UPSTATE UPSTATE UPSTATE UPSTATE UPSTATE UPSTATE UPSTATE

Our next meeting will be Thursday October 15, 1987.

The November meeting will be November 19, 1987.

PLACE: Capital District Psychiatric Center

New Scotland Avenue next to Albany Medical Center

The program for OCTOBER is as follows:

Updates for CFS Utility will be available.
The Software Library Club will be present.
Election of new club officers.
Public domain software will be demoed.

A note to other Users Groups: The articles printed
in the Upstate Newsletter may be reprinted if proper credit
is given to the author and to the Upstate New York 99/4 Users
Group.

Upstate 99/4a User's Group
PO Box 13522
Albany , N.Y. 12212

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Over 130 original programs in Basic and Extended Basic, available on cassette or disk, only $3.00 each plus $1.50 per order for PPM. Entertainment, education, programmer's utilities. Descriptive catalog $1.00, deductable from your first order.

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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. All for just $19.95 postpaid.

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$$$$$$$$$$$$$$$$$$$$$$$$$$$$
$                          $
$ TIPS FROM THE TIGERCUB   $
$ VOL. 3 is now ready.     $
$ Another 62 programs,     $
$ routines, tips, tricks   $
$ from Nos. 25 thru 32.    $
$ Also $15 postpaid.       $
$                          $
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$                          $
$ TIPS FROM THE TIGERCUB   $
$ Vol. 4 is now ready.     $
$ Another 48 programs,     $
$ routines, tips, tricks   $
$ from Nos. 33 thru 41.    $
$ Also $15 postpaid. Any   $
$ two Tips disks for $27,  $
$ any 3 for $35, all 4     $
$ for $42, postpaid.       $
$                          $
$$$$$$$$$$$$$$$$$$$$$$$$$$$$
```

This will be the last issue of the Tips from the Tigercub.

I started this newsletter over 3 years ago, as a means of promoting my software business. It has never been a success for that purpose, but I have kept it going because of the many interesting newsletters that I have received in exchange, and the many friends that I have made around the world.

I know, from the editors' comments in many of your newsletters, that many of you are finding it difficult to finance a newsletter for your shrinking membership, and even more difficult to find the time, and the material to print. For a one-man user's group pretending to be a business which is getting very little business, it has become impossible. User group members have never been good customers for anyone's software, for reasons which you all know, and those who are remaining active in the TI world are wanting more sophisticated software than I have to offer.

Some of you have offered to subscribe to my Tips, but I just don't have the time to get involved in anything like that. I have had some other projects on the back burner for too long, and it's time I got to work on them - they can hardly turn out to be less profitable than trying to sell software!

I am NOT going out of business, and I am NOT releasing my programs to the public domain. I will continue to sell them, and will continue some classified advertising.

My heartfelt thanks to the many user group editors and officers who have tried in many ways to encourage and help me. Many thanks to those who have purchased my programs.

I will greatly miss your

newsletters. I do hope to keep in contact with some of you. Perhaps now I can find time to browse in the TI sections of CompuServe or GENIE, and perhaps I will meet you there.

The answer to the challenge in the last Tips? For a clue, try -
DISPLAY AT(24,1):0 in Basic.

Still don't get it? In Basic, DISPLAY is the same as PRINT, but AT is not recognized, so the computer thinks you are telling it to print the variable AT(1,I) - which, being undefined, is 0 - and advance to the next line (the :) and print 0.

I have always wanted a pocket calculator with several memories and a window to display the contents of each one. So, since there is plenty of room for windows on a TV screen, I wrote one.

It does not require any use of the Enter key, but each CALL KEY input must be validated and processed, so don't type too fast. It will accept such inputs as M1=7= or M1=7+1= or M2=1-M1= to put a value in a memory, or 6+7= or 6+M2= to calculate and display, o' 6+7M1 or M1-.M2M3 calculate and put into memory, and will even do multiple calculations such as 1+2-3/4*5%6, subtotaling after the first two.

