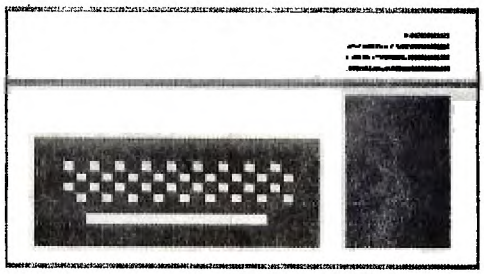
Spirit of 99

THE OFFICIAL NEWSLETTER OF THE CENTRAL OHIO NINETY-NINERS INC.

PUBLISHED MONTHLY IN COLUMBUS OHIO

NO 9 AUGUST $1.00

CENTRAL OHIO



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Spirit of 99

VOL. 1 NO. 9 AUGUST 1983

THE OFFICIAL NEWSLETTER OF CENTRAL OHIO NINETY-NINERS

CENTRAL OHIO NINETY NINERS INC

The SPIRIT of Ninety-Nine is the official newsletter of the Central Ohio Ninety-Niners Inc. It is published monthly in Columbus, by INFOWARE for C.O.N.N.I. Members and other subscribers.

Subscription price is Ten ($10.) dollars a year to non-members, or One ($1.) dollar per single issue. Members whose dues are current will receive the newsletter at no charge.

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Central Ohio Ninety-Niners Inc. is a non-profit organization composed of members who own or use the TI99/4A and it's related products. It's main objective is the exchange of Educational and Scientific information for the purpose of Computer literacy.

C.O.N.N.I. meetings are held the SECOND SATURDAY of each month at the Martin Janis Senior Center, on the Ohio State Fairgrounds, East Eleventh Avenue in Columbus. Meeting time is at 9:30 AM. Meetings are open to the public

Membership dues are $15.00 per year payable to C.O.N.N.I., this fee covers your immeadiate family. An application has been placed in this newsletter for your convenience. Please address it and all other correspondence to:

SPIRIT of 99 c/o (department)
1456 GRANDVIEW AVENUE
COLUMBUS OHIO 43212

If you have questions please call 486-7262 MON-WED 8AM-3PM only, and I will try to help you.
Pat Saturn ED.

* (AGENT FOR EXTENDED SOFTWARE)

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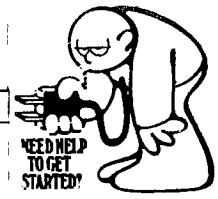

CENTRAL OHIO NINETY NINERS INC

99 OWNERS OR BUYERS!!!

C.O.N.N.I. Wants to talk to you.

Looking for HELP? Other Users?, Software?, Programs?, Group DISCOUNTS?, Peripherals?...
Well, now you can STOP looking! STOP sitting up late nights trying to figure out what "BAD VALUE" means. Call someone who does, or someone else who does not, or just someone else to be confused with you.
All this and more!!!

We are a fast moving, steadily growing USERS GROUP located in Central Ohio (Address below). We will do our best to Help you find the answers to your many questions. Our NEW MEETING PLACE will be (as of JULY) the Martin Janis Senior Citizen Center, Located on East 11th avenue (fair grounds) in COLUMBUS.
Our meetings are the SECOND SATURDAY OF EACH MONTH , UNLESS OTHERWISE NOTED IN OUR NEWSLETTER (SPIRIT OF 99). Write to C.O.N.N.I. at 1456 GRANDVIEW AVENUE COLUMBUS OHIO 43212.
If you have a question about us I can be reached at 486-7262 MONDAY-WEDNESDAY 8AM TO 3PM ONLY.

If you simply wish to join our Group the fee is $15.00 per year (single or family) a handy-dandy application form is attached.
If you would rather not join but, would like to receive our Newsletter, Subscription is $10.00 per year. (Members receive the newsletter Free).

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PUT A CIRCLE AROUND THE ABOVE PERIPHERAL YOU PLAN TO ( )BUY NEXT

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KIDS COMPUTER CORNER

This month we were asked to review an Extended Basic game called NIT-WIT. Sent to us by TEXware Associates 350 First North St. Wellington Il. 60973.

The gameboard is comprised of a double screen of drain pipes (one for each Player). A plug controlled via joystick is then moved under and up into each pipe trapping letters in them. The object is to form a word in the order that you trap the letters, before your opponent does. The letters drop down the screen in random order, sometimes so close that you miss the one you were after and get the next one. Sometimes you don't get any vowels. This, of course, leads to words like "dprxtn" and "frbblx" which prove that you need vowels to form words. Even though these are not words the game thinks they are valid. Some words that are real are taken as non-words. This made the game somewhat disappointing.

The game had good graphics and sound. The pre-game graphics were a random sprite movement with a Call Coinc, (a thing-a-ma-jig takes the sprite title letters and crushes them on the game grid, then they slide off the board)? I would personally remove from the game. I also felt that being limited to only joy sticks was a handicap.

