AUGUST 1984 Vol. 2 No. 8

The August meeting will be held on Thursday, August 16th at Cuyahoga Falls High School at the corner of Fourth and Stow Streets in Room 413 - Physic's Lab. The September meeting will be held on Sept. 20th. Please be sure to sign in.

This month's program will feature printers. John Tuesday has lined up some demonstrations.

Rich Williams will be teaching the Basic class for beginners. Please bring in your Blue book that came with your keyboard.

NEW PRODUCTS ANNOUNCEMENTS

Logoville^{TM} is a game that teaches the computer logic of the LOGO language on a gameboard. It requires no computer. It is recommended for ages 5-12 with 2-4 players. By playing Logo-ville,^{TM} children learn the twelve computer programming commands and the concepts associated with them. For more information you can either look at the bulletin board at the meeting or you can send $12.95 plus $2.00 shipping and handling to: Tuttle Products, P.O. Box 26981, Tamarac, FL 33320-6981.

J&KH Software are offering a special price on SXB^{TM}(Regular $99.95, Special $59.95). SUPER EXTENDED BASIC (SXB) is a powerful extension to the TI Extended BASIC programming language. SXB is comprised of over 100 TMS9900 Assembly Language subroutines which substantially expand your Extended BASIC programming capabilities on the TI Home Computer. The subroutines are easily invoked with the LINK subprogram in essence, it is now possible to access the raw power of assembly language with only a knowledge of Extended BASIC and the 76 page reference manual provided with the program.

RAFFLE

You still can get tickets for the raffle to be held on Sept. 20. Tickets are $1.50 each or 5 for $5.00.

1st prize= Extended BASIC Module

2nd prize= TI 99/4A Console

3rd prize= Parsec Game Module

4th prize= Pair of Joysticks

5th prize= Cassette Interface Cable

Home Computer Magazine announced that it will no longer carry outside advertising. The new magazine format will allow each article to be presented in its entirety without being interrupted by distracting advertising material.

Subscribers to Home Computer Magazine will also be kept abreast of additional product availability through a separately mailes, 32-page publication called Home Computer Digest (tm). This supplementary publication will be mailed approximately nine times per year and will contain mail-order advertising plus limited editorial material geared to readers who purchase products by mail.

Irene's Campground is holding a swap meet in the Great Smokies for all 99'ers. The meet is planned for August 27 thru September 2. For more information see the bulletin board or write: Irene's Campground, c/o Richard J.P. Smith, Cherokee, NC 28719 or call (704) 497-9634 between 9:30 and 11:00. The rates are 7-8.00 for 2 people and 1.00 for each additional person.

Nick Polanski is selling his TI equipment for $200.00. It includes:

TI 99/4A

Speech

Cables

6 modules (educational, Tunnels of Doom, Fractions, Math, Parsec, Munch Man, Early Reading, English Grammer) and cassettes

Joysticks

8 Magazines and books

You can reach Mr. Polanski at 848-3074.

Rich Williams has written a program call Checkbook Balancer:

This is one of those programs that started out as a fourty line example of programming in basic. It was o.k. for balancing my checkbook at first, but i was spending to much time at a calculator for the extra charges and credits that banks keep dreaming up. Why use a calculator when I've got a computer at my disposal, right?

Well, as you will see, one thing led to another and what we have as about six months worth of modifications, deletions, and "I didn't know this 'puter could do that!".

Here's a quick explanation of running this program. The first thing you should see is the title and credit (that was a last minute afterthought). The first input to the program is the bank's balance. This is the balance from the checking account statement. The next prompt is for outstanding checks that are in your checking register but are not on the statement. These are entered by check number and amount seperately and as long as you do not enter a zero for the check number, it will continue to prompt you for entries. Upon entering a zero for the check number the program will prompt you for any outstanding deposits. Here again, as long as you enter an amount other than zero, the program will continue to request outstanding deposits. Entering a zero will cause the program to request any interest you may have accumulated if you have an account that pays interest on checking. Now it's time to include those service charges that always seem to be at least twice the amount of the interest accumulated. (if theres more than one service charge we can add them up in our head, right?) The computer will now come up with a new balance that should match the amount in your checking register after the last check or deposit on the statement. If it does, there will be an exclamation of joy from the computer (and possibly you). If not, it will tell you how much you are in error. In either case, it will ask you if you would like to see the totals. Entering a 'Y' will cause the program to display all of your entries and thier totals. If the entries and totals are to numerous to list on the screen, the program will list as many as will fit on the screen and then prompt you with 'press enter to continue'. Pressing ENTER will allow the program to finish the list. Answering 'N' to seeing the totals or after listing all of the entries brings up the question 'try again?'. Answering with an 'N' will end the program. If you give it a 'Y', it will give you a menu as to where you would like to re-enter the program. By pressing the number corresponding to the re-entry point, the program will put you back into the program, leaving all amounts previuos to the entry point unchanged and using the new values as you progress through the program again.