```
100 CALL CLEAR :: CALL SCREE
N(5):: DEF S$(X)=SEG$(A$,X,1
)&" " = " :: CALL PEEK(8198,A)
:: IF A<>170 THEN CALL INIT
110 CALL LOAD(-31806,16):: O
N WARNING NEXT :: GOTO 140
120 SET,M$(),K,S,A$,S$(),R,C
,N,M1,M2,M1F,M2F,M1F,M,MF,DF
,FF,VF,EF,FL,M$,F2,T,M2,MEM(
1,ST,MX,ZF
130 CALL COLOR :: CALL CHAR
:: CALL KEY :: CALL SOUND '@
P-
140 FOR SET=0 TO 4 :: CALL C
```

```
OLOR(SET,16,1):: NEXT SET ::
FOR SET=5 TO 8 :: CALL COLO
R(SET,5,16):: NEXT SET :: CA
LL CHAR(64,"0")
150 FOR SET=9 TO 12 :: CALL
COLOR(SET,16,1):: NEXT SET
160 DISPLAY AT(1,10):"TI6ERC
UB":"   MULTIMEMORY@CALCULAT
OR": :"MEMORY #1": :"MEMORY
#2": :"MEMORY #3": :"MEMORY
#4": :"MEMORY #5"
170 M$(1)="D)234567B9.+-#/I=
CIM" :: M$(2)="01234567B9.AS
MDPECIM" :: DISPLAY AT(20,1)
:"use ?":"(1) symbols":"(2)
alpha characters"
180 CALL KEY(0,K,S):: IF S=0
OR K(49 OR K)50 THEN 180 ::
A$=M$(K-48)
190 DISPLAY AT(20,1):S$(12);
"add";TAB(16);S$(16);"percen
t" :: DISPLAY AT(21,1):S$(13
);"subtract";TAB(16);S$(17);
"equals"
200 DISPLAY AT(22,1):S$(14);
"multiply";TAB(16);S$(18);"c
ancel" :: DISPLAY AT(23,1):S
$(15);"divide by";TAB(16);S$
(19);"clear all"
210 DISPLAY AT(24,1):"MI to
M5 = memories #1 to #5"
220 R=15 :: C=1 :: N,N1,N2,N
1F,N2F,M1F,M,MF,DF,FF,VF,EF,
FL,ZF=0 :: N$="" :: DISPLAY
AT(18,1):""
230 CALL KEY(3,K,S):: IF S(1
THEN 230 :: CALL SOUND(50,5
00,5):: DISPLAY AT(R,C):CHR$
(K):: C=C+1
240 ON POS(A$,CHR$(K),1)+I 6
OTO 260,270,270,270,270,270,
270,270,270,270,270,280,290,
250,290,290,290,340,410,420,
430
250 IF VF=1 OR MF=1 THEN 290
:: ZF=1 :: N$="-" :: GOTO 2
30
260 DISPLAY AT(R,C-1):"?" ::
C=C-I :: GOTO 230
270 IF MF=1 THEN 260 :: FL=0
:: VF=1 :: IF DF=0 AND ZF=0
THEN N=N#10+K-48 :: GOTO 23
0 ELSE N$=N$&CHR$(K):: GOTO
230
280 IF DF=1 THEN 260 :: DF=1
:: MF,FL=0 :: IF ZF=1 THEN
N$=N$&"." :: GOTO 230 ELSE N
$=STR$(N)&"." :: GOTO 230
290 IF C=2 OR FL=1 THEN 260
:: FL=1 :: IF FF=0 THEN 320
```