We gave the game an over-all rating of 4, on a scale of 1-10. We wish to thank TEXware for the opportunity to review their software, and will review their other game "The Game of Wit" in a future column. This game will be placed in the club Library for others to enjoy. It is Protected, so if you want your own copy it should appear in the TEXware ad in august 99er. or simply write to the address above. See you next month, or at the August meeting. Will Mclung

NEWSLETTER REM

(REMinder)

Well here we are Number Nine, August. We've gotten Bigger and for the most part, Better. I would like to thank those of you who have contributed to our columns, even Biggie, and of course, our readers.

As you probably know, our newsletter is read by Thousands of people around the World. That's right, Other Countries receive our monthly columns. Some get it FREE, others SUBSCRIBE. Among those who receive this newsletter at No Charge are, Members, User's Groups, Advertisers, & some Magazines or Special Interest Groups. I mention this now because as our size grows, so grows our costs.

We've let a few free issues go out each month to persons who are not Subscribers or Members because, well we would like everyone to get free issues. (and I'm a nice Editor). Unfortunately, we can't continue this practice. I've been told to CUT the BUDGET, (so I'm not asking for any more missiles or guns).

At this point the only sane thing to do, is cut some of the freebies, and so, a NEW Policy. Starting in September, a Non-Member/Subscriber will receive TWO (2) news letters. THIS MEANS THIS IS THE LAST. They will then be expected to join CONNI, or Subscribe to the Newsletter.

We feel that it is well worth the price, besides it is ONLY FAIR to those who have and are paying. So if you like Biggies bits, Kids Computer Corner, Tenderfoot, as well as the many programs already published, and those yet to come.... Get out your pen and send Art a check. Membership and Subscriber information can be found just Inside our Front Cover. Sincerely, Pat Saturn (Ed)..

BIGGIES BITS

Dear Biggie,
My friend laughs at me because my TI dosen't have a real Keyboard like his VIC-20. Also, he says I can't get REVERSE LETTERS with one key like he can. Can you show me how to make REVERSE LETTERS on my 99/4A? Ron P., Columbus Oh.

Dear Ron,
Not only are the TI99/4A keys of typwriter style, The keyboard is the same size as that of the IBM Selectric III. As for REVERSE letters, this is a feature found on many terminnals to make user inputs stand out better. TI uses an audible tone to indicate user inputs. On the 99/4A REVERSE letters can be used to define both text & screen in any of 16 available colors,foreground & background of the character. Some TI software packages offer color control options. Your friend has very little reason to laugh at your computer. Here is a subroutine to show your friend how you can also get REVERSE letters, in ANY color.

REVERSE LETTERS:

```
100 CALL CLEAR
110 FOR I=1 TO 12
120 CALL COLOR(I,3,2)
130 NEXT I
140 INPUT "BEGIN TYPING:A$
150 PRINT A$
160 GOTO 140
```

(SEE PAGE 42 OF "BEGINNER'S BASIC).

Dear Biggie,
Why doesn't the TI have true lower case letters in their basic programs? also, when I want lower case how can I make the computer put lower case on the screen? Victor.

Dear Victor,
Your TI can have lower case letters any time you want to REDEFINE the 2nd ASCII set. (Example Vol. 1, No. 7 "Just another pretty face" and Vol. 1 No. 3 Lower case subroutine). The reason TI doesn't put true lower case in it's BASIC memory is, that the TI can be hooked up to any TV. Unfortunately, if someone is using a TV set with relatively low picture quality, lower case letters can sometimes become unreadable; the smaller upper case letters offer better legibilty in this case. Programming Aids I also has routines to define true lower case.

BASIC

```
 50 REM  PROGRAM TO DEMONSTRATE
 60 REM  A SET OF EXAM GRADES
 70 REM  USING 15 STUDENTS
 80 REM  GIVING HIGHEST GRADE
 90 REM  LOWEST GRADE
100 REM  AVERAGE GRADE
110 REM  PROG CAN ACCEPT
120 REM  UP TO 50 GRADES
130 DIM G(50)
140 CALL CLEAR
150 CALL SCREEN(12)
160 PRINT "HOW MANY STUDENTS";
170 INPUT N
180 PRINT
190 PRINT "STUDENT","GRADE"
200 PRINT
210 FOR I=1 TO N
220 PRINT I,
230 INPUT G(I)
240 NEXT I
250 LET S=0
260 FOR I=1 TO N
270 LET S=S+G(I)
280 NEXT I
290 PRINT
300 LET M=S/N
310 PRINT "CLASS AVERAGE IS";M
320 LET H=G(1)
330 LET L=G(1)
340 FOR I=2 TO N
350 IF L<G(I)THEN 370
360 LET L=G(I)
370 IF H>G(I)THEN 390
380 LET H=G(I)
390 NEXT I
400 PRINT "HIGHEST GRADE IS";H
410 PRINT "LOWEST GRADE IS";L
420 END
```