I welcome any suggestions or corrections to the program. I can be reached on just about any night of the week at 626-2423. Just don't ask me to balance your checkbook, I'm still working on mine!

```
100 CALL CLEAR
110 REM   LOGO
120 CALL HCHAR(1,3,36,29)
130 CALL VCHAR(1,3,36,24)
140 CALL VCHAR(1,31,36,24)
150 CALL HCHAR(24,3,36,29)
160 FOR LIN1=8 TO 25
170 READ TITLE
180 CALL HCHAR(12,LIN1,TITLE)
190 NEXT LIN1
200 FOR LIN2=8 TO 25
210 READ TITLE
220 CALL HCHAR(19,LIN2,TITLE)
230 NEXT LIN2
240 FOR LIN3=10 TO 22
250 READ TITLE
260 CALL HCHAR(21,LIN3,TITLE)
270 NEXT LIN3
280 DATA 67,72,69,67,75,66,79,79,75,32,66,65,76,65,78,67,69,82,85,80,68,65,84,69
,68,32
290 DATA 86,69,82,83,73,79,78,32,66,89,82,73,67,72,32,87,73,76,76,73,65,77,83
300 FOR DELAY=1 TO 1000
310 NEXT DELAY
320 CALL CLEAR
330 REM   BANK BALANCE
340 INPUT "BANK BALANCE? $":BALANCE
350 CALL CLEAR
360 REM   OUTSTANDING CHECKS
370 PRINT "ENTER EACH OUTSTANDING CHECKNUMBER AND AMOUNT."
380 PRINT
390 PRINT "(ENTER A ZERO FOR THE CHECK NUMBER WHEN FINISHED.)"
400 PRINT :::
410 FOR DELAY=1 TO 10
420 NEXT DELAY
430 PRINT
440 N=0
450 CTOTAL=0
460 N=N+1
470 INPUT "CHECK NUMBER? #":CNUM(N)
480 IF CNUM(N)=0 THEN 530
490 INPUT "CHECK AMOUNT?        $":CAMT(N)
500 CTOTAL=CTOTAL+CAMT(N)
510 PRINT :
520 GO TO 460
530 N=N-1
540 CALL CLEAR
550 REM   OUTSTANDING DEPOSITS
560 PRINT "ENTER EACH OUTSTANDING"
570 PRINT "DEPOSIT AMOUNT."
580 PRINT
590 PRINT "ENTER A ZERO AMOUNT"
600 PRINT "WHEN FINISHED."
610 PRINT
620 M=0
630 DTOTAL=0
640 M=M+1
```