```
3#0 F2=POS(A$,CHR$(K),1)-I1
:: IF VF=1 THEN GOSUB 480
310 GOSUB 520 :: N1=T :: DIS
PLAY AT(1B,1):"SUBTOTAL"j1 :
: N2F,N2=0 :: FF=F2 :: GOTO
230
320 IF VF=0 THEN 330 :: VF,N
F:0 :: GOSUB 480
3#0 MF=0 :: FF=POS(A$,CHR$(K
),1)-11 :: GOTO 230
310 IF C=2 OR(FF=0 AND N1F=0
)#RiC=4 AND M1F=0)OR FL=1 TH
E#i 260
3#0 IF C=4 THEN EF=1 :: N2=M
:: N1F,MF=0 :: GOTO 230
3#0 IF VF=1 THEN GOSUB 480
3#0 IF EF=0 THEN 400
380 IF N2F=0 THEN MEM(M2)=N1
:: DISPLAY AT(M2#2+2,11):N1
:: GOTO 220
390 GOSUB 520 :: MEM(M2)=T :
: DISPLAY AT(M2#2+2,11):T ::
GOTO 220
400 GOSUB 520 :: DISPLAY AT(
15,C):I :: GOTO 220
410 DISPLAY AT(R,1):"":"":""
:: GOTO 220
420 MEM(1),MEM(2),MEM(3),MEM
(4),MEM(5)=0 :: FOR R=4 TO 1
2 STEP 2 :: DISPLAY AT(R,1D
:"" :: NEXT R :: GOTO 410
430 IF EF=1 AND MF=1 THEN 26
0
440 CALL KEY(3,K,S#):: IF ST
(1 OR K(49 OR K)53 THEN 430
ELSE CALL SOUND(50,500,5)::
h=K-48 :: DISPLAY AT(R,C):CH
R$(K):: C=C+1 :: MF=1 :: FL
=0 :: IF VF=1 THEN GOSUB 480
450 IF N1F=0 THEN M1F,N1F=1
:: N1=MEM(M):: IF ZF=1 OR DF
=I THEN N1=VAL(N$&STR$(N1)):
: OF,ZF=0 :: GOTO 230 ELSE 2
30
460 IF N2F=0 THEN N2F=1 :: N
2=MEM(M):: IF ZF=1 OR DF=1 T
HEN N2=VAL(N$&STR$(N2)):: DF
,ZF=0 :: GOTO 230 ELSE 230
470 GOSUB 520 :: MEM(M)=T ::
DISPLAY AT(M#2+2,11):T :: G
OTO 220
480 IF DF=0 AND ZF=0 THEN NX
=N ELSE NX=VAL(N$):: DF,ZF=0
490 IF N1F=0 THEN N1=NX :: N
IF=1 :: GOTO 510
500 N2=NX :: N2F=I
510 VF,N=0 :: N$="" :: RETUR
(-
 520 IF FF=1 THEN T=N1+N2 ELS
E IF FF=2 THEN T=N1-N2 ELSE
```

IF FF=3 THEN T=N1#N2 ELSE IF
FF=4 THEN T=N1/N2 ELSE T=N1
#N2/100
530 RETURN

  I have always been annoyed
by the difficulty of hyphen-
ating with TI-Writer, when I
want to avoid the gaping
holes that wraparound and
Fill and Adjust can cause.
Manually filling and adjust-
ing with carets is slow, and
leaving a space after the
hyphen is unreliable, so I
wrote this program.

```
100 DISPLAY AT(2,10)ERASE AL
L:"TIGERCUB":"  HYPHENATED F
ILL AND ADJUST"
110 DISPLAY AT(6,1):" Prepar
e text with TI-Writer":"Edit
or. Leave left TAB at 0,":"s
et right TAB at the actual"
:"value of the line length d
e-"
120 DISPLAY AT(10,1):"sired
(i.e., for a 2B-char":"lin
e, set it at 28)."
130 DISPLAY AT(12,1):" Inden
t as desired. Center":"hea
dings as desired but be":"
sure to follow them with a
":"line feed (Enter). Hyphen
ate"
140 DISPLAY AT(16,1):"as de
sired and follow the":"hyp
hen immediately with a":"
line feed (Enter)."
150 ON ERROR 160 :: GOTO 170
160 ON ERROR 160 :: RETURN 1
70
170 DISPLAY AT(20,1):"INPUT
FILE? DSK" :: ACCEPT AT(20,1
6)BEEP:F$ :: OPEN #1:"DSK"&F
$,INPUT
180 DISPLAY AT(22,1):"OUTPUT
FILE? DSK" :: ACCEPT AT(22,
17)BEEP:NF$ :: OPEN #2:"DSK"
&NF$,OUTPUT
190 DISPLAY AT(24,1):"LINE L
ENGTH?" :: ACCEPT AT(24,14)V
ALIDATE(DIGIT):L
200 LF$=CHR$(13):: H$="-"&CH
R$(13)
210 ON ERROR 210 :: GOTO 220
220 ON ERROR 210 :: RETURN 3
10
230 LINPUT #1:M$ :: IF M$="
" OR M$=LF$ OR M$="" OR ASC(
```

