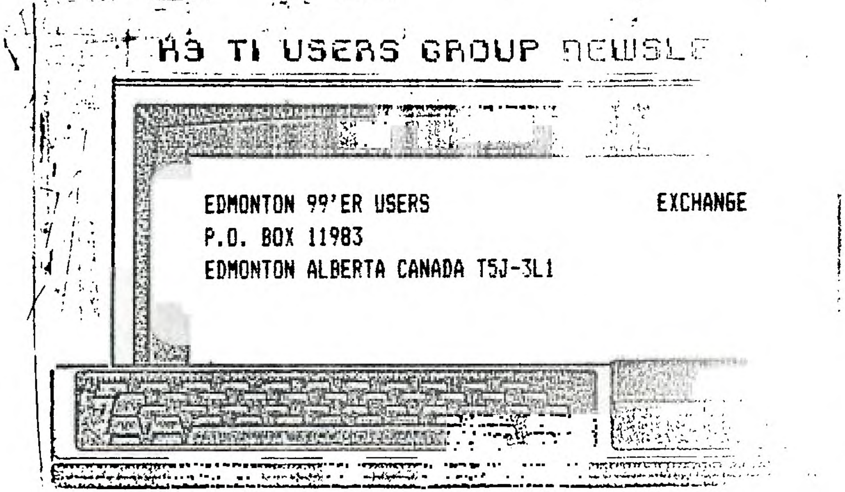
K*3 TI USERS GROUP
P.O. BOX 1945
KANKAKEE, IL 60901

NEXT MEETINGS

MARCH 21, 1987
APRIL 18, 1987

BOURBONNAIS
MUNICIPAL
CENTER



EDMONTON 99'ER USERS EXCHANGE
P.O. BOX 11983
EDMONTON ALBERTA CANADA T5J-3L1

CHAIRMAN'S NOTES

February, 1987
by George Lempeotis
Chairman TI K*3 Users Group

Welcome to the new year, 1987 should be a good year for the TI-99/4A. The MG and Triton TI-99/4A - IBM clone and the Myrac 9940 will make for a lot of excitement in the TI-99/4A world this year. I hope 1987 turns out to be as good a year for the TI K*3 Users Group and all of its members.

At the February 1, 1987 board meeting there where 4 board members in attendance. The treasury is in good shape, with enough funds to operate for about 6 months. Our membership is still increasing, we now have 26 paid members. TI K*3 has steadly increased its membership since last August. All the efforts of our membership drive has paid off with 7 new members. Congratulations to all that have worked for the membership drive, well done.

We must still continue our efforts to find new members and keep old ones, if we are to keep our group together. One more step in our membership drive will be to send out post cards to all members whose membership has just expired. Hopefully this small reminder will help entice them to renew.

The club has received a shipment of disks and will sell them for $5.00/ten at the next club meeting. I hope we will have some left by the March meeting.

The March 21,1987 meeting will be in the Firemen's lounge for the this meeting only at the Municipal Center. The meeting will feature the building of a Super-Cart by Mark Harms and others.

in our membership drive will be to lower the membership fee to $5.00 a year. The club will also send out post cards to all former members in the area, informing them of this opportunity to rejoin our group and of what what we have to offer. We will also try to start listing our meeting in the Kankakee paper. This is just the start of our membership drive, we will do more.

The board is looking for any suggestions to help in our membership drive. We would also like to see our present members help out by telling and inviting other TI users to our meeting. We all will have to work at this to keep our club together.

* *

USING CTRL-U WITH TI-WRITER

by George Lempeotis
From The TI K*3 Users GROUP

CTRL-U or the special character mode can be used to send control codes to a printer. The control codes most printers require are in the ASCII range of 0-31, which make them undisplayable on the screen and not found on the keyboard. Some special form of inputting and displaying the control characters must be made, and in TI-Writer CTRL-U is the method used.

You can use CTRL-U to change printer modes in the formatter,in a transliterate command, and even in the text editor to affect the editor's print command. Hitting CTRL-U in TI-Writer causes the cursor to change to an underline and all keys hit to be a different ASCII code, untill you hit CTRL-U again.

The April 18.1987 meeting will again be back in the board room of the municipal building. The meeting will feature a demo of CSGD (Character Sets and Graphic Design) program by Bruce Shearer.

