TI-WRITER and print it with the PF function (do not use the formatter); (2) use the Editor/ Assembler Edit screen, option #4 (PRINT) without loading in first; or (3) RUN the program XBPRNTDOCS in XBasic (which handles the

whole job for you). If using (1) or (2), the printer device name should include .LF (e.g. PIO.LF).

There are three runnable programs on the disk; all must be used in XBasic. The first is QUADCOL, already in widespread use by newsletter editors (including this one!). This program produces pages of two, three or four columns from ordinary TI-WRITER text files. You first use the TI-WRITER formatter to produce a file with the your desired column width, with the output going to disk rather than printer. Right-justifying is desirable but not necessary. Printer control codes as well as the formatter's underline and emphasize commands can all be used. A small amount of manipulation must be done on the output file before it is ready for QUADCOL. You then indicate your choice of columns per page, line feeds, and lines per page (the last two being useful if you wish to squeeze more than 66 lines on a page). Each page will read column to column sequentially, and the columns on the last page will be of equal length.

The second program is SWAYS, which will print a text file, such as those produced by the E/A or TI-WRITER editors, sideways on an Epson compatible printer, using the printer's graphics capabilities. The only restriction on the text file is that it must contain only ASCII characters. There are provisions for shorter than 80 character lines, and for chaining files together. Being a basic program, it of course runs rather slowly, but it works.

There is a companion group of nine programs that go with SWAYS, but are there for your edification only. As described in the DOCS, the program depends on a series of data statements, which cannot be read, that give the graphics information for each ASCII character to the printer. The program MAKE/DATA was used to produce the data statements, in a MERGEable file named DATAEMERGE. The program SWAYS/NOOT is what SWAYS looked like before the data

statements were merged in. The other two sets of three programs (carrying the numbers 1 and 2 in their names) are similar programs to use the printer's double and quad density graphics capabilities. I did not find the difference to be striking, but they are there for you to use if you wish. Simply merge the appropriate DATAEMERGE file into the /NOOT file to produce the alternative versions of SWAYS.

The third program, VARLISTER, is especially useful to anyone writing text which incorporates Basic programs (e.g. teachers or newsletter writers). Whereas the TI normally can produce only 80 column program listings when output to disk or printer, with VARLISTER you can produce a listing of any width that you wish. There are provisions for margins and printer control codes. For instance, you can produce screen-sized 28 column listings, useful for those who need to type in exactly what they see, or 168 column listings to save space (my printer can do that in compressed elite mode). It should be noted that in the June, 1986 issue of The Smart Programmer, Craig Miller published a method of changing the width with the BrainCracker(tm). VARLISTER, however, allows you to go rapidly back and forth between different sizes.

The DOCS file explains all this in greater detail and also takes you through each program so that you can understand it, and even modify it if you wish. To do this you will need printouts of each. DO NOT PRINT a listing of SWAYS, or of any of the DATAEMERGE set. They are full of control characters and will make your printer go crazy! (For instructional purposes, list SWAYS/NOOT instead.)

I hope you enjoy the programs. I don't want to "belabor" the point, but I have labored long over them for the good of the club. PLEASE SUPPORT YOUR CLUB.

Tom Freeman

The following TI-WRITER tips were downloaded from Compuserve by Ray Fisher.

TI-WRITER TIPS

Q: Can TI-WRITER save a file in any format besides D/VB0?

A: Yes, if you use the PF command to print a file, you can insert a "F" in front of the filename, as in: F DSK1.MYFILE. The F will cause the file to print in Display/Fixed 80 format.

Q: After margins are set, can the left margin be disabled?

A: The keystroke CTRL-Y will temporarily disable the left margin.
NOTE: there is no right margin release.

Q: Can a file be printed without the control characters?

A: The use of a "C" in front of the filename strips any control characters from the file as it is sent.
example- C PIO

Q: How do you use the Text Formatter, and what are Format Commands?

A: To start off with, the Formatter is a utility program that reads in a file and interprets designated characters, or groups of characters, and performs certain functions on the text of the file. To use the Formatter, you install these groups of characters, called Format Commands, into your text where needed. Most of these commands follow the rule of starting with a period (.) and starting at the beginning of a line. Numerical values are usually required, and must also follow in order. There are some format commands that consist of only one character, such as the ambersand (&), which underlines the following text. A complete list of the Format Commands, and their meanings, is in the Forum Data Library-0, under the name FMTCMD.HLP.

Q: How do Transliterate commands work?

A: The Transliterate command is a special type of Format command that redefines any ASCII key value to equate to a string of character values. This is used to send specific code values to a printer in order to activate special functions. The format is....

".TL xxx:aaa,bb,ccc"

where xxx is the key to be redefined, and aa,bb,cc, etc are the subsequent code values being sent. You will have to check your printer manual to see which codes do what.