```
M$))I27 OR(LEN(M$)=L AND POS
(M$,LF$,1)=0)OR POS(M$," ",I
)=0 THEN 310
240 IF POS(M$,LF$,1)()0 AND
POS(M$,H$,1)=0 THEN 310
250 IF POS(M$,H$,I)()0 THEN
M$=SEG$(M$,1,LEN(M$)-1)
260 IF LEN(M$)=L THEN 310
270 P=1
280 X=POS(M$," ",P):: IF X=P
THEN P=P+1 :: GOTO 280 ELSE
Y,P=X :: IF POS(M$," ",P)=0
OR P=L THEN 310
290 M$=SEG$(M$,1,X)&" "&SEG$
(M$,X+1,255):: IF LEN(M$)=L
THEN 310 ELSE P=I+2
300 X=POS(M$," ",P):: IF X=0
THEN P=Y :: GOTO 300 ELSE G
OTO 290
310 PRINT #2:M$ :: IF EOF(1)
()1 THEN 230 ELSE CLOSE #1 :
: CLOSE #2
```

  Here is one for the pre-
schoolers -

```
100 CALL CLEAR :: CALL SCREE
N(14):: CALL COLOR(1,11,11,I
2,5,5):: DISPLAY AT(3,10):"S
EE-N-SAY": : :"PRESS ANY KEY
" !by Jim Peterson based on
a routine by Michael Lyons
110 DIM E$(16),PAT$(16):: CA
LL CHAR(123,RPT$("F",16))
120 DATA "  ","   ","(","  (
"," ((","(","   ( (","(  ((
"," (( (((","(  ","( ","(","(((
"," ("  (("","( "," ("","(","(((
"," ,(((("
130 FOR J=0 TO 15 :: READ PA
T$(J):: NEXT J
140 CALL KEY(0,K,S):: IF S=0
THEN 140
150 CALL CHARPAT(K,CP$):: FD
R X=1 TO 16 :: Y=ASC(SEG$(CP
$,I,1)):: E$(X)=PAT$(Y+(Y)57
)#7-48):: NEXT X :: IF K)96
AND K(123 THEN K=K-32
160 CALL CLEAR :: CALL SAY(C
HR$(K)):: FOR X=2 TO 16 STEP
2 :: DISPLAY AT(B+(X/2),12)
:E$(X-1);E$(X):: NEXT X
170 CALL SAY(CHR$(K)1:: GOTO
140
```

  And so, one more time

  MEMORY FULL

  Jim Peterson

TI NOTES

Ryte Data of Canada has many products for the TI Community at large. For example:

    99 AT expansion system which replaces the current
      PE Box
    GPL Assembler and Linker
    Basic Compiler

Inquiries may be directed to:

    Ryte Data
    210 Mountain St
    Haliburton, Ontario KOM1S0
    Canada

Myarc has announced several new developments on software and hardware:

    M-Dos has been released for the 9640
    A hard disk controller will be available which
      will control up to three hard drives

Rave 99 has announced the 99/105 keyboard enhancement for $199.95. This keyboard installs in the console without soldering. Other features include: 24 function keys, single key entry for TiWriter and Multiplan, numeric keypad, and dedicated cursor keys.

Inquiries may be directed to:

    Rave 99
    112 Rambling Rd
    Vernon, CT 06066
    (203) 875-9833

It is very important to attend the next meeting as we will be electing new officers for the 1988 year. Currently the following vacancies exist:

    Vice-President
    Secretary (Ivan is retiring)
    President (current officer is resigning)
    Editor of newsletter
Chuck has volunteered to be Treasurer if elected.
So let's see all dedicated 99'ers show up , volunteer, and vote.

                              Arthur F. Payeur
                              President