I will now include an excerpt from the October Chairman's Notes. The file was lost, and was not included in the November newsletter. This excerpt will give our members some insight and history of our group membership problem and group history.

Let me give a little background of our club's membership history. In the summer of 1984 we had about 90 paid members. By the summer of 1985 we had 45 members. By the summer of 1986 our group was down to 25 paid members, and as of this month (October, 1986) we have only 20 members left. From the above numbers, the K*3 TI Users Group is in a pattern of losing about half of its members a year.

The reasons for our group's membership decline are many and too lenghty to get into here. I still feel there is enough interest and usefulness in the TI 99/4A to keep this user group operating in the years to come in Kankakee. All we have to do is get and keep the TI users in this area involved in our group. Sounds easy? No way!

Our users group is at a critical crossroads. If our group continues this yearly membership decline in 1987, we will have about 10 members and not much of a club left. If we can stop our membership decline, keep most of our present members, and maybe add a few more members, our group will survive.

In a attempt to stop our membership decline, the board members decided

To see what is happening when you are in CTRL-U, look at the table on page 146 of the TI-Writer manual. The ASCII characters from 0-31 are listed with the key press to get the special character and the screen display for that character. An example to input the ASCII code of 27 (Escape), you hit CTRL-U to get into CTRL-U, FCTN-R for the ASCII character 27, and CTRL-U again to leave the special character mode. The screen will display the special character listed in the table when you hit FCTN-R in CTRL-U. This character display lets you know there is an ASCII chararcter 27 in the text at the character.

The key sequence for CTRL-U is first hit CTRL-U to get into the special character mode, next the special ASCII character key press you need for the character from the table on page 148, and last CTRL-U again to get out of special character mode. You must get out of CTRL-U, because all regular characters ASCII 32 - 127 will have decimal 64 or hexidecimal >40 added to their normal value in CTRL-U. If you hit A (capital A) in CRTL-U mode which is normal ASCII 65, it would be inputted in the text as ASCII 129 (65+64=129), which is a user defined character. The added number (decimal 64) to the regular character set would cause unpredictible results in both the printing and screen display of the TI-Writer document. You must get out of CTRL-U, if you are to control the printing and display of your TI-Writer document.

Three printer commands I use a lot are Form Feed, Condensed Print, and Near Letter Quality (NLQ). The Star SG-10 manual list the control characters for these commands plus all commands the printer will accept. I will now list the printer commands with the key press in CTRL-U to get that.

Form Feed	-	ASCII(12)	C-U,S-L,C-U
Condensed Print	-	ASCII(15)	C-U,S-O,C-U

NLQ-On	-	ASCII(27)
		ASCII(66)-B
		ASCII(4)
			C-U,F-R,C-U
			B (S-B, Big B)
			C-U,S-D,C-U

NLQ-Off	-	ASCII(27)
		ASCII(66)-B
		ASCII(5)
			C-U,F-R,C-U
			B (S-B Big B)
			C-U,S-E,C-U

C=CTRL, F=FCTN, and S=SHIFT

In order to explain the commands a little more, I will explain two of the examples. To put the Form Feed command in a text document, you need to send a ASCII(12) to the printer. The key sequence would be CTRL-U, SHIFT-L, and CTRL-U. To send the NLQ-On command to the SG-10, you need to send a ASCII(27), B (ASCII(66)), and ASCII(4). The key sequence would be CTRL-U, FCTN-R, CTRL-U, SHIFT B (Capital B), CTRL-U, SHIFT-D, and CTRL-U. Remember you have to get out of CTRL-U to input a B, or CTRL-U will add decimal 64 ot its ASCII value.

As you can see CTRL-U offers you complete control of your printer. I hope this short article gave some insight into the use of CTRL-U.

****

--NOTICE--

The MARCH meeting
ONLY will be held
in the Firemen's
Lounge, [illegible] nstairs
in [illegible] al
Center [illegible] ing.
Enter [illegible]
[illegible]
you there!!

From The Editor
BY Mark Harms

You probably are wondering what stragnge type of program I an using to write this article. Well I must confess I'm not doing it on my trusty old TI. I am doing it on a new computer. It is an Apple compatible. The word processor is called MULTI-SCRIBE. I think it's great!

