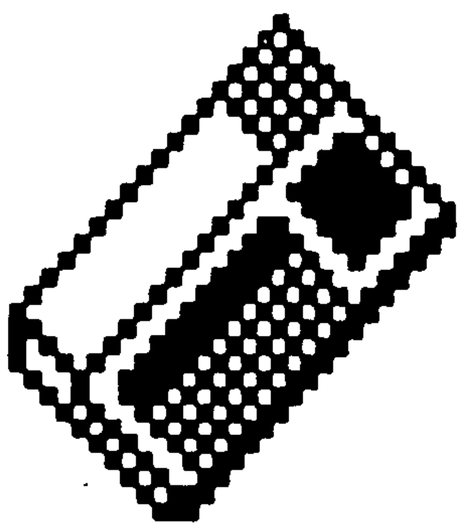

HUG

HOUSTON USERS GROUP

JUNE

1985

PROP.of HUG
SET "A"
c/o R.Lumpkin
Houston Texas
713-469-5089

HUG TIBBS - (713) 699-2073
24-hour BULLETIN BOARD

MEETING SCHEDULE

FIRST SUNDAY OF EVERY MONTH
(2nd Sunday if 1st Sunday
is on a holliday weekend)

****

AT THE NEXT MEETING

SUNDAY, JUNE 2, 1985 2:00 P.M.

St. John's School - 2401 Clairemont

The HUG meeting program this month will deal with the use of Bulletin Boards. We will attempt to hook up to the HUG TIBBS and possably other boards from the meeting. (see page 3)

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IN THIS ISSUE

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1985 HUG OFFICERS

President ---	BILL KNECHT ... 473-5713	Secretary -	CHIA GREER ... 668-4500
VP/Membership	DON LEWIS 353-5295	Treasurer -	DAVID MATHER . 941-1497
VP/Program --	SANDOR KARPATHY 955-1138	Librarian -	LARRY PIPKIN . 499-9991
VP/S.I.G. ---	MARK CRUMP 467-2541	TIBBS/SysOp	STEPHEN FOSTER unlisted
Exec. Asst. -	TOM JAY 850-0222	Editor ----	CECIL CROWDER 487-5530

****

PRESIDENT'S REPORT

This report is a pleasure to write this month, as I am going to tell you about some of the members who are putting forth an extra effort and really working for HUG. Our Constitution committee has done an excellent job in its draft of a proposed Constitution for our group. The Board will be reviewing this proposal and making recommendations, then it will be brought to the membership. If you have ever tried to write a document like this, you know the worked involved. Chia Greer and her committee should be commended for this.

Mark Crump came forward and was elected our new Special Interest Group Vice-President and he has some good ideas. We will be changing the way the groups have been operating. In the past the groups have been set up and would meet each month, but now we will focus on seminar type activities and one-time educational programs. Let's all give Mark our support and suggestions on what we would like to include.

Another member's work must be recognized. We have a member that joined HUG about a month ago. Rogers Mills moved here from Florida where he had been active in a user group there. When one of our disk drives on HUG-TIBBS broke, Rogers volunteered to check it out and within 24 hours of getting the drive, had it repaired. This saved us time in taking it to a repair shop and also the cost of repair. We are always happy to get new members, but Rogers looks like a real asset to HUG. Be looking for more from him. I'm starting to think... "Where there's a Mill there's a way!"

Another contribution has been made in a future officer for HUG. Congratulations to Rocky & Jane McAshan on their new son, Robert Arthur, born on April 19th.

I would also like to say thanks to Bill Rister for the help he has been giving Stephen on HUG-TIBBS, such as replacing the fan in the P-Box and working on the cable needed for 1200 Baud operation.

One other bit of appreciation should be noted. Thanks to all our officers for their work and support, and to anyone else I may have failed to mention.

Bill W. Knecht

==========

SOFTWARE REVIEW

SPRITE BUILDER & SPRITE PATTERNS
HUG Library No. 1065 & 1067

We now have in our library what I think is the best sprite utility program ever written for the TI 99-4A. This program, called SPRITE BUILDER, comes from John Taylor of Florence, Alabama.

The program allows you to draw your sprites on the screen and save them to disk (or cassette version HUG 1066). You can call them up later for editing to use with other programs. You can call up as many as 4 different sprites and decide which ones you want. But the best option of the program is that you can have SPRITE BUILDER write the 64 character Hex-code directly to a merge file to use in your program. You tell it what line numbers to use and what Character code. This is real handy when working witih several sprites. No more typing in the codes, just merge them. Other features of the program include speech, flash & overlays, magnification and excellent documentation to view on screen or for printout.

If you have trouble designing sprites, another disk SPRITE PATTERNS come with 125 sprites already drawn. These can be called up by SPRITE BUILDER and used in your programs. I personally use these and have started another pattern disk of my own designs, so I will have them available when I need sprites for my programs. This disk comes with a program called SLIDESHOW which allows you to view all 125 sprite patterns on the disk.

John is to be congratulated on these programs. If you do any programming using sprites, you should give these two programs a try. You won't be disappointed. Disk version requires 32K, 1 drive, 1 disk for SPRITE BUILDER, 1 disk for SPRITE PATTERNS, optional printer for printing instructions. Cassette version requires cassette, 32K.
-Bill Knecht

==========

HUG TIBBS NEWS

Due to failing health, Stephen Foster, HUG SysOp, gave his resignation with a recommendation that I be elected SysOp in his stead.