MORE

UNCLE BIGGIES PAINT CALCULATOR

```
50 CALL CLEAR
60 FOR SET=1 TO 12
70 CALL COLOR(SET,16,1)
80 NEXT SET
90 CALL SCREEN(5)
100 REM  PAINT PROGRAM/      CALCULATES
AMOUNT OF PAINT  REQUIRED FOR UP TO SIX
WALLS
110 REM  AND THE APPROXIMATE COST FOR PAINT SELECTED
120 REM  DIM WALLS & SET VAR  TO ZERO
130 DISPLAY "       UNCLE BIGGIES "::"
PAINT  CALCULATOR"::"PRESS  <ENTER>
TO CONTINUE"::::::
140 INPUT A$
150 CALL VCHAR(1,1,32,760)
160 DIM WALLS(6)
170 HEIGHT=0
180 GALLONS=0
190 SQFT=0
200 S1=0
210 S2=0
220 S3=0
230 S4=0
240 S5=0
250 S6=0
260 TCST=0
270 CST=0
280 REM  MAIN WALL LEN LOOP
290 FOR C=1 TO 6
300 WALL(C)=0
310 CALL CLEAR
320 PRINT "LENGTH OF WALL";C;
330 INPUT WALL(C)
340 PRINT "FT."
350 INPUT "IS LENGTH CORRECT? (Y/N) ":A$
360 IF A$<>"Y" THEN 310
370 NEXT C
380 REM  INPUT HEIGHT OF         WALLS
390 CALL CLEAR
400 PRINT "HEIGHT";
410 INPUT HEIGHT
420 INPUT "IS HEIGHT CORRECT? (Y/N) ":A$
430 IF A$<>"Y" THEN 390
440 CALL CLEAR
450 PRINT "NO. OF SQUARE FT./GALLON"::"(FROM LABEL)";
460 INPUT SQFT
470 PRINT "IS SQ.FT. FIGURE"::
480 INPUT " CORRECT? (Y/N) ":A$
490 IF A$<>"Y" THEN 440
500 REM  CALCULATE AND PRINT     VALUES
510 CALL CLEAR
520 INPUT "COST/GALLON? $":CST
```

CONTINUED

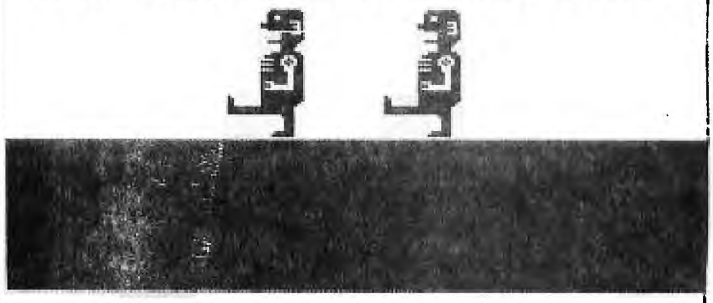
PAINT CONTINUED

```
530 INPUT "IS COST CORRECT? (Y/N) ":A$
540 IF A$<>"Y" THEN 510
550 CALL CLEAR
560 S1=HEIGHT*WALL(1)
570 S2=HEIGHT*WALL(2)
580 S3=HEIGHT*WALL(3)
590 S4=HEIGHT*WALL(4)
600 S5=HEIGHT*WALL(5)
610 S6=HEIGHT*WALL(6)
620 S7=S1+S2+S3+S4+S5+S6
630 GALLONS=S7/SQFT
640 GALLONS=GALLONS+.5
650 TCST=INT(GALLONS)*CST
660 PRINT "GALLONS";INT(GALLONS)::"COST $";TCST::"TOTAL
   SQUARE FOOTAGE"::"=";S7;   "SQ.FT.":: 
670 INPUT "PRESS <ENTER> TO END":A$
680 CALL CLEAR
690 PRINT "YOU COULD USE THIS TO PAINT"::"YOUR COMPUTER
    ROOM":::"TO RUN AGAIN, TYPE IN <RUN>"::"AND PRESS
    <ENTER>":::::::
700 END
```