Do not fear! I am not deserting my favorite computer. I still have the dream of a 60 meg hard drive on it. As it stands now I have a "little TI" that has 608k of RAM and 64k of ROM! If your wondering how I got to that number, watch this:

Location	Rom	Ram
console	24k	16k
GramKer	8k	80k
SuperCrt	0k	8k
M/512k	8k	512k
RS232	8k	0k
C/diskcon	16k	0k
	64k	608k

Add these together for as whopping 672k, and I have have probably missed some somewhere! Even some die-hard Commodore users get a little wided-eyed.

You may wonder why I then, I bother with Apple. This is one reason. There are some very good programs for other machines that are not yet available for the TI.

I look for this to change in the future. With the dawn of the new 80col card for hi-res and other peripherals of that caliber, new programmers will have a field day. So no I am not selling out! I am not giving out! TI will be my primary system for a long time to come.

My goal is to get better at programming, and provide these type of programs for oursystem. Until then I make suggestion to those that have the have the skill already in hope that they will follow it up.

So come on guys, the best computer has the best software, and the best programmers make the best software. So it is up to us to keep the candle burning! What has come forth already is great. What will come can only be better.

By the way:

This program basicly allow you to type to a bit map screen. Then do a screen dump. It prints all the way across the page. Another wish is "Allow [illegible] Printall to [illegible] alone" [illegible]? The possibilities are out there.

How about it any takers??

MUSIC PROGRAMMING
USING NOISE AS LOW BASS NOTES

By Bill Knecht
From the PUG newsletter

An article in the October 1986 HUG Newsletter by Jeff Gatlin prompted me to write this article on Low Bass Notes. Mr.Gatlin gave a good explanation on how the low note is created by using a CALL SOUND with three voices and one noise, but there is an easier way to correct the effect of a seventh note being played. The seventh note is played for the bass note if you use a CALL SOUND(1000,330,0,392,0,523,0,-4,0). To correct this, he suggested using a lower note, such as 494 instead of 523. Trouble is that if you are reading the music and typing it in, you have to remember to enter the "wrong" note, like C# for C or F for E.

One way I do it is to multiply the third note by 3.75. The CALL SOUND statement would look like this: CALL SOUND(1000,330,0,392,0,523*3.75,30,-4,0).

I use 30 for the volume of the third note so it will be to low to be heard. Thus, you have a low C, two octaves below middle C or the one below 131.

Below is a sample program you can type in to see how the low notes decrease:

```
 100 CALL SOUND(1000,523,0)
 110 CALL SOUND(1000,262,0)
 120 CALL SOUND(1000,131,0)
 130 CALL SOUND(1000,523,30,5
 23,30,523*3.75,30,-4,0)
 140 CALL SOUND(1000,262,30,2
 62,30,262*3.75,303,-4,0)
 150 END
```

This is the technique I used in my recent music program "Holiday Road" and the technique used in the popular Pennsylvania Polka and Beer Barrel Polka.

Another technique is to multiply the third note by 7.480916. This will drop the sound one octave. In other words:

```
CALL SOUND(1000,131,30,131,30,131*
7.480916,30,-4,0)
```

would give you the note that is one octave below low C (131). I like this technique because you can input the third note as a "normal" low note, then by adding the noise routine, drop the note one octave. I used this procedure in my new Christmas song named "Santa". If you like programming music, I would urge you to try this and see what kind of sounds you can come up with.

****

CHEAT MODE FOR TI RUNNER

By Dave Talan - Northcoast 99ers

Most who have played or play TI Runner know that it is indeed a challeging game. You have probably spent countless hours trying to master it. Still, you couldn't get past screen 25! Nevertheless, you still wre able to view the entire 50 screens- but weren't able to play them. You probably hit every key in the hope you might reveal some SECRET CHEAT MODE, but there was none! Now, there is a cheat mode! Type in this simple assembly program in your E/A editor, Assemble it, then run it. (You must load this program prior to loading TI Runner). For more details on assembling, consult your E/A manual.

At first you think nothing has changed, but soon you will realize you no longer have to pick up objects...just climb the ladder!