With approval of the board, I have moved the equipment and it is up and running at (713) 487-5530. Some of the equipment needs replacing and there also needs to be additional equipment added. Stephen was running the BBS with what could be called a shoestring with two knots in it and frayed many other places. He had requested but not insisted for additional equipment just before he resigned. The biggest need now is more drives. We are also running without the clock, due to it's failure.

There are many things that I hope to do with the BBS provided the membership aproves me as SysOp, but it will take time and Stephen's shoes are going to be hard to fill.

We all owe Stephen much appreciation and thanks for the things he has done for HUG as well as being a very close friend to some of us, myself included. My prayer is for his health to be restored. ... Cecil

==========

June HUG meeting:

Well, summer is upon is and there are many outdoor activaties that beg for our time. There are baseball games to go to and that swimming pool just can't seem to stop calling, so who would want to stay inside and get behind the keyboard of the computer anyway? This is a question that will constantly pop up during the next few months. Those programs that we desperately "need" can easily wait until September.

But since we are going to spend less time computing, it will be hard to keep up with our computer friends, who are doing the same thing. This is where the faithful computer comes in handy. Messages can be left via electronic mail on the local Bulletin Board. The BBS systems that we have here in town can be utilized to circumvent the many activaties that keeps us from home.

This month the program at the HUG meeting will focus on utilizing the computer by MODEM. We will attempt to log on to some local bulletin boards and try to get a feel for what type of information they contain. In addition, we will give a short presentation on how best to utilize national systems like Compuserve or the Source.

For those of you who do not have a modem this program should give a great insight into what you are missing. And for those of you (us) who have modems the program should give you a few pointers on how others utilize these systems.

The remainder of the time for the meeting will be devoted to questions and answers. There is no better way to learn than to ask a question and be able to receive an answer that will help solve the problem.

So if you want to know what TELECOMPUTING is all about, or have questions (or possibly answers) that others may be interested in, come and join us.

Sandor A. Karpathy, VP/Programs

==========

ATTENTION USER GROUPS

I try to keep a updated address with the user groups that we are exchanging newsletters with, but at times there are still problems that arise. If I am mailing to you at an outdated address please notify me and I will correct it.

Also if you will, please check your address for Houston Users' Group as there are many still mailing to last year's address and some still mailing to even another address.

Thanks for your newsletter and your cooperation. -Cecil

HOUSTON USERS' GROUP
P.O.BOX 5310
PASADENA, TX. 77508-5310

==========

SPECIAL THANKS to Rogers Mills for doing 3 pages of newsletter for me this month. ... Cecil

PRINTING WITH FILES

There are always some things that are explained somewhere but somehow or another escape the casual observance of a computer user. It makes little difference if you like to program your TI 99/4A or you simple want to use some of its capebilities, ie a simple task made easy by just knowing how the thing works. So here is some basic knowledge on how the PRINT statement works in relation to the FILE system of the computer.

In a line from a famous movie : Blondy, its' got to have a name or a number! (Can you name the movie and the character ?) This is a clue to the subject about to be covered. The PRINT STATEMENT of TI-BASIC and EX-BASIC is set up a a particular fashion that remains consistant throughout the programing language. Understanding how this is done alows the USER (that's you) to write programs in a more simplified manner while obtaining professional results. The clasic response to this aproach is the old standard saying ' You don't need to know anything about computers to use them.' Such an approach leads to the driver of a car with a flat tire in the middle of nowhere! His chances of survival grow dim when he can not change the tire even with all of the tools before him!

So on with the information on 'PRINTING WITH FILES'. Every print statement has a file number, even the print statements that are not given a file number are given a file numbe by our old friend 'DEFAULT'! Now this fellow gets around. It seams sthat he is always doing something to keep things on the move. So let us see what he is doing with the print statement. After you see what is happening then printing with files will make a little more sense. Naturally I will include a short program to demonstrate the text being put forth here today.

OK! Here we go! The computer 'PRINTS' everything by file numbers. Without a number it would not know where to send the information too! This includes the screen! So theprint statement will always have the number assign to it by either the user or 'DEFAULT'. Default, for the print statement is file number 0. The internal programing of the computer has been set to send the information in a print statement to the screen if the file number is 0. All other file numbers must be assigned by the programmer of the software. The 'FILE' number becomes the 'TRAFIC COP' of the print statements. The 'FILE ATTRIBUTES' defines how the file is to be handled and to where it is to be directed.

Hard to beleive? Well here is the short demo that will help you see things a little clearer.

```
100 PRINT "THIS WILL PRINT TO
 THE ":"SCREEN"
110 PRINT #0:"THIS WILL PRINT
TO THE SCREEN"
120 PRINT #0:"THE NEXT STATEM
ENT WILL CAUSE":"AN ERROR AND
STOP THE PROGRAM"
130 PRINT #1:"ERROR ERROR ERR
OR ERROR ERROR"
```

Ok! Now that you see how the computer uses file numbers and that it uses them ALL of the time you can begin to understand how to use them. (You might even want to learn how to change that tire if you don't know already.) But there is much more to learn about printing with files.

To print to a file you must know what a file is. So let us review what we have discovered. So far. the little program has demonstrated that the screen is file number one. This is part of the default programing. (There's that fellow called DEFAULT again.) If you leave the file attributes out of your print statement. the default is file number 0. If you put the wrong file number in the computer will detect an error. So the FILE NUMBER is the directory of the computer as far as where it is to send ANY information. It becomes the road map of the file system. Our friend the traffic coo looks at the the file number and directs the information to the correct destination.