SPLIT SCREEN

```
100 REM SPLIT SCREEN
110 REM BY NIRAJ SHAH
120 REM
130 REM
140 REM WIPE OFF THE SCREEN        AND MAKE IT INVISIBLE
150 CALL CLEAR
160 CALL SCREEN(1)
170 PRINT TAB(7);"SPLIT-SCREEN": : : : :
180 PRINT "WHICH PART OF THE SCREEN DO": :"   YOU WANT
    TO TYPE ON?": : : :
190 PRINT TAB(5);"<1>  TOP": :TAB(5);"<2>  BOTTOM": : : :
200 PRINT TAB(5);"PRESS <1> OR <2>": :
210 REM MAKE SCREEN VISIBLE
220 CALL SCREEN(8)
230 REM WAIT FOR A KEY TO BE HIT AND ONLY ACCEPT <1>&<2>
240 CALL KEY(0,K,ST)
250 IF ST=0 THEN 240
260 IF (K<ASC("1"))+(K>ASC("2"))THEN 240
270 CALL CLEAR
280 CALL SCREEN(1)
290 REM MAKE ALL THE LETTERS BLACK(2) & ALL BACKGROUNDS
    DARK YELLOW(11)
300 FOR I=1 TO 16
320 NEXT I
330 REM FIND OUT WHICH KEY  WAS HIT; EITHER <1> OR <2>
340 IF K-48=1 THEN 360 ELSE 400
350 REM SET THE ROW LIMITS        FOR THE TOP HALF OF
    THE SCREEN
360 IMIN=1
370 IMAX=12
380 GOTO 440
390 REM  SET THE ROW LIMITS       FOR THE BOTTOM HALF
    OF THE SCREEN
400 IMIN=13
410 IMAX=24
420 GOTO 440
430 REM PUTS THE CURSOR ON  THE SCREEN AND MAKES SURE
    THAT IT DOES NOT GO OFF OF  THE SCREEN.
440 GOSUB 640
450 JMAX=29
460 I=IMIN
470 JMIN=2
480 J=2
490 CALL KEY(0,K,ST)
500 CALL HCHAR(I,J,30)
510 IF ST=0 THEN 490
520 REM DECIDE IF CURSOR IS BEYOND THE COLUMN LIMIT
530 IF J>=JMAX THEN 570
540 J=J+1
550 CALL HCHAR(I,J-1,K)
560 GOTO 490
570 I=I+1
580 REM DECIDE IF CURSOR IS BEYOND THE ROW LIMIT
590 IF I>=IMAX THEN 620
600 CALL HCHAR(I-1,29,K)
610 GOTO 480
620 INPUT "WANT TO DO IT AGAIN?(Y/N) ":R$
630 IF R$="Y" THEN 150 ELSE 690
640 REM   DISPLAYS THE            DIVISION BETWEEN THE
    TOP AND BOTTOM HALVES  OF          THE SCREEN
650 CALL CLEAR
660 CALL SCREEN(14)
670 CALL HCHAR(12,1,61,32)
680 RETURN
690 END
```

SCREEN DUMP, ROCKIES ROBOT BOOGIE



Dear Biggie,

Here is a trick to stop someone from RUNning a program you don't want them to run.

Make sure that you have a tape or disk copy of the program and with the program in memory add 1 RUN "CS1" to it. With this statement at the beginning of the program, typing RUN and pressing ENTER will cause the computer to clear its memory and prompt the user to operate the cassette recorder. There is a way to RUN the program with this statement at the beginning, but I'll let the readers figure out what it is. Remember, this only works in EXTENDED BASIC.

Paul Powers

CLASSIFIEDS

GENERAL ELECTRIC 10 INCH COLOR PORTABLE; 8 months $165.00 with MODULATOR $150.00w/o Paul Powers CALL 1-873-8177 (PLAIN CITY)

GIVE YOUR TI A HOME.... DESK PLANS $5.00...TURTLE SHELL $15.00... CLUB T-SHIRT (SEE ME AT THE MEETING) BASIC TUTOR $5.00/HR. (CHILDREN 8-14) CALL 486-7262 MON-WED ONLY/ 8A.M.-3P.M. PAT S.

5" WABASH SD DISKS $18.50/BOX...POOR MANS FLOPPY (HISPEED TAPE 3000 BAUD) TRSmod1 W/1 CASSETTE DRIVE $95.00...ROBOTICS USR3330 MODEM AUTO ANSWER,DIRECT CONNECT, 300 BAUD $125.00 OTHER USED COMPUTERS & EQUIPMENT FOR SALE CALL J. CRAMER 614-279-8271

SEND YOUR PERSONAL AD TO SPIRIT OF 99 1456 GRANDVIEW AVENUE COLUMBUS OHIO 43212 MEMBERS ADS ARE PRINTED AT NO CHARGE. (LIMIT 25 WORDS PLEASE).

FOR SALE: T.I.SPEECH EDITOR $20.00,(SYNTHESIZER NEEDED). T.I. BLACK JACK & POKER $15.00, Instruction book w/each command module. see Earl Dodd at the next meeting, or call 443-37445.

ATTENTION
NEW MEMBERS

Being a new member you probably have many questions Earl Dodd has graciously volunteered to answer basic questions at the meetings about the 99/4A and getting started. If you have Questions about programming or technical questions, we have several people who are well versed in these matters.

Remember, the only dumb question is the one you don't ask.

NEW STUFF

SOFTWARE

TI-Mini-Writer
* Cassette based.
* Requires Mini-Memory cartridge
* Available 3rd Quarter 1983. SRP IS $19.95

EDUCATIONAL
* Early Logo Learning Fun Jul "83" SRP $39.95
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* Word Invasion 4th Qtr. "83" SRP $39.95

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* Moonmine cartridge 4th Qtr. "38" SRP $39.95
* Entrapment (Cassette) 3rd Qtr. "83" SRP $19.95 (requires Mini-Memory to run).