Q: How do you reformat a table created in Fixed mode without drawing the whole table into one paragraph?

A: Unfortunately, this is not a convenient task. The only way is to insert a Carriage Return symbol after each line and reformat again.

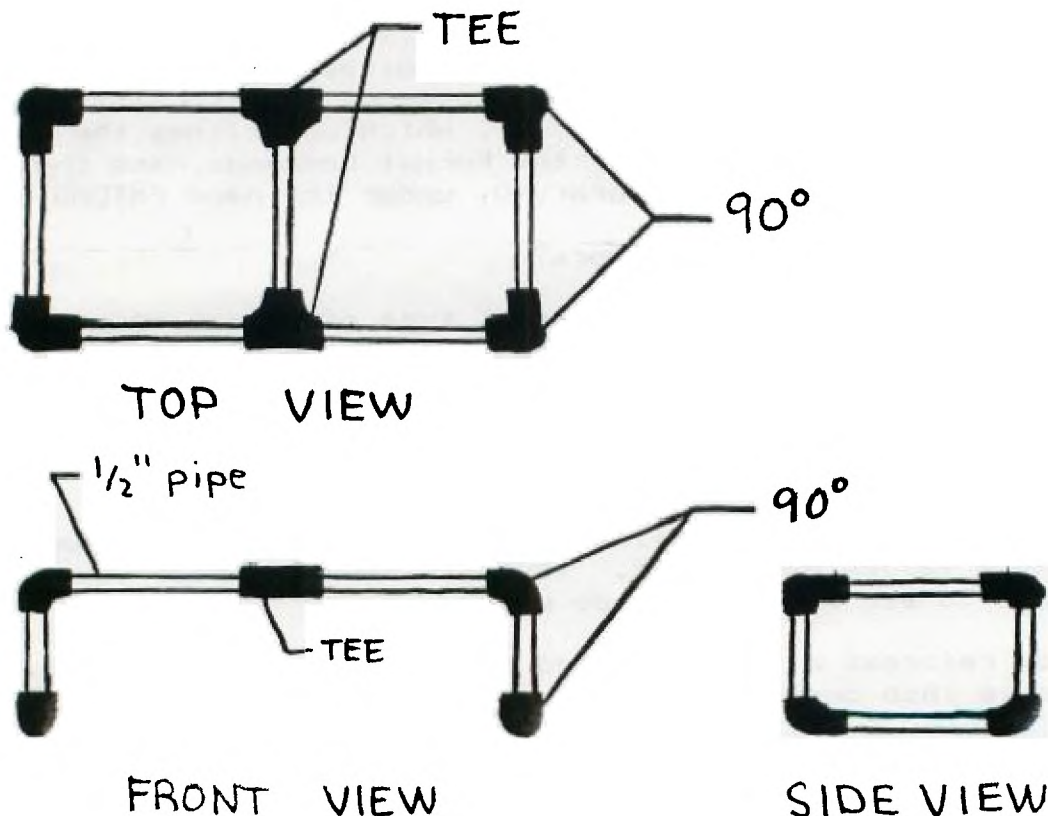
HOMEMADE PRINTER STAND

Recently, I purchased a second printer for my daughter. I wanted to set her printer on a stand with the paper underneath. However, I could not find anything locally that would serve the purpose as a printer stand so I decided to make my own.

I concluded I could make a custom stand out of PVC (plastic) water pipe. I used 1/2" diameter pipe, but I'm sure you could 3/4" diameter without any problems. To make one like in the sketches, below you need about 4 of 5 five feet of pipe, eight 90 degree fittings and two tees. You might get by without glueing the joints, but I wouldn't recommend it. So you should plan on buying some PVC pipe cement. If you have to buy all of the needed material, it will cost between seven and ten dollars.

The first step is turn your printer over and see what length and width stand fits best. Next determine the height you want. Finally, cut pieces to build the stand remembering that the pieces fit in the fittings, so measure accordingly.

Looking at the top view shows the printer will sit on a frame that looks like a flattened I. The front view shows the stand sits on the desk with two runners. Remember to assemble the stand first without glueing the joints to check how it fits.