4

```
650 INPUT "DEPOSIT AMOUNT? $":DAMT(M)
660 PRINT :
670 IF DAMT(M)=0 THEN 700
680 DTOTAL=DTOTAL+DAMT(M)
690 GO TO 640
700 M=M-1
710 CALL CLEAR
720 REM   INTEREST
730 INPUT "ENTER INTEREST: $":NTRST
740 PRINT :
750 REM   SERVICE CHARGE
760 INPUT "ENTER SERVICE CHARGE: $":RIPOFF
770 NBAL=BALANCE-CTOTAL+DTOTAL-NTRST+RIPOFF
780 PRINT :
790 PRINT "NEW BALANCE=$":NBAL
800 PRINT :
810 REM   CHECKBOOK BALANCE
820 INPUT "CHECKBOOK BALANCE? $ ":CBAL
830 IF NBAL=CBAL THEN 920
840 PRINT :
850 PRINT "OOPS! CORRECTION=$";NBAL-CBAL
860 PRINT :
870 PRINT "DO YOU WISH TO SEE THE        TOTALS? [Y/N] "
880 CALL KEY(0,K,S)
890 IF K=89 THEN 1020
900 IF K<>78 THEN 880
910 GOTO 1320
920 CALL CLEAR
930 FOR DONE=3 TO 28
940 CALL HCHAR(12,DONE,ATLAST)
950 READ ATLAST
960 DATA 33,33,33,33,33,66,65,76,65,78,67,69,68,32,65,84,32,76,65,83,84,33,33,33,33,33
970 NEXT DONE
980 RESTORE 960
990 FOR DELAY=1 TO 1000
1000 NEXT DELAY
1010 GOTO 870
1020 NOSCROLL=0
1030 IF (N+M)<6 THEN 1050
1040 NOSCROLL=1
1050 CALL CLEAR
1060 PRINT "BANK BALANCE:$";BALANCE
1070 PRINT :
1080 PRINT "OUTSTANDING CHECKS:"
1090 FOR Z=1 TO (N)
1100 PRINT CNUM(Z);"$";CAMT(Z)
1110 NEXT Z
1120 PRINT :
1130 PRINT "THE TOTAL OUTSTANDING        CHECKS=$";CTOTAL
1140 PRINT :
1150 PRINT "THE DEPOSIT AMOUNTS:"
1160 FOR W=1 TO M
1170 PRINT "$";DAMT(W)
1180 NEXT W
1190 PRINT :
```

```
1200 PRINT "THE TOTAL OUTSTANDING          DEPOSITS=$";DTOTAL
1210 PRINT :
1220 IF NOSCROLL=0 THEN 1270
1230 PRINT "PRESS <ENTER> TO CONTINUE."
1240 CALL KEY(0,K,S)
1250 IF K<>13 THEN 1240
1260 PRINT :
1270 PRINT "THE  INTEREST=$";NTRST
1280 PRINT :
1290 PRINT "THE SERVICE CHARGE=$";RIPOFF
1300 PRINT :
1310 PRINT "CHECKBOOK BALANCE:$";CBAL
1320 PRINT
1330 PRINT "TRY AGAIN?[Y/N]"
1340 CALL KEY(0,K,S)
1350 IF K=78 THEN 1560
1360 IF K<>89 THEN 1340
1370 CALL CLEAR
1380 PRINT "WHERE WOULD YOU LIKE TO     RE-ENTER THE PROGRAM?:"
1390 PRINT
1400 PRINT TAB(5);"1) BANK BALANCE"
1410 PRINT
1420 PRINT TAB(5);"2) OUTSTANDING CHECKS"
1430 PRINT
1440 PRINT TAB(5);"3) OUTSTANDING DEPOSITS"
1450 PRINT
1460 PRINT TAB(5);"4) INTEREST"
1470 PRINT
1480 PRINT TAB(5);"5) SERVICE CHARGE"
1490 PRINT
1500 PRINT TAB(5);"6) CHECKBOOK BALANCE"
1510 CALL KEY(0,K,S)
1520 IF (K<49)+(K>54)THEN 1510
1530 CALL CLEAR
1540 ON K-48 GOTO 330,360,550,720,750,810
1550 CALL CLEAR
1560 END
```

PROGRAM DEMO

  September's meeting will feature program demonstrations from the
library. If you would like to see one of our library programs
demonstrated or would like to demonstrate one please contact John
Tuesday at Ph. 644-2616.

UP-DATED TI WRITER

  The Presidents Corner was written this month with the new update of the
TI Writer, copies of the updated disk can be obtained from the library,
members must provide their own disk.

Deals Deals Deals

  Bert Hass has located disks for $18.00 per 10 pack. Bert says that he
can get as many at this price as we can use, also if you are about to
get a printer talk to Bert befor you spend $30 to $35.00 on a PIO
cable.
Bert Hass Ph. 628-1019

```
                      VIDEO TITLES II
                         a review
                 poor-good-very good-excellent
PERFORMANCE    ¡++++++++++++++
GRAPHICS     ¡ ¡++++++++++++++++++
DOCUMENTATION¡+++++++
EASE OF USE   ¡+++++++++++++++++++
SPEED          ¡+++++++
```

     Video Titles II from J&KH software is mainly designed for in store demonstrations. With it you can create titles, move them to the screen change thair colors, add sprites, change border design, and more. I think that this software is very good with its ease of use, performance, and graphics. But speed was the sacrifice for the quality of the program. Video Titles II is a good buy and is worth the money. But you cannot use it without a disk drive and extended basic. The documentation isn't too hot but the program does have a reveiw notes function when you first boot. This allows you to understand how to use this program better. Also, this program is almost like a programming language. What I mean is that when you design a title sequence you "program" it to do certain functions as if you were programming in another programming language. Once again I state that Video Titles II is good buy for your money. by Ian Mariano

Presidents Corner

 Elections are just around the corner (September meeting) which means that nominations should be submitted during the August Meeting. Norman Sorkin has accepted the job as nonimating committe chairman and will be contacting members for positions. If you would like to serve on the board or know of someone who you feel would serve as an officer or committee member please contact Norman Sorkin at Ph. 678-2360. The following members have consented to run for the following positions: President= John Tuesday, Vice-President= Norman Sorkin, Library= Bert Hass.