OK so far? Well here is just how you accomplish the task of setting up your files. So here is the statement that is responsible for just that! The OPEN STATEMENT is the author of the file directory. It has various parts. each part doing a simple job. These parts are the FILE ATTRIBUTES. Each part goes into making the file. Not all files have all of the same components or elements. For the sake of description at this point. the files to be demonstrated here will be for the screen,the printer and the Speech synthesizer.

```
100 OPEN #1:"SPEECH",OUTPUT
```

A file is nothing more than a place to put some information. It can be any kind of information, from text to data of some sorts. In this case the file is the Speech synthesizer. It CAN ONLY BE USED WITH THE TE-II command module. So if you have the TE-II and the Speech Synthesizer you can use this statement otherwise you can not. Now let us look at the statement to see it's parts.

The first part is the line number of a program.(This is easy right?) The next part says. in the instruction code, That this is a definition of a file. (That is simple enough.) The next part is the FILE NUMBER. (Remember the movie?, Its got to have a name or a number!) The next part is where the file is to be directed to. (The information for our 'tratic cop'.) The next part describes the 'vehicle' that our file is to travel in. In this case the 'vehicle' is rather simple for the internal programing of the TE-II will determine the rest of the attributes by our friend DEFAULT.

Now all we need is a short program for demonstration and we will close the article. The next article in this series will deal with more file attributes.

PROGRAM EXPLANATION

Line 100 clears the screen.

Line 110 will print to the screen. the screen title.

Line 120 will skip a space or rather print a blank line on the screen.

Line 130 will print the title to the screen as in the same manner you are accustom to.

Line 140 will print several blank lines to scroll the title up the screen.

Line 150 and 160 is a delay loop to stop the action for 100 milli-seconds .

Line 170 clears the screen.

Line 180 prints a message to the screen and scrolls it up the screen.

Line 190 opens a file to the Speech Synthesizer to allow the programming in the Speech Synthesizer to produce speech.

Line 200 and 210 provide a 100 milli-second delay in the program.

Line 220 clears the screen.

Line 230 prints a message to the screen.

Line 240 and 250 enters a 100 milli-second delay into the program.

Line 260 is an INPUT STATEMENT with a prompt to allow text to be entered into the computer.

Line 270 clears the screen.

Line 280 prints the text you entered on the screen.

Line 290 scrolls the message up the screen.

Line 300 prints the same message to the screen using the file number zero.

Line 310 ,320 and 330 sends the text in the program to the Speech Synthesizer to speak a message to you.

Line 340 sends the message you typed in the input statement to the Speech Synthesizer.

Line 350 clears the screen for the next loop.

LIne 360 is the goto statement to develop a continues loop for the program.

```
100 CALL CLEAR
110 PRINT #0:"    PRINTING W
ITH FILES   "
120 PRINT
130 PRINT "    PRINTING WITH
 FILES"
140 PRINT ::::::::
150 FOR DELAY=1 TO 100
160 NEXT DELAY
170 CALL CLEAR
180 PRINT #0:"THE NEXT STATE
MENT IS THE":"OPEN STATEMENT
":::::
190 OPEN #1:"SPEECH".OUTPUT
200 FOR DELAY=1 TO 100
210 NEXT DELAY
220 CALL CLEAR
230 PRINT #0:"THE NEXT STATE
MENT IS THE":"INPUT FOR THE
PROGRAM"
240 FOR DELAY=1 TO 100
250 NEXT DELAY
260 INPUT "TYPE IN ANY TEXT"
:MGS$
270 CALL CLEAR
280 PRINT MGS$
290 PRINT ::::::
300 PRINT #0:MGS$
310 PRINT #1:"LINE 280 PRINE
D TO THE SCREEN"
320 PRINT #1:"LINE 300 PRINE
D TO THE SCREEN ALSO "
330 PRINT #1:"THE LAST THREE
LINES ARE PRINTIN TO THE SPE
ECH SYNTHESIZER"
340 PRINT #1:MSG$
350 CALL CLEAR
360 GOTO 260
```