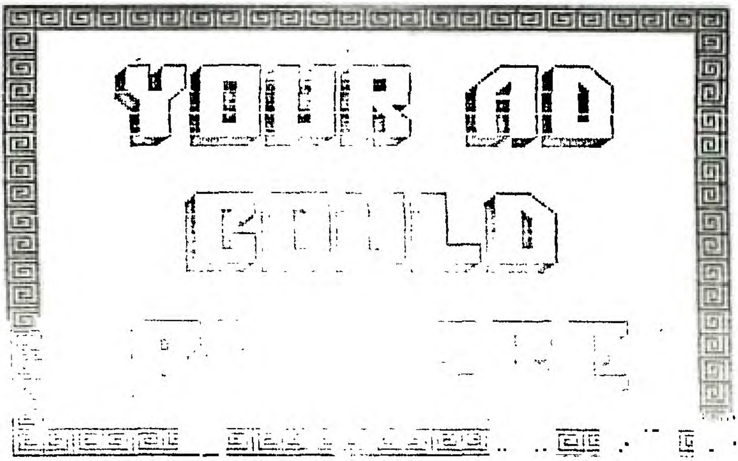
For those TI Runner enthusiasts, you will be ha[illegible] [illegible] there are new screens available as FREEWARE. Send a disk mailer [illegible] [illegible] to: Michael L. Salley, 35 Cr[illegible] [illegible] Park, Michigan [illegible]

```
            AORG >FF00

ICNT        DATA 1
IBAS        DATA 1200

VW          ORI  R0,>4000
VR          SWPB R0
            MOVB R0,@>8C02
            SWPB R0
            MOVB R0,@>8C02
            ANDI R0,>3FFF
            RT

ISR         DEC @INCT
            JEQ I2
            RT

I2          MOV R11,R3
            CLR R0
            CLR R1.
            LI  R2,>6000
            BL  @VR
I3          CI  R0,767
            JGT I5
            MOVB @>8800,R1
            CI R1,>7800
            JNE I4
            BL @VW
            MOVB R2,@>8C00
            INC R0
            BL @VR
            JMP I3
I4          INC R0
            JMP 13
I5          MOV @IBAS,@ICNT
            B *R3

            AROG >83CR
            DATA ISR

            END
```

From the PUG Newsletter

The following is a time saving program that will allow you to print a DV/80 file (a text file) directly to your printer, without having to load TI Writer Editor Assembler.

```
100 CALL CLEAR :: OPEN #1:"P
IO"
110 CALL CLEAR
120 DISPLAY AT(12,1):"WHAT F
ILE ON DSK1."
130 ACCEPT AT(12,19):D$
140 DEVICE$="DSK1."&D$
150 OPEN #2:DEVICE$,VARIABLE
80,DISPLAY
160 LINPUT #2:A$
170 PRINT #1:A$
180 IF EOF(2) THEN 190 ELSE
160
190 CLOSE #1 :: CLOSE #2
200 DISPLAY AT(12,1):"PRINT
ANOTHER FILE?"
210 DISPLAY AT(13,14):"(Y/N)
?"
220 ACCEPT AT(13,20):X$
230 IF X$="Y" THEN 100
240 IF X$="N" THEN END
```



originated [illegible] cursor, but my goal is not for you to be the proud user of a TEXAS type cursor, but rather you to know how to create your own custom CURSOR.

Whatever program that you use, assembly, or extended basic, you will have to encode the design for your custom CURSOR. The program will be the vehicle for your own cursor.

```
1 ! TEXAS CURSOR FROM GOTO
NEWSLETTER OF COLUMBUS GA.
USERS GROUP; UNATTRIBUTED,
BUT JIM PETERSONS AND DR.
RON ALBRIGHT'S NAMES CAME UP

2 CALL CLEAR :: CALL INIT

3 CALL LOAD(8196,63,248)!REF
TABLE POINTER AT >2004
(3F,F8)

4 CALL LOAD(16376,67,85,82,83
,79,82, 48,8) !INDICATES THAT
A PROGRAM NAMED "CURSOR" BEGI
NS AT >3008

5 CALL LOAD(12288,48,48,63,25
5,254,124,24,12)!THIS IS WHER
E WE START THE CUSTOM CURSOR
DESIGN

6 CALL LOAD(12296,2,0,3,240,2
,1,48,0,2,2,0,8,4,32,32,36,4,
91)

7 CALL LINK("CURSOR") !LINKS
TO THE CURSOR PROGRAM.
```

If you are intrested in creating your own cursor please read the rest of this article, and I will show you how to chart out this TEXAS CURSOR, and how to create your very own, let's say one with you very own intitials, or a square box. The creation is very much the save as charting a sprite in extended basic, but instead of using HEX, you will be using straight BINARY.