 The election will be held at 8 PM during the September meeting and the elected officers will take office in October 1984. John Tuesday is in the process of making a voting program to be used on the TI 99 4/A which will enable a secret ballot and the computer will anounce the winners of each office. Membership card must be presented in order to vote, if you do not have a membership card please contact me at Ph 920-1884.

 I would like to thank Ian Mariano and Rich Williams for their articles this month. The newsletter needs more articles written by our own members. If you have anything that you think may be of intrest (a program you have written, modified or corrected, an evaluation of a program or module, evaluation of hardware you have purchased, anything) please contact Kathi Anderson at Ph. 923-7530 or Pat Bowen 920-1884.

 Best wishes to Norm Sorkin who just underwent surgery this week. Get well soon Norm.

 I received a letter from Mike Noble a few days ago and it seems that he will be stuck in "Siberia" longer than expected, other than that he is doing fine. Mikes address is : 125 Crestline #701 Clarksdale, Ms 38614 Ph. 601-624-8567 work 601-745-6611 ext:712 Drop him a line or give him a call.

This article comes to us from the Washington DC Area Users Group, May, 1984.

The Gemini 10X Printer
by Chris Bobbitt

The Gemini 10X is perhaps the best printer for it's price anywhere. It has more features than all of the printers in it's price range, as well as features available only on much more expensive printers. On top of that, the printer is extremely easy to use, is fast, and is very versatile.

The Gemini 10X is packaged in a very attractive blue and white packing case. The case is made of durable cardboard, and the printer itself comes packed in styrofoam and plastic. The case has a built-in handle which makes transporting the box much easier. It doubles nicely as a carrying case for the printer. Included with the printer is a large, smoked, clear plastic cover, which has a cutting edge on it to let it double as a paper cutter for roll paper. Also included is a paper separator to separate the incoming from the outgoing paper, a paper guide, a roll paper holder and paper shaft for roll paper, an inked ribbon with an estimated life of one to two months (my estimate), a very nice manual which gives operating instructions for every computer but our own, and a registration card that promises a 90-da. warranty on the printing element and a one year warranty on the printer itself. Also included is an extra fuse for the power supply. Short circuiting the printer is not a difficult task, I found out to my chagrin. Simply touch the power supply with a metal screw-driver when the printer is on and you have succeeded. Thank God for Star Micronics's foresight. The printer is, for the most part, assembled when it arrives. Assembly entails putting on the paper separator and guide, and putting on the ribbon, which can be frustrating if you don't read the instructions. The printer includes a parallel output, (which is what I prefer; I don't see what people see in serial), and the option of purchasing a serial card or a buffer. Unless you purchase a cable with a printer, you will have to buy one (for an exorbiant fee; like I did) from a company that makes cables.

The manual which comes with the printer covers complete assembly and dissassembly of the printer. But putting the printer together the first time is a snap (literally). The paper guide and separator have been provided with slots in the chasis, but it is a TIGHT fit. The only difficulty you may have putting the printer together may be putting on the ribbon. If all else fails, read the instructions. The ribbon will last about two months with heavy use, and automatically reverses direction when it gets to the end. The ribbon is a standard typewriter style spool ribbon, with an eyelet at each end. These ribbons may be obtained for about $1.50 each at most office-supply stores.

The control panel of the printer has four LED indicators, as well as three buttons. The indicators indicate whether the **POWER** is on, whether the printer is **READY** , when it is **ON-LINE** , and when it is in a mode of **PAPER-OUT** .The three sensitive buttons on the panel allow you to put the printer on and off line, allow you to form-feed one sheet of paper, and allow you to send a signal to feed the paper up one line. The last two buttons can only be used in the off-line mode. Also included is a built-in self-test. Simply press down either the on-line button and the line-feed button, or the form-feed and the line-feed button as you turn the printer on to get a complete list of the regular and italic character sets. External controls include an on-off switch (obviously), and a set of preset dip switches on the back as well as on the inside of the printer. These switches were named after people who love to press buttons and pull switches. Unless you intend to make semi-permanent changes in the character sets or in some basic paper handling routines, these switches are best left alone. However Star Micronics again supports stupid people by giving a list of all the switches and their original state, so if you (like I did) mess up

when setting the switches, you can always consult the manual. All the features available through the dip-switches can be duplicated in your software.