TI-WRITER TIP

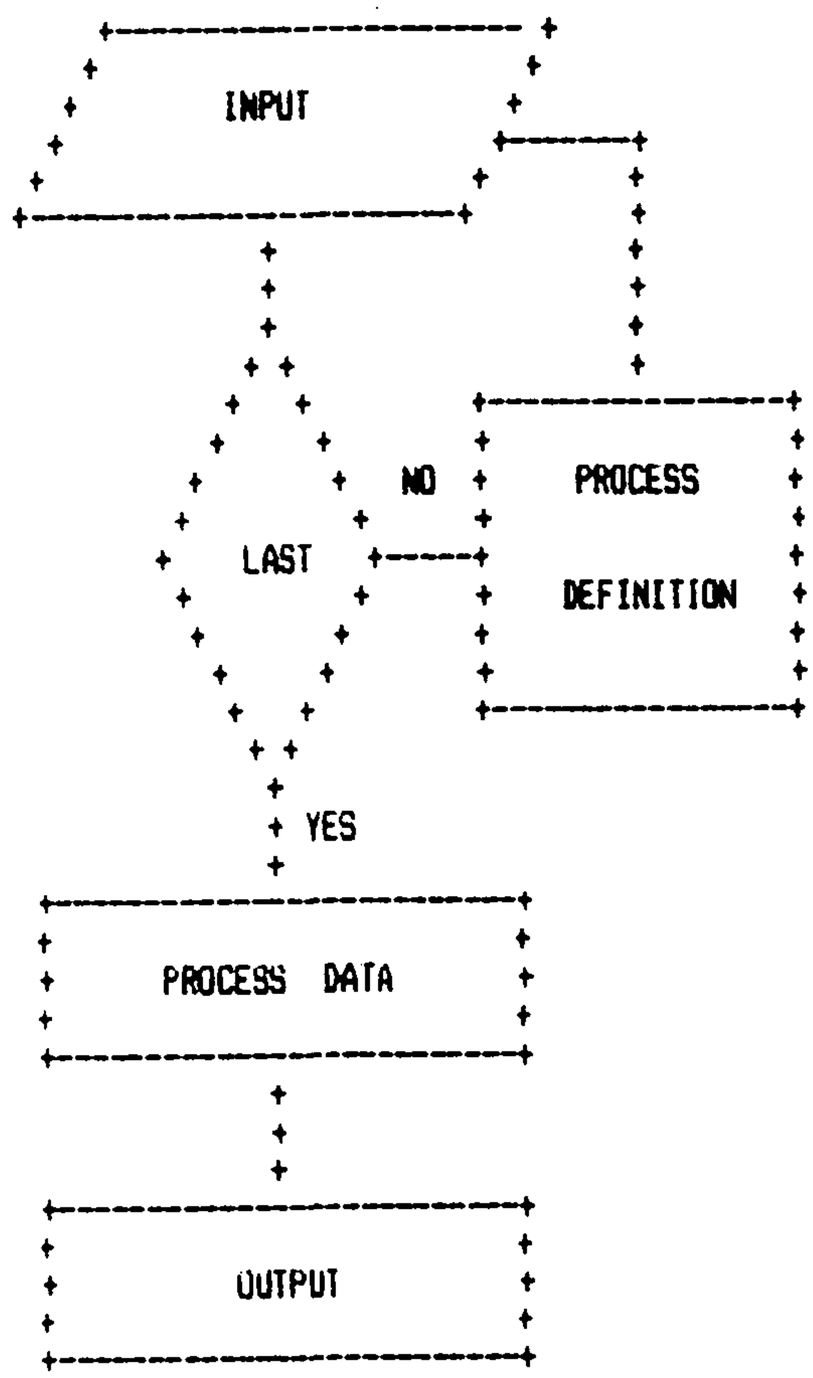
Would you like to see just how the formatted printed copy will look like without printing the page and wasting your expensive paper? Well here is a tip that will help *you do just that.*

After you save the text to the diskette. Run the formatter program with a slight twist. Instead of printing to your printer, erase the PIO.LF (or the RS232 STATEMENT) and replace it with DSK1.NAME! (enter a name suitable in less than 10 characters. Now enter the EDITOR and call up your file.

The next step is to check the print to see if it is just the way you want to see it on the printed page. If it is not than you can tell how you need to make changes to the text before it is formatted. To print the text *just as it appears, remove the line feed characters from* the screen with delete character. Leave in any control characters that you feel is necessary to produce the printed page as you want it. Now print the file from the TEXT EDITOR and your done!

FLOWCHARTING FOR SIMPLICITY
REPRINTED FROM NWF 99ER LINES

A well-written program is easy to read. easy to modify easy to use, and contrary to popular belief, it is not 'composed' while staring at the screen with the keyboard on your lap. One of the best tools a programmer can use is a flow chart. Armed with a good flowchart. coding is made much easier. All programs are built on four things: input, process-definition, decision, and output. This can be put in flowchart form with three symbols:



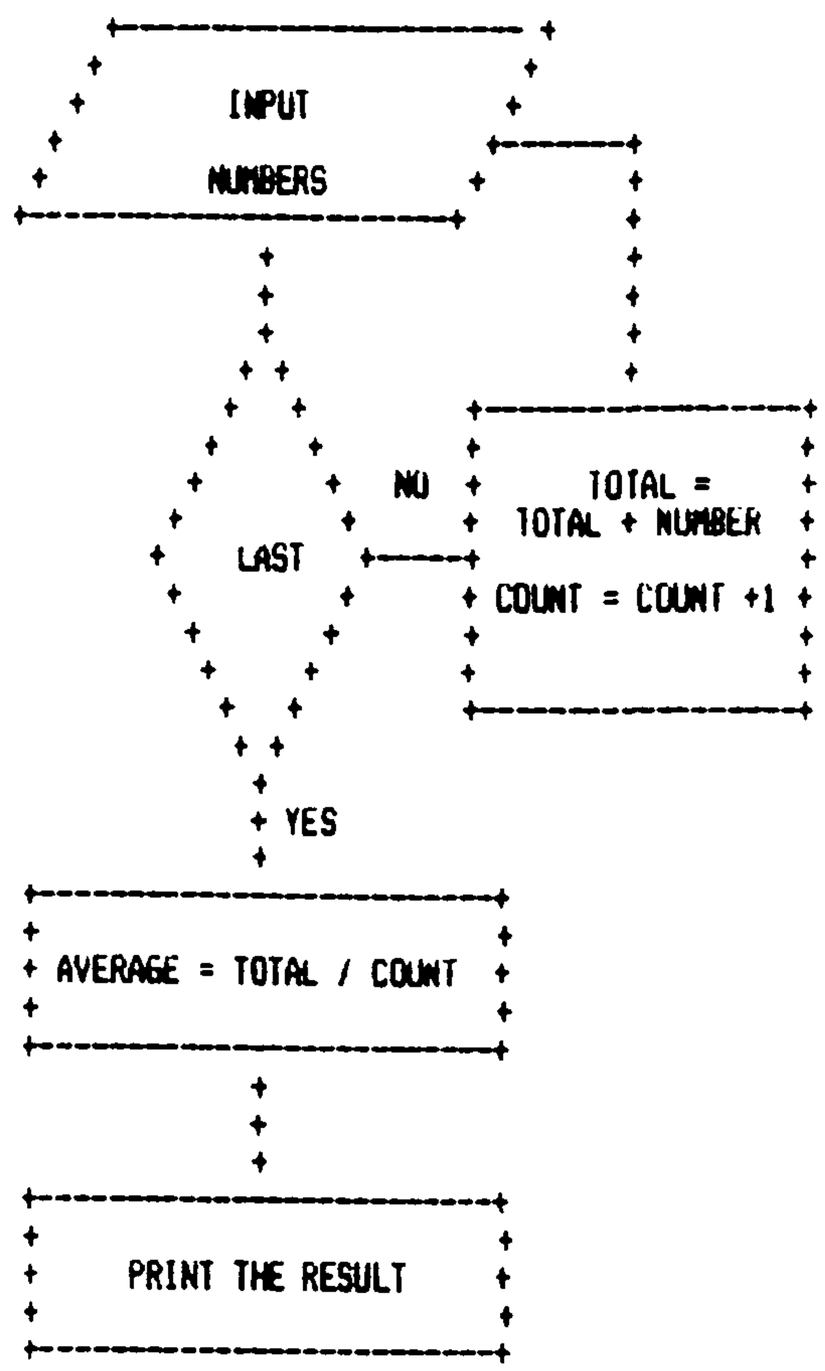
Now. lets look at a simple program and see how we can set up a flowchart.

The problem will be how to find the average of a set of numbers of undetermined set size. These numbers can be anything: ie grades, distance, etc.

Now we can begin by filling in the general categories of our flowchart. This will serve as an outline of our program. The individual steps can then be written from the flowchart. This will be the ALGORITHM .

This will constitute the second process definition. The first process definition is to determine if all the numbers have been entered. This is a simple test to see if the user has completed his task as defined by the user.

The items that we will be looking for are the input. the termination of the input, the number of the inputs, and. finally. whether the user wishes to continue using the program after the results are printed.



Now from the flowchart we can begin our coding for each block and have a well ordered and easily changed program. Sense we do not know how many numbers will be used , the program will be written for any amount.

The last number entered will be the indicator. This will be controled by the user. The program will look like this.

```
100 INPUT "ENTER NEW NUMBER,
0 TO STOP ":NUM
110 IF NUM=0 THEN 150
120 COUNT=COUNT + 1
130 TOTAL = TOTAL +NUM
140 GOTO 100
150 AVERAGE = TOTAL / COUNT
160 PRINT "AVERAGE=": AVERAGE
170 END
```

This is the basic program which may be enhanced in each step with out great difficulty. This is obviously a simple example, but you can see from this how a well defined program can be laid out. The last thing that must be done with any program is to test. test, and test some more. It is best to let someone else run a final test on your program to catch any overlook problems. (There is usually at least one.)

TIPS FROM THE TIGERCUB

#22

TIGERCUB SOFTWARE
156 Collingwood Ave.
Columbus, OH 43213

The entire contents of Tips from the Tigercub Nos. 1 through 14, with more added, are now available as a full disk of 50 programs, routines and files for just $15.00 postpaid!

Nuts Bolts is a diskfull of 100 (that's right, 100!) XBasic utility subprograms in MERGE format, ready for you to merge into your own programs. Contents include 13 type fonts, 14 text display routines, 12 sorts and shuffles, 9 data saving and reading routines, 9 wipes, 8 pauses, 6 music, 2 protection, etc., and now also a tutorial on using subprograms, all for just $19.95 postpaid!

And I have about 140 other absolutely original programs in Basic and XBasic at only $3.00 each!(plus $1.50 per order for casette, packing and postage, or $3.00 for diskette, PPM) Some users groups charge their members that much for public domain programs! I will send you my descriptive catalog for a dollar, which you can then deduct from your first order.

This challenge was printed in Tips #21 -

```
100!The Unprintable Unkeyabl
e Program!
110!To shuffle the numbers 1
 to 255 into a random sequen
ce without duplication
120!The strings contain the
ASCII characters 1 to 127 an
d 128 to 255
130!Most of the ASCII charac
ters below 32 or above 159 c
annot be input from the keyb
oard
140!So how was this program
programmed?
150 M$="
                !"#$%&'()*+,-./0
123456789:;<=>?@ABCDEFGHIJKL
MNOPQRSTUVWXYZ[\]^_`abcdefgh
ijklmnopqrstuvwxyz{|}~"
160 M2$="
170 M$=M$&M2$
180 L=LEN(M$):: RANDOMIZE ::
 X=INT(L$RND+1):: N=ASC(SEG$
(M$,X,1)):: M$=SEG$(M$,1,X-1
)&SEG$(M$,X+1,LEN(M$))
190 PRINT N;:: IF LEN(M$)=0
THEN STOP ELSE 180
```