BINARY WEIGHT	128	64	32	16	8	4	2	1	
ROW #1			X	X					= 48 -\
ROW #2			X	X					= 48
ROW #3			X	X	X	X	X	X	= 63
ROW #4	X	X	X	X	X	X	X	X	= 255 \
ROW #5	X	X	X	X	X	X	X		= 254 /
ROW #6		X	X	X	X	X			= 124
ROW #7				X	X				= 24
ROW #8					X	X			= 12 -/

If you look at the above chart, you will see the TEXAS CURSOR defined. Now all you will have to do is make a blank chart like the one above, and instead of putting the "X"'s in for Texas, put in the "X"'s to match the shape of you Design. Add up the numbers (Binary Weights) across the top of the chart above the place you inserted the "X". Do this for each row, and put the total at the end of each row.

Enter these totals in line 5, AFTER the address in the CALL LOAD(12288,....). Now save this program to disk! RUN the program, and you are all set.

The program should stay in the machine until you either:

```
100 REM *************
110 REM * BOA ALLEY *
120 REM *************
130 REM BY TARIK ISANI
140 REM 99'ER VERSION 2,6.1
150 REM APRIL, 1983
160 REM  TYPING BY "ME"
170 CALL CLEAR
180 CALL SCREEN(2)
190 RANDOMIZE
200 PRINT "     *** BOA ALLE
Y ***": :"           BY":"
     TARIK ISANI"
210 PRINT :"YOU  MUST  DIRE
CT  A  LONG": :"SNAKE-LIKE
OBJECT  THROUGH"
220 PRINT :"A MAZE  HITTING
ROUND  WHITE": :"TARGETS.  U
SE THE  JOYSTICK"
230 PRINT :"OR THE ARROW  KE
YS TO MOVE.": :"IF YOU  HIT
 YOURSELF,  THE"
240 PRINT :"BOUNDARIES OR TH
E DIVIDERS,": :"THE GAME WIL
L END."
250 PRINT :"[PRESS ANY KEY T
O CONTINUE]"
260 FOR I=1 TO 8
270 CALL COLOR(I,16,1)
280 NEXT I
290 CALL KEY(0,S1,S2)
300 IF S2=0 THEN 290
310 CALL CLEAR
320 FOR I=1 TO 8
330 CALL COLOR(I,1,1)
340 NEXT I
350 PRINT :"   METHOD OF INP
UT:": :"      1. ARROW KEYS":
 :"      2. JOYSTICK": :
: : :
360 FOR I=1 TO 8
370 CALL COLOR(I,16,1)
380 NEXT I
390 CALL KEY(0,O1,O2)
400 IF (O1<49)+(O1>50)THEN 3
90
410 CALL CLEAR
420 FOR I=2 TO 9
430 CALL COLOR(I,2,9)
440 NEXT I
450 CALL COLOR(9,10,1)
460 CALL COLOR(11,14,1)
470 CALL COLOR(12,16,1)
480 CALL COLOR(13,5,1)
490 CALL COLOR(14,9,1)
500 CALL CHAR(96,"3C7EFF9999
FF7E3C")
510 CALL CHAR(97,"3C66E7FFFF
E7663C")
520 CALL CHAR(112,"007E7E666
67E7E00")
530 CALL CHAR(120,"3C7EFFFFF
FFF7E3C")
540 CALL CHAR(129,"183C7EFFF
FFFC381")
550 CALL CHAR(132,"F87C3E3F3
F3E7CF8")
560 CALL CHAR(131,"81C3FFFFF
F7E3C18")
570 CALL CHAR(128,"1F3E7CFCF
C7C3E1F")
580 CALL CHAR(136,"FFFFFFFFF
FFFFFFF")
590 OPTION BASE 1
600 DIM P(105,2)
610 CALL HCHAR(1,2,136,29)
620 CALL HCHAR(23,2,136,29)
630 CALL VCHAR(1,2,136,23)