The printer has a whole slew of software support features. Through the use of the versatile CHR$ command you can send commands to the printer which allow you to change virtually every aspect of printing. You can select one of the eight available foreign character sets, set the print pitch to pica or elite, set it to superscript or subscript, tell the printer to print in condensed (136 columns) or double-width mode (40 columns), and basically get what you want done, how you want it done. The print is good enough to pass for letter quality in the normal-size print mode, but looks even better in the condensed mode. One feature of the printer which is very uncommon among printers of this price range; you can define what is called a "macro instruction". This instruction allows you to define a single command to represent up to 16 printer functions, which will all be executed when the single command is. Believe me, this really simplifies some hard tasks. Also available are bit image graphics in low resolution, high resolution at double the speed, and quadruple density (240 dots-per-inch!). You can even put your printer offline through the use of one of the multitude of available printer functions. If you are brave enough, you can attempt to define your own character set. The only drawback with this is you will have to load it in every time you want to use the set, or keep the printer on around-the-clock.

The printer is quiet. When not working you can only tell it's on by it's LEDs (this is probably why they included them). When the printer is blasting away at full speed, 120 characters-per-second, it is quite audible. But with the hood on it is quite acceptable. You don't even notice it after a while, it not being too much noisier than the fan in the P-Box. Epsons tend to beat other printers on this point. But I will take my Gemini anyday for reliability and features. In speed tests, the Gemini 10X ALWAYS beats both the Epson printers, even the one that goes 160 CPS (referance: Byte magazine, last month's issue). This is primarily because the Gemini 10X has a much faster line feed. The Gemini has been done with a page for five to ten seconds before the Epson gets around to finishing. Unless you have a buffer, this is a pretty nice feature. The form feed of the Gemini 10X is also faster than that of the Epsons . Overall, I believe the Gemini 10X is a much better buy for the money. I base my opinion on it's flexibility (it takes single-sheet, roll, and tractor paper), quality (six month's and not a difficulty yet), speed (mentioned above), and versatility (I haven't even experimented with a lot of the available functions). The Gemini has beautiful characters and graphics, and it can even use graphic programs designed for the Epson printers (as well as the TI printer) with few if any modifications.

The Gemini 10X is available for $300 on up at retail establishments, but can be purchased for $250 on up by mail. The parallel cable (and obviously the RS232 and P-Box) are not included. Cables can be had from many places for a semi-reasonable price, which means they will only charge you an arm, but not a leg, for a three foot piece of ribbon cable. Bye...

On the next page is an article from THE HUGGERS HOOSIER USERS GROUP, July 1984.