USER'S GROUPS

We would like to welcome SUMMIT 99'ER USER CLUB to our growing list of groups we are exchanging news letters with. Mr.Paul Hayden President, Cayahoga Falls, OH 44221.

ERROR

Gracia Luoma has discovered an ERROR in the instructions for working with disk systems and the Personal Record Keeping Module.

The computer never prompts you for the DEVICE NAME as a separate response. Instead DEVICE NAME is entered as part of the FILE NAME. To correct these instructions DELETE the following sentence in paragraph 2 on pg. 32 of the operating manual for this Module:

(paragraph 2 line 3) "The computer prompts you for the device name, Type DSK1., DSK2., or DSK3. depending upon the disk drive you are using."

TENDERFOOT BASIC

by [illegible]

This month we are going to "talk" about <IF-THEN-ELSE> statements. First of all, why would you want to use this statement? A programmer uses an <IF-THEN-ELSE> statement to test his data to see which way he wants to go(ie: what he wants to do next). Basically, a <I-T-E> stmnt. tests the expression in its argument and does either one thing or another. The programmer decides what the expression to be evaluated is and he also decides what to do as a result of the evaluation(this is called BRANCHING to another part of the program).
The argument of the <I-T-E> stmnt. is the expression located between the words IF and THEN. The LINE numbers after the word THEN and after the word ELSE are called the BRANCH LINES. These are the LINES that the program must go to after the argument has been tested. So, the <I-T-E> statement looks like this in its most general form:

```
 IF (expression) THEN LINE 1 ELSE
line2
```

When the computer encounters an <I-T-E> stmnt. in the program it evaluates the argument of the stmnt.. IF the argument is found to be correct or true THEN the program branches to LINE 1 ELSE the program branches to LINE 2. How does the computer know if the expression is correct or true? The programmer has to set up the expression in such a way that the computer can say "yes, that is correct" or it can say "no, that is not true". How does the programmer do this? The best way to understand this is to see a example. So, consider the following example:

```
100 CALL CLEAR
110 EXPRESSION$="YES"
120 IF EXPRESSION$="YES" THEN 130
ELSE 150
130 PRINT "YES" :::
140 GOTO 160
150 PRINT "NO" :::
160 END
```

LINE 110 sets the variable [EXPRESSION$] to have a value of "YES". LINE 120 is a <IF-THEN-ELSE> stmnt.. Its argument is the expression, (EXPRESSION$="YES"). The purpose of LINE 120 is to see if [EXPRESSION$] is equal to "YES". When the computer reaches LINE 120 it will ask the question, "Is [EXPRESSION$] Equal To "YES" ?". The answer will be "yes!". So, because the answer is "yes" the computer has to branch to the LINE number that follows the word THEN in the <I-F-T> stmnt. In this case the computer will have to branch to LINE 130; which will PRINT the word "YES". Then LINE 140 will skip around the ELSE clause and go to the END statement.
Consider what would happen if LINE 110 was changed to EXPRESSION$="NO".
So,now when the computer evaluates the expression, EXPRESSION$="YES", it will immediately see that the equality is NOT TRUE. This is because LINE 110 had set EXPRESSION$="NO". So, after the computer has found the argument in the <I-T-E> to be FALSE (Not True) it will proceed to the else clause which starts at LINE 150. LINE 150 will print a "NO" on the screen.
Now that you have seen a concrete example of using an <IF-THEN-ELSE> statement let us go over the highlights. When the computer reaches an <I-T-E> stmnt. in a program it evaluates the expression in the argument of the statement. IF the argument is true/valid/correct THEN the computer branches to LINE 1 ELSE if the argument is not true the computer branches to LINE 2. The argument consists of an expression to which will result in a "yes" or "no" answer to the question "IS THIS EXPRESSION CORRECT?". Based on the answer the flow of the program branches in two different directions.

CONTINUED

TENDERFOOT CONTINUED

How can you put the above program example to use? Suppose that you were programming a questionaire and were only asking Yes & No type questions. How would you ask the questions to the user? Remember from last month's topic that we covered <INPUT> statements? So you would use an <INPUT> stmnt. to evoke a response from the user. How would you test his response? What do you have to test for?