640 CALL VCHAR(1,30,136,23)
650 FOR I=3 TO 21 STEP 2
660 FOR J=4 TO 28 STEP 2
670 CALL VCHAR(I,J,112)
680 NEXT J
690 NEXT I
700 D=1
710 X1=16
720 Y1=21
730 M1=0
740 N1=-1
750 FL=0
760 L=0
770 SC=0
780 CALL HCHAR(1,2,136,29)
790 A$="SCORE:0"
800 J=10
810 GOSUB 1920
820 FOR I=6 TO 10 STEP [illegible]
830 FOR J=7 TO 25
840 CALL SOUND(1,2000,0)
850 CALL VCHAR(I,J,1[illegible]
860 L=L+1
870 P(L,1)=I
880 P(L,2)=J
890 NEXT J
900 CALL SOUND[illegible]
910 CALL VCH[illegible]
920 L=L+1
930 P(L,1)=I+1
940 P(L,2)=J-1
950 FOR J=25 TO 7 STEP -1
960 CALL SOUND(1,2000,0)
970 CALL VCHAR(I+2,J,[illegible]
980 L=L+1
990 P(L,1)=I+2
1000 P(L,2)=J
1010 NEXT J
1020 CALL SOUND(1,2000,0)
```

```
1030 CALL VCHAR(I+3,J+1,131)
1040 L=L+1
1050 P(L,1)=I+3
1060 P(L,2)=J+1
1070 NEXT I
1080 FOR J=7 TO 25
1090 CALL SOUND(1,2000,0)
1100 CALL VCHAR(14,J,132)
1110 L=L+I
1120 P(L,1)=14
1130 P(L,2)=J
1140 NEXT J
1150 CALL SOUND(1,2000,0)
1160 CALL VCHAR(15,25,131)
1170 L=L+1
1180 P(L,1)=15
1190 P(L,2)=25
1200 FOR J=25 TO 21 STEP -1
1210 CALL SOUND(1,2000,0)
1220 CALL VCHAR(16,J,128)
1230 L=L+1
1240 P(L,1)=16
1250 P(L,2)=J
1260 NEXT J
1270 RX=INT(RND*22)+2
1280 RY=INT(RND*27)+3
1290 CALL GCHAR(RX,RY,C)
1300 IF C<>32 THEN 1330
1310 CALL VCHAR(RX,RY,120)
1320 FL=1
1330 IF O1=50 THEN 1510
1340 CALL KEY(1,S,T)
1350 IF S<>5 THEN 1390
1360 M1=-I
1370 N1=0
1380 GOTO 1550
1390 IF S<>3 THEN 1430
1400 M1=0
1410 N1=1
1420 GOTO 1550
1430 IF S+1<>1 THEN 1470
1440 M1=1
1450 N1=0
1460 GOTO 1550
1470 IF S<>2 THEN 1550
1480 M1=0
1490 N1=-I
1500 GOTO 1550
1510 CALL JOYST(1,A,B)
```

```
[illegible]
N 1550
1530 M1=B/4
1540 N1=A/4
1550 CALL GCHAR(M1+X1,N1+Y1,
C)
1560 IF C=32 THEN 1770
1570 IF C<>120 THEN 1650
1580 CALL SOUND(-100,110,0,1
000,0,500,0)
1590 SC=SC+1
1600 A$=STR$(SC)
1610 J=16
1620 GOSUB 1920
1630 FL=0
1640 GOTO 1770
1650 CALL SOUND(-500,-7,0)
1660 CALL SCREEN(12)
1670 CALL SCREEN(2)
1680 CALL KEY(0,S1,S2)
1690 IF S2<1 THEN 1680
1700 FOR I=2 TO 22 STEP 2
1710 CALL HCHAR(I,3,32,27)
1720 NEXT I
1730 FOR I=3 TO 29 STEP 2
1740 CALL VCHAR(2,I,32,21)
1750 NEXT I
1760 GOTO 700
1770 CALL VCHAR(X1,Y1,1[illegible]*
(N1+1)+M1)
1780 X1=X1+M1
1790 Y1=Y1+N1
1800 CALL SOUND(-1,2000,0)
1810 IF M1=0 THEN 1840
1820 CALL VCHAR(X1,Y1,96)
1830 GOTO 1850
1840 CALL VCHAR(X1,Y1,97)
1850 CALL VCHAR(P(Q,1),P(Q,2
),32)
1860 P(Q,1)=X1
1870 P(Q,2)=Y1
1880 Q=Q+1
1890 IF Q<>106 THEN 1910
1900 Q=1
1910 IF FL=0 THEN 1270 ELSE
1330
1920 FOR I=1 TO LEN(A$)
1930 CALL VCHAR(1,I+J,ASC(SE
G$(A$,I,1)))
[illegible]
1950 RETURN
```