And here is the answer - It was written by a program that writes a program! Key this in and run it to create a MERGE format disk file. Then type NEW, then type MERGE DSK1.LONGSTRING and you will have a RUNable program consisting of lines 150-170 of the puzzle!

```
100 OPEN #1:"DSK1.LONGSTRING
",VARIABLE 163
110 LN=100 :: GOSUB 190 :: A
$=L$&"M$"&CHR$(190)
120 FOR J=1 TO 127 :: C$=C$&
CHR$(J):: NEXT J :: A$=A$&CH
R$(199)&CHR$(127)&C$&CHR$(0)
130 PRINT #1:A$
140 GOSUB 190 :: B$=L$&"M2$"
&CHR$(190)
150 FOR J=128 TO 255 :: D$=D
$&CHR$(J):: NEXT J :: B$=B$&
CHR$(199)&CHR$(128)&D$&CHR$(
0)
160 PRINT #1:B$
170 GOSUB 190 :: F$=L$&"M$"&
CHR$(190)&"M$"&CHR$(184)&"M2
$"&CHR$(0)
180 PRINT #1:F$ :: PRINT #1:
CHR$(255)&CHR$(255):: CLOSE
#1 :: END
190 L$=CHR$(INT(LN/256))&CHR
$(LN-256*INT(LN/256)):: LN=L
N+10 :: RETURN
```

Now type in the remaining lines, and you will have a speeded-up version of the Tigercub Scramble which was published in Tips #10. It is still *not as fast as the CALL PEEK* versions but is much more useful because you can modify it to scramble a sequence of any length anywhere between 1 and 255. For example, to shuffle the numbers 100 to 150 into a random sequence without duplication, just add a line 175 M$=SEG$(M$,100,50).

The method of writing a "program that writes a program" was fully explained by John Clulow in the 99er magazine Vol. 1 Nos. 3 and 4. It is a little-used but very valuable technique.

For instance, Tips#9 contained the following routine to turn the alphabet upside-down.

```
100 FOR CH=33 TO 127 :: CALL
 CHARPAT(CH,CH$):: FOR J=1 T
O 16 STEP 2 :: X$=SEG$(CH$,J
,2)&X$ :: NEXT J :: CALL CHA
R(CH,X$):: X$="" :: NEXT CH
110 INPUT A$ :: GOTO 110
```

The only trouble with that is that it takes about 50 seconds to run. Try this instead -

```
100 FOR CH=33 TO 127 :: CALL
 CHARPAT(CH,CH$):: FOR J=1 T
O 16 STEP 2 :: I$=SEG$(CH$,J
,2)&I$ :: NEXT J :: CALL WRI
TE(CH,I$):: I$="" :: NEXT CH
1000 SUB WRITE(CH,X$):: IF F
LAG=1 THEN 1010 :: FLAG=1 ::
 OPEN #1:"DSK1.WRITE",OUTPUT
,DISPLAY ,VARIABLE 163 :: LN
=3000 :: GOSUB 3000
1010 I=I+1 :: L$=L$&CHR$(200
)&CHR$(16)&X$ :: IF X<5 AND
CH<127 THEN L$=L$&CHR$(179):
: SUBEXIT
1020 I=0 :: PRINT #1:L$&CHR$
(0):: L$="" :: IF CH=127 THE
N 1030 :: GOSUB 3000 :: SUBE
XIT
1030 PRINT #1:CHR$(255)&CHR$
(255):: CLOSE #1 :: GOTO 301
0
3000 L1=INT(LN/256):: L2=LN-
256*L1 :: L$=CHR$(L1)&CHR$(L
2)&CHR$(147):: LN=LN+10 :: R
ETURN
3010 SUBEND
```

RUN that, type NEW, then MERGE DSK1.WRITE, and you will have a program consisting of DATA statements containing the hex codes for all the upside-down characters. Add a line 100 FOR CH=33 TO 127 :: READ CH$ :: CALL CHAR(CH,CH$):: NEXT CH, and you can turn everything upside-down in only 12 seconds.

Someone sent me a classified ad, clipped from an unknown publication, which read -

TI-WRITER COMPANION. Loaded with ingenious ways to make your TI-Writer more effective. Well written. Send $2.50 to Dr. Bill Browning, 7541 Jersey Avenue North, Brooklyn Park, MN 55428. Money back guarantee.

I sent off my money and have just received 29 pages, 3-hole punched, loaded with useful and ingenious tips and ideas for getting more out of TI-Writer. I recommend it - it's worth twice the money and then some!

The K-Town newsletter recently published a utility routine that is so useful that I want to pass it on to everyone. If a program is not resequenced after it is modified, this will compare