1) a YES answer
2) a NO answer
3) an INVALID response

The best way to test his response is to use <IF-THEN- ELSE> statements. Consider the following program as a solution to this problem:

```
100 CALL CLEAR
110 INPUT "WHAT IS YOUR NAME
?:NAME$
120 INPUT "ARE YOU TIRED?
":RESPONSE$
130 IF RESPONSE$="YES" THEN 140
ELSE 160
140 PRINT NAME$&" IS TIRED":::
150 GOTO 180
160 IF RESPONSE$="NO" THEN 170
ELSE 120
170 PRINT NAME$&" IS NOT
TIRED":::
180 END
```

Notice that this time there are TWO <I-T-E> statements. The first one in LINE 130 tests to see if the response of the user was a "YES". IF it was a "YES" THEN proceed to LINE 140 ELSE goto LINE 160. Line 160 has the second <I-T-E> stmnt. whose purpose is to see if the response was a "NO" or invalid data. IF the response was "NO" THEN proceed to LINE 170 and PRINT the appropriate message ELSE it is an invalid response which causes the program to branch back to the question in LINE 120.

Notice how I took care of the user giving a response other than "YES" or "NO". This was taken care of by the <I-T-E> Stmt. in LINE 160. The standard approach to taking care of INVALID DATA is to check for VALID (good) DATA first then check for the INVALID (Bad) DATA. The reason for this is that nine times out of ten the user WILL give the correct type of response. But, if there is a lot of data to check and relatively little INVALID data then it is better to test for bad data first then to check for the desired data. In this case, I took the standard approach. That is, I checked in order for the responses, "yes" and "no", then if the response was neither of those I knew it was an invalid response.

Imagine that the response was an invalid one for the above program. When the computer reaches LINE 130 it will find that the [RESPONSE] was not a "YES" so it branches to LINE 160. This time the computers checks to see it [RESPONSE] is a "NO". Since it is not a "NO" the ELSE clause causes a branch to LINE 120 which repeats the question. The purpose of LINE 150 is to keep from fooling the computer into thinking that the response was an INVALID one. Suppose that LINE 150 was omitted and that the response was a "YES". The argument for LINE 130 when evaluated will prove to be true which causes a branch to LINE 140. After LINE 140 is executed, the computer will proceed to LINE 160 which tests for a "NO" or an INVALID response. We know that the response was a "YES" but the computer has 'forgotten' that once it finished executing LINE 130. So, when LINE 160 is reached the argument will give a false evaluation. This means that the response is INVALID! But, this is not correct! How to solve this problem? Put LINE 150 back in!

The purpose of this experiment was to show you that you must put a GOTO statement at the end of every THEN and ELSE clauses. In other words after the THEN part of the program is finished put a GOTO stmnt. right after it to avoid the ELSE part of the program.

CONTINUED

TENDERFOOT CONTINUED

Keep the THEN and ELSE clauses close to their respective <IF-THEN-ELSE> statement and keep the two clauses close to each other and separated by a GOTO statement. By 'close' I mean sequentially in order in the body of the program.
In closing, here is a memory hint to help you remember how to implement an <IF-THEN-ELSE> statement. Think of it this way: IF (expression) is true THEN goto LINE 1 ELSE(otherwise) goto LINE 2

100 Different programs for the TI994/A programmed in TI Basic, no peripherals needed.
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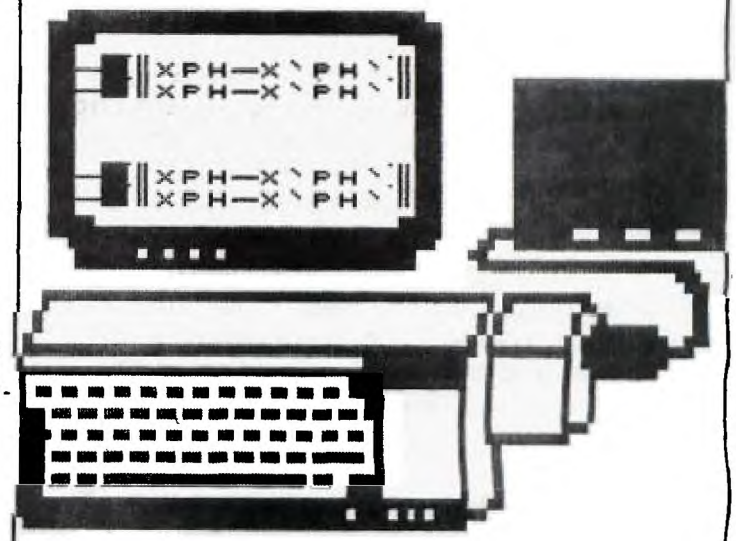
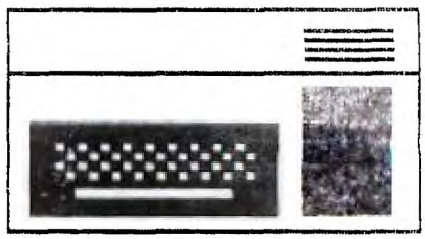
MAIN SCREEN SYMPOSIA



SCREEN DUMPS were made possible by a program sold by EXTENDED SOFTWARE 11987 CEEDAR CREEK DR. CINCINNATTI OHIO 45240 (THIS IS A FREE ONE JIM).