PROGRAMS

Below are several interesting programs. All except SCROLL DOWN (requires X-BASIC) will run in Basic or EXTENDED BASIC. The program to the left will convert numbers between DECIMAL and HEXADECIMAL. It appeared in the JULY86 issue of the WEST PENN 99er's newsletter. SCROLL DOWN was in the MARCH86 issue of the Decatur 99er's newsletter. STRANGE PROGRAM is from the MID-SOUTH 99 users group and was in their JULY86 issue.

```
100 H$="0123456789ABCDEF"
110 CALL CLEAR
120 PRINT TAB(7):"DECIMAL-TO
-HEX": :
130 PRINT TAB(7):"HEX-TO-DEC
IMAL": :
140 PRINT TAB(7):" CONVERSIO
NS ": :
150 PRINT "INPUT THE NUMBER
THAT YOU"
160 PRINT "WANT TO CONVERT."
: :
170 PRINT "PRECEDE THE NUMBE
R WITH '#'"
180 PRINT "IF YOU WANT TO CO
NVERT HEX"
190 PRINT "TO DECIMAL"
200 INPUT "N= ":I$
210 IF LEN(I$)<1 THEN 200
220 IF SEG$(I$,1,1)<>"#" THE
N 290
230 N=0
240 FOR I=2 TO LEN(I$)
250 N=16*N+POS(H$,SEG$(I$,I,
1),1)-1
260 NEXT I
270 N$=STR$(N)
280 GOTO 350
290 N=VAL(I$)
300 N$=""
310 N$=SEG$(H$,N-16*INT(N/16
)+1,1)&N$
320 N=INT(N/16)
330 IF N>0 THEN 310
340 N$="#"&N$
350 PRINT : "I$&" = "&N$"
360 PRINT : "PRESS ANY KEY
TO CONTINUE"
370 CALL KEY(0,K,S)
380 IF S<1 THEN 370
390 GOTO 110
```

```
10 REM JUNE86 MANASOTA USER
GROUP NEWSLETTER
20 REM AUTHDR UNKNOWN
30 REM "NONSENSE"
100 CALL CLEAR
110 CALL SCREEN(8)
120 RANDOMIZE
130 A=INT(24*RND)+1
140 B=INT(32*RND)+1
150 C=INT(95*RND)+32
160 D=INT(16*RND)+1
170 E=INT(16*RND)+1
180 F=INT(16*RND)+1
190 CALL COLOR(D,E,F)
200 CALL HCHAR(A,B,C)
210 G=INT(5000*RND)+110
220 CALL SOUND(300,6,5)
230 FOR X=1 TO 25
240 NEXT X
250 GOTO 130
```

```
100 ! *****
110 ! * SCROLL DOWN *
120 ! *****
130 CALL INIT
140 CALL LOAD(8196,63,248)
150 CALL LOAD(16376,83,67,82
,76,68,78,48,0)
160 CALL LOAD(12288,2,224,13
1,224,4,192,2,1,37,20,2,2,22
4,4,32,32,44)
170 CALL LOAD(12306,2,1,36,2
44,2,2,3,0,4,32,32,36,4,91)
180 FOR C=9460 TO 9492 :: CA
LL LOAD(C,128):: NEXT C
190 !.....
195 ! ** PROGRAM TEST **
200 CALL CLEAR
210 PRINT "* TEST *"
220 FOR UP=1 TO 20 :: PRINT
:: NEXT UP
230 FOR DOWN=1 TO 20 :: CALL
LINK("SCRLDN"):: NEXT DOWN
240 GOTO 220
```

```
10 REM STRANGE PROGRAM
20 REM BY GARY COX AND
30 REM MORTON DWORSHAK
40 REM
50 CALL CLEAR
60 CALL SCREEN(14)
70 INPUT "STEP 1-10? ":ST
80 FOR X=1 TO 10 STEP ST
90 CALL COLOR(13,6,X+1)
100 CALL HCHAR(12-X,16-X,128
,2*X+1)
110 CALL HCHAR(12+X,16-X,128
,2*X+1)
120 CALL VCHAR(12-X,16-X,128
,2*X+1)
130 CALL VCHAR(12+X,16+X,128
,2*X+1)
140 FOR DELAY=1 TO 50
150 NEXT DELAY
160 NEXT X
170 FOR DELAY=1 TO 200
180 NEXT DELAY
190 PRINT "PRESS ANY KEY TO
CONTINUE"
200 FOR X=2 TO 16
210 A=(RND)/3)+110
220 CALL SOUND(300,A,2,A*110
,2,A*520,2)
230 CALL COLOR(13,6,X)
240 CALL SCREEN(X-1)
250 FOR DELAY=1 TO 10
260 NEXT DELAY
270 CALL KEY(0,K,S)
280 IF S<>0 THEN 50
290 NEXT X
300 GOTO 200
```

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```
*****
*      MMM   MMM   IIIIII   CCCCCC   RRRRRRRR   00000000   *
*      MM M M MM   II      CC      RR      RR   00   00   *
*      MM M M MM   II      CC      RRRRRRRR   00   00   *
*      MM  M  MM   II      CC      RR      RR   00   00   *
*      MM      MM   II      CC      RR      RR   00   00   *
*      MM      MM   IIIIII   CCCCCC   RR      RR   00000000   *
*
*
*      The MID ILLINOIS COMPUTER RESOURCE ORGANIZATION
*****
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