it with the original and prepare a MERGE format file of all the changes, for the use of others to update their copy.

```
100 !!!!!!!!!!!!!!!!!!!!!!!!
110 !!  COMPARE PROGRAM    !!
120 !!     by Mike Dodd     !!
130 !!!!!!!!!!!!!!!!!!!!!!!!
131 ! In K-Town 99'er V.2 #1
     April 1985
140 !Version 85.0406.1XB
    Requires disk drive.
    Compares two programs,
    gives list of all diff-
    erences.
150 !SAVE old program in
 MERGE format (SAVE DSK1.(ol
 dfilename),MERGE). SAVE up-
 dated program in MERGE for-
 mat(SAVE DSK1.(newfilename)
,MERGE)
160 !RUN this program, answe
r prompts for OLD FILE name,
 NEW FILE name, and a differ
ent OUTPUT FILE name.
170 !When finished, type NEW
, then MERGE DSK1.(outputfil
ename) and ENTER
180 !Can be MERGED into othe
r copies of OLD program to
update them
190 DEF @(@$)=ASC(SEG$(@$,1,
1))*256+ASC(SEG$(@$,2,1))
200 A$=CHR$(255)&CHR$(255)::
 DISPLAY AT(1,1)ERASE ALL:"O
LD    FILE:": :"NEW    FILE:
": :"OUTPUT FILE:"
210 ACCEPT AT(1,13)BEEP:B$ :
: ACCEPT AT(3,13)BEEP:C$ ::
ACCEPT AT(5,13)BEEP:D$ :: OP
EN #1:B$,INPUT ,VARIABLE 163
220 OPEN #2:C$,INPUT ,VARIAB
LE 163 :: OPEN #3:D$,OUTPUT,
VARIABLE 163
230 LINPUT #1:@$ :: LINPUT #
2:E$ :: F$=SEG$(@$,1,2):: G$
=SEG$(E$,1,2):: A=@(F$):: B=
@(G$)
240 IF F$=A$ AND G$=A$ THEN
CLOSE #1 :: CLOSE #2 :: PRIN
T #3:A$ :: CLOSE #3 :: STOP
250 IF B>A THEN PRINT #3:F$&
CHR$(131)&" !!DELETED LINE !
!"&CHR$(0):: LINPUT #1 :: @$
 :: F$=SEG$(@$,1,2):: A=@(F$
):: GOTO 240
260 IF A>B THEN PRINT #3:E$
:: LINPUT #2:E$ :: G$=SEG$(E
$,1,2):: B=@(G$):: GOTO 240
270 IF @$<>E$ THEN PRINT #3:
E$
280 GOTO 230
```

Thanks to some ideas from Joyce Corker, I have made some more improvements to the Tigercub Menuloader, and I have used the above utility routine to list all the changes made since it was published in Tips#15.

```
100 !by A. Kludge/M. Gordon/
T. Boisseau/J. Peterson/etc.
modified in Tips #22
102 OPTION BASE 1 :: DIM PG$
(127),VV(127),VX(127):: GOTO
 110
105 @,A,A$,B,C,D$,FLAG,I,J,K
,KD,KK,M$,NN,P$,PG$(),Q$,S,S
T,T$(),TT,VT,VV(),VX(),W$,X,
X$,K2,S2
106 CALL INIT :: CALL LOAD :
: CALL LINK :: CALL PEEK ::
CALL KEY :: CALL SCREEN :: C
ALL COLOR :: CALL CLEAR :: C
ALL VCHAR :: CALL SOUND :: !
eP-
150 ! !!DELETED LINE !!
160 T$(1)="d/f" :: T$(2)="d/
v" :: T$(3)="i/f" :: T$(4)="
i/v" :: T$(5)="pro" :: ON WA
RNING NEXT
170 IMAGE ###
180 DISPLAY AT(1,4):"TIGERCU
B MENU LOADER"
210 D$="DSK1." :: OPEN #1:D$
,INPUT ,RELATIVE,INTERNAL ::
 INPUT #1:N$,A,J,K :: DISPLA
Y AT(1,2)SIZE(27):SEG$(D$,1,
4)&" - Diskname= "&N$;
230 FOR X=1 TO 127 :: IF X/2
0<>INT(X/20)THEN 260
240 DISPLAY AT(24,1):"Type c
hoice or 0 for more 0" :: AC
CEPT AT(24,27)VALIDATE(DIGIT
)SIZE(-3):K :: IF K=0 THEN 2
50 :: IF VV(K)<>5 THEN 411 :
: IF K>0 AND K<NN+1 THEN 420
 ELSE 240
290 DISPLAY AT(X+4,2):USING
170:NN :: DISPLAY AT(X+4,6):
P$ :: PG$(NN)=P$ :: DISPLAY
AT(X+4,18):USING 170:J :: DI
SPLAY AT(X+4,22):T$(ABS(A))
291 VV(NN)=ABS(A):: VX(NN)=A
BS(B)
295 X$="  "&STR$(B):: DISPLA
Y AT(X+4,26):SEG$(X$,LEN(X$)
-2,3):: VT=VT+J
350 DISPLAY AT(X+6,1):"  C
hoice?" :: ACCEPT AT(X+6,16)
SIZE(3)VALIDATE(DIGIT):K ::
IF K<>NN AND K<>NN+1 THEN 41
0
410 IF K<1 OR K>127 OR LEN(P
G$(K))=0 THEN 320
411 IF VV(K)=5 OR(VV(K)=4 AN
D VX(K)=254)THEN 420
412 ON ERROR 417 :: CALL CLE
AR :: OPEN #2:D$&PG$(K):: CA
LL SCREEN(16)
413 LINPUT #2:W$ :: IF EOF(2
)THEN 416 :: PRINT W$
414 CALL KEY(0,K,S):: IF S=0
 THEN 413
415 CALL KEY(0,K2,S2):: IF S
2<1 THEN 415 ELSE 413
416 CLOSE #1 :: CLOSE #2 ::
END
417 DISPLAY AT(12,10):"UNLIS
TABLE" :: CALL SOUND(200,110
,0):: RETURN 400
430 ON ERROR 417 :: CALL INI
T :: CALL PEEK(-31952,A,B)::
 CALL PEEK(A*256+B-65534,A,B
):: C=A*256+B-65534 :: A$=D$
&PG$(K):: CALL LOAD(C,LEN(A$
))
```

The Menu Loader will now list up to 127 programs and files, showing the number of sectors in each and the file type, record type and record length of each file. It will stop at the end of each page, and continue on a default value of 0, or will stop for selection when any key is pressed. It gives disk name, number of sectors used and available. It adds up sectors actually used and gives a warning if all sectors are not accounted for. It will load and run any program which can be loaded from Extended Basic, displaying the program being loaded. It will delete any program or file, after first displaying the filename and requesting verification. It will list any listable file to the screen, pausing on any key input, and can be very easily modified to list to a printer. If a file is not listable, it will inform you so, and restart the menu selection. It has the pre-scan option to speed it up.