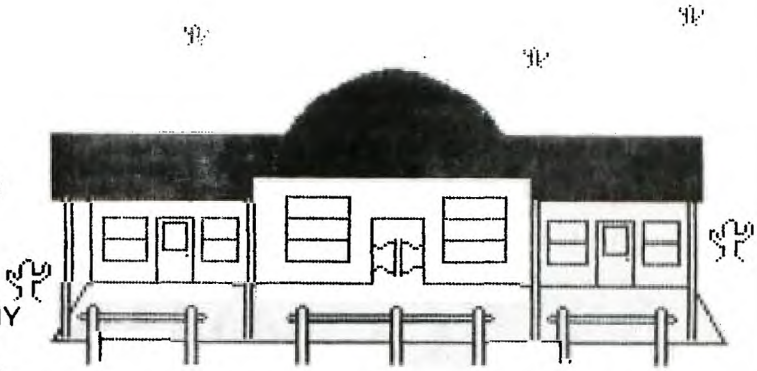
CENTRAL OHIO



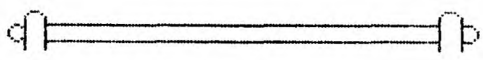
NINETY NINERS INC

AUGUST MEETING

9:00 AM @ 23 WEST 2ND AVENUE, SIDE DOOR, PARKING AVAILABLE, BRING YOUR COMPUTERS. TOPICS FOR DISCUSSION WILL BE C.O.N.N.I. FAMILY PICNIC, CHRISTMAS PARTY, EXTRA TRADING BLOCK MEETINGS, SOFTWARE CONTEST. OPEN FORUM. ANY PERSON WHO WANTS TO DEMONSTRATE HARDWARE OR SOFTWARE, PLEASE GET IN TOUCH WITH SAM MORABITO AT THE MEETING.



ODE TO PUPPYTOWN



FREE COMPUTER

In the June newsletter I made what was supposed to be a joke about sending box tops for a computer. Well it seems the joke's on me.....

General Foods is sponsoring a computer literacy drive starting with school systems and involving ComputerTowns' (Menlo Park, Calif), "Catch on to Computers" campaign. Here it is:

For only 1,383 Box tops from POST cereals a school district or club will be able to acquire a Texas Instruments computer. The soft ware will be available for an additional 95 box tops. Please write General Foods, White Plains NY, or ComputerTown East Arlington Public Library,Columbus, Oh.

FOR WHAT IT'S WORTH

The Beginner's BASIC Manual will no longer be packaged with the Home Computer. However, the book will be available from TI retailers at a suggested retail price of $9.95.....

The decision to change to a light grey color on all future consoles and peripherals came after results of a current research study revealed a marked preference among consumers for lighter colors in both computers and calculators...

If you felt bad when you didn't buy a Commadore 64, here are some items that will make you feel better.

One major advantage people see in the 64, is that it comes standard with 64k bytes of RAM. Unfortunately, when the computer is turned on, the operating system is loaded into the RAM, leaving the user with 38K.

The 64 is also extremely unfriendly to those without programming experience since graphics, color and music can only be utilized through the peeks and pokes of machine language. The programmers reference has to be used to look up memory addresses and must be purchased separately for $20.00.

Very little software is available for the 64. Plug-in cartridges for the VIC-20 cannot be used with the 64.

This information appeared in Computers and Electronics, ppgs, 51-61, April, 1983.

COMPUTER DRAW—A—LINE

by Paul Powers

I got the idea watching my six year old daughter Rebekah, playing with an "Etch-a-Sketch". All that was needed was a solid colored square in the middle of the screen. The four arrow keys (E,S,D,X) are used to move the box via the CALL KEY statement. and the box leaves a trail.

LINES 130 & 140 define the initial position of the box. LINES 260-340 list the colors available for the square and screen, ask for color code INPUTS, and test them for validity. LINES 400-650 do the actual moving of the square from keyboard input, and allow you to erase the trail and get color changes.

This is a simple program where many modifications are possible. I have a version which uses two squares to draw two lines and if you wish, has the computer randomly draw both lines. See what you can do with it. Possibly make revisions to use Joysticks or eliminate the wraparound feature, stopping the square at the edges of the screen. Let me know what you come up with.

By taking a simple program like this and making some slight changes for improvement and to suit your self, you can learn a lot of programming. It is still a good idea to keep your USERS REFERENCE GUIDE handy to look up references & ASCII codes.