HEART AND SOUL OF PERSONAL RECORD KEEPING, PART III
by Don Donlan

```
100 REM      INSERT THE P-R-K COMMAND MODULE AND USE THE SUBPROGRAMS THAT ARE
110 REM      RESIDENT THERE TO CREATE TWO SEPARATE DISK FILES: ONE IS THE
120 REM      P-R-K HEADER RECORD THAT DESCRIBES THE STRUCTURE OF THE DATA;
130 REM      THE OTHER IS A FILE OF THE DATA ITSELF.
140 REM BEFORE LOADING THIS BASIC PROGRAM.............................
150 REM      EXECUTE THE FOLLOWING THREE BASIC COMMANDS:
160 REM                  > CALL FILES(1)
170 REM                  > CALL P(10000)   [To prepare a data area.]
180 REM                  > NEW             [To clear out any old data.]
190 REM      Now load and run the following program.  Each line will be followed
200 REM      by a comment about the purpose of that statement.
210 REM =================================================================
220 CALL L("DSK1.PRKFILE",C)     REM Load data file into reserved area.
230 IF C=0 THEN 650              REM Check error indicator: 0=failure, non-0=O.K.
240 OPEN #1:"DSK1.PRKHEADER",RELATIVE,INTERNAL,OUTPUT,FIXED
250 CALL H(1,1,0,F$)            REM Read the internal file name.
260 CALL H(1,5,0,F)            REM Read the number of fields per record.
270 CALL H(1,6,0,R)            REM Read the number of records in the file.
280 PRINT #1:F$,F,R            REM Write Header File record.
290 PRINT F$;F;R              REM Print this information on the screen.
300 FOR I=1 TO F              REM Begin a loop to write field definitions.
310 CALL H(1,9,I,F$)          REM Read the field name.
320 CALL H(1,10,I,T)          REM Read the field type.
330 CALL H(1,11,I,W)          REM Read the field width or size.
340 IF T<>1 THEN 370          REM Field is alpha (TYPE is not equal to 1)
350 S=S+W+1                   REM So add width + 1 to record size.
360 GOTO 380                  REM Then skip around next lines of code.
370 S=S+9                     REM With numeric field, add 9 to record size.
380 CALL H(1,12,I,D)          REM Read the number of decimal places.
390 PRINT #1,REC I:F$,T,W,D   REM Write this information to HEADER file.
400 PRINT F$;T;W;D            REM Print this information to the screen, too.
410 NEXT I                    REM Return to write remaining field definitions.
420 CLOSE #1                  REM Close the HEADER; open DATA file when done.
430 OPEN #1:"DSK1.PRKDATA",SEQUENTIAL,INTERNAL,OUTPUT,VARIABLE S+2
440 FOR I=1 TO R              REM Set up a loop to read records and print DATA.
450 PRINT I                   REM Print record number to the screen.
460 FOR J=1 TO F              REM Set up a loop to read fields in each record.
470 CALL H(1,10,J,T)          REM Read the field type.
480 IF T=1 THEN 540           REM Determine if field is alpha or numeric.
490 CALL G(1,I,J,C,D)         REM For numeric, retrieve data in a numeric var.
500 IF C=0 THEN 520           REM If 'missing data' code is not 0,
510 D=-9.9999999999999E+127   REM enter a default value that can be tested for;
520 PRINT #1:D;               REM otherwise, print the numeric data to the file
525 PRINT D;                  REM and to the screen.
530 GOTO 590                  REM go around the lines that handle  alpha DATA.
540 CALL G(1,I,J,C,F$)        REM Retreive character data into a character var.
550 IF C=0 THEN 570           REM If 'missing data' code is not 0,
560 F$="?"                    REM enter a default value that can be tested for;
570 PRINT #1:F$;              REM otherwise, print the alpha data to the file
580 PRINT F$;" ";             REM and to the screen (with an additional blank).
590 NEXT J                    REM Go to the next field within the record.
600 PRINT #1:"@"              REM Finish by printing the entire record to file.
610 PRINT                     REM Finish pending print to the screen, too.
620 NEXT I                    REM Go on to process the next record in the file.
630 CLOSE #1                  REM Close the DATA file.
640 STOP                      REM Stop or End program execution.
650 PRINT "ERROR IN LOADING PRK FILE."      REM Error message if load fails.
660 STOP
```

This article comes to us from the Boise 99'ers Computer Club, July 1984 issue.

99/4A MINI ORGAN

By: J.D. Canning

The following short program converts the keyboard of the 99/4A into an electronic organ. It scans each side of the keyboard so two notes may be played at one time completely independently of one other.

The numbers in the DATA statement are simply the frequencies that I have assigned to each key. For more information, refer to your TI reference manual that was supplied with your computer.

```
100 REM  MINI TI ORGAN
110 REM  *************
120 REM  JUNE 1984 JDC
130 REM  *************
140 REM
150 OPTION BASE 0
160 DIM NOTE(20)
170 REM
180 REM  **************
190 REM  READ NOTE FREQ
200 REM  **************
210 REM
220 FOR I=0 TO 20
230 READ NOTE(I)
240 NEXT I
250 DATA 40000,220,247,262,294,3
30,349,392,440,494,523,587,659,6
98,784,880,988,1047,1175,1319,13
97
251 REM
252 REM  ***************
253 REM  CLEAR DISPLAY
254 REM  ***************
255 REM
256 CALL CLEAR
257 DISPLAY TAB(7):"TI MINI ORGA
N": : : : : : : : : :
260 REM
270 REM  **************
280 REM  SCAN KEYS
290 REM  **************
300 REM
310 CALL KEY(1,K1,S)
320 CALL KEY(2,K2,S)
330 REM
340 REM  ****************
350 REM  CONVERT DATA
360 REM  ***************
370 REM
380 K1=K1+1
390 K2=K2+1
400 REM
410 REM  ****************
420 REM  PLAY NOTE & REDO
430 REM  ****************
440 REM
450 CALL SOUND(-1000,NOTE(K1),0,
NOTE(K2),0)
460 GOTO 310
```

I would like to thank all that contributed to this month's newsletter. See you at the meeting.

Kathi Anderson, Editor

SUMMIT'99ers USERS GROUP
Kathi Anderson, Editor
3240 Bailey Road
Cuyahoga Falls, Ohio 44221