Fairly often, the disk directory will lose track of one or a few sectors during the process of loading records, even though the Disk Manager showed all 358 were initialized. That's why I put the checking routine in the Menu Loader. The figure shown as "used" is actually 358 minus the number of sectors still available, and is checked against the total sectors of all files.

The loss of a few sectors is no serious matter, but once in a great while you may notice that the "available" and "used" sector quantities have obviously been reversed. I have found that this is a signal that the disk is about to go haywire and you had best back it up immediately!

Programs and files are loaded in the first available sector, and continued in the next available sector. If a number of small files are deleted from a disk, and a long file is then loaded, it may thus be fractured into many parts. If you have a work disk on which you continually add and delete files of various lengths, it will become badly fractured. This can cause disk errors, and it also badly overworks your drive. It is a good idea to recopy your work disk occasionally - file by file, not sector by sector with a quick copier.

MEMORY FULL! - Jim Peterson

HUG LIBRARY CATALOG ADDENDUM
June 1985

0172 **HANG PAC MAN**$$XB Cute hangman-like program only this time Pac-Man is the victim. 24 sectors
0173 **FREEDOM**$$TI-B A cute game that sees how long it will take you to make it to freedom. Written by William Shields. 12 sectors
0174 **BINGO**$$TI-B TEII Rqd. Printer Optional This program features an option to print out random Bingo cards, has speech and automatically calls out numbers. Has option for verifying winning Bingo card. 20 sectors
0175 **TRIVIA 99'ER**$$XB Disk Rqd. Permission granted by Robert Wesler. Fantastic trivia game for the trivia buff. You can even load in your own trivia questions. Documentation on disk. **Requires SSSD Dedicated Disk.** 259 sectors
1072 **CUSTOM LETTERS**$$XB This program has 3 subroutines that can be used in your programs for displaying Script, Slashed, or Bold Block Letters. 18 sectors
3042 **FLORIDA QUIZ**$$TI-B A program by Rogers Mills that teaches you the cities in Florida. 32 sectors
3043 **GEORGIA QUIZ**$$TI-B Another program by Rogers Mills that teaches you the cities in Georgia. 38 sectors
3044 **HERO'S FORMULA**$$TI-B A program by Matthew Cowan. Given the lengths of 3 sides of a triangle, it computes the area of the triangle. 3 sectors
4105 **ELI THE ANALYST**$$TI-B TEII Optional Cute question & answer session with Eli the Analyst. 33 sectors
4106 **ADDRESS BOOK**$$XB Disk Drive & Printer rqd. Makes address book and prints out lists and mailing labels. Excellent program by Rogers Mills. 44 sectors
4107 **MASTER/CASSETTE**$$TI-B Requires 2 cassette recorders. Keeps track of files on cassettes by tape #, beginning and ending counter #, name and date. 20 sectors
4108 **MEN-GEN WITH DOCUMENTATION**$$XB Printer Optional Program by Gregg Wonderly that creates menus from screen to load into high memory that can be reloaded and displayed almost instantaneously. Requires TI-Writer or EA Module to print out documentation. 60 sectors
4109 **IF/FILES** DV 80 Files/TI-Writer Rqd. 17 files to call up with .IF Command from TI-Writer to set type, line-spacing, MLM, etc. Set up for Gemini Printers and also the new SG-10. Includes HUG graphic file from top of newsletter. 62 sectors

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TI-HUG MINUTES
May 5, 1985

The regular monthly meeting was called to order by President Bill Knecht at 2:05 p.m. at which time the officers present were introduced. The Minutes of the April 1985 Meeting were approved as published in the newsletter. With the acceptance of office as Librarian, a vacancy was made in the office of Vice President in charge of Special Interest Groups. Mark Crump was elected unanimously to fill this position. Being no further business before the club, the program, **PROGRAMMING MUSIC** by Bill Knecht was presented, followed by a period of questions from the audience. The meeting was adjourned at about 4:00 p.m.

Respectfully submitted,
Lucia C. Greer, Secretary

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FAMILY COMPUTING DROPPING TI

In an editorial this past month **FAMILY COMPUTING** magazine editor-in-chief, Claudia Cohl, announced that their publication could no longer continue presenting programs for the TI-99/4A since TI suppliers and manufacturers were not purchasing space. Although there should be no correlation (in the writer's opinion) between editorial copy and advertising copy, unfortunately publications such as this make this demand. Ms Cohl did not report **how many** subscribers would be affected by this change, but it behooves us **HUG** members to write our letters and postcards asking them to reconsider. If I recall correctly it wasn't so long ago that they assured us they would continue to support our computer!

If you care, write:

Claudia Cohl, Editor-in-Chief
FAMILY COMPUTING
730 Broadway
New York, N.Y. 10003

Please, do it today. LCG

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