——BASIC——

```
100 CALL CLEAR
110 ROW=12
120 COL=16
130 PRINT TAB(5);"COMPUTER DRAW-A-LINE!":TAB(7);"by
    PAUL E. POWERS"::::
170 FOR DELAY=1 TO 1000
180 NEXT DELAY
190 PRINT "USE THE FOLLOWING KEYS:"
200 PRINT :"KEY E--UP":"    X--DOWN":"    S--LEFT":"
    D--RIGHT":
210 PRINT "    Q--CHANGE COLORS":"    Z--ERASE LINES":::
250 FOR DELAY=1 TO 2000
260 NEXT DELAY
270 CALL CLEAR
280 CALL SCREEN(8)
290 CALL COLOR(2,2,1)
300 PRINT "INPUT COLORS.":" 2. BLACK":" 3.
    MEDIUM GREEN":" 4. LIGHT GREEN":"
 5. DARK BLUE":" 6. LIGHT BLUE":
310 PRINT " 7. DARK RED":" 8. CYAN(STANDARD SCREEN)":"
    9. MEDIUM RED":" 10.LIGHT RED":" 11.DARK YELLOW":"
    12.LIGHT YELLOW":
320 PRINT " 13.DARK GREEN":" 14.MAGENTA":" 15.GRAY":"
    16.WHITE"::
330 INPUT "SQUARE COLOR:":CSQ
340 IF CSQ>16 THEN 330
350 IF CSQ<2 THEN 330
360 INPUT "SCREEN COLOR:":CSC
370 IF CSC>16 THEN 360
380 IF CSC<2 THEN 360
390 CALL SCREEN(CSC)
400 CALL CLEAR
410 CALL COLOR(2,CSQ,CSQ)
420 X=1
430 CALL HCHAR(ROW,COL,42)
440 CALL KEY(1,KEY,STATUS)
450 IF STATUS=0 THEN 440
460 IF KEY=2 THEN 520
470 IF KEY=3 THEN 560
480 IF KEY=5 THEN 610
490 IF KEY+1=1 THEN 660
500 IF KEY=15 THEN 710
510 IF KEY=18 THEN 270 ELSE 440
520 COL=COL-1
530 IF COL<1 THEN 540 ELSE 420
540 COL=32
550 GOTO 420
560 COL=COL+1
570 IF COL>32 THEN 590 ELSE 420
590 COL=1
600 GOTO 420
610 ROW=ROW-1
620 IF ROW<1 THEN 640 ELSE 420
640 ROW=24
650 GOTO 420
660 ROW=ROW+1
670 IF ROW>24 THEN 690 ELSE 420
690 ROW=1
700 GOTO 420
710 CALL CLEAR
720 GOTO 420
730 END
```

WRITING A PROGRAM

by ROGER WILLS

In this second part of the program the "sell" side of the portfolio is addressed. Again data input is handled using DATA statements. You must put the necessary information in these lines, otherwise the program will not run. If you followed last month's program you should not have too much trouble. The main menu allows you to display all the sales information (selling prices, commissions), as well as the net receipts per security and the total receipts. The data can be dumped to a printer (lines 900 to 980).

```
100 REM ###INVESTMENT PORTFOLIO####BY ROGER WILLS###
110 REM  ####PART 2,LIST SELLING PRICES,RECEIPTS AFTER
    COSTS##########
120 REM WS(50)=NUMBER OF UNITS SOLD
130 REM XS$(50)=NAME OF UNITS SOLD
140 REM QS(50)=PRICE PER UNIT SOLD
150 REM ZS(50)=OTHER COSTS FOR SALES
160 REM SOLD(I)=NET SALES VALUE AFTER COSTS
170 REM  TOTSOL=TOTAL RECEIPTS AFTER ALL COSTS
180 CALL CLEAR
190 DIM WS(50),XS$(50),QS(50),ZS(50),SOLD(50)
200 GOSUB 710
210 CALL CLEAR
220 FOR I=1 TO 12
230 READ WS(I),XS$(I),QS(I),ZS(I)
240 SOLD(I)=(WS(I)*QS(I))-ZS(I)
250 NEXT I
260 TOTSOL=SOLD(1)+SOLD(2)+SOLD(3)+SOLD(4)+SOLD(5)+SOLD
   (6)+SOLD(7)+SOLD(8)+SOLD(
 9)+SOLD(10)+SOLD(11)+SOLD(12)
270 IF RZ=2 THEN 490
280 PRINT "ORIGINAL SALES INFORMATION"
290 PRINT
300 FOR I=1 TO 12
310 PRINT WS(I);XS$(I);QS(I);ZS(I)
320 PRINT
330 NEXT I
340 FOR DELAY=1 TO 1000
350 NEXT DELAY
360 FOR R=1 TO 8
370 PRINT
380 NEXT R
390 PRINT "NET RECEIPT PER SECURITY"
400 PRINT
410 FOR I=1 TO 12
420 PRINT XS$(I);SOLD(I)
430 NEXT I
440 FOR DELAY=1 TO 1000
450 NEXT DELAY
460 PRINT
470 GOSUB 900
480 GOSUB 710
490 PRINT "TOTAL RECEIPTS";TOTSOL
500 FOR R=1 TO 8
510 PRINT
520 NEXT R
530 GOSUB 900
540 GOSUB 710
550 PRINT
560 CALL CLEAR
570 REM ###DATA STATEMENTS###
580 DATA
590 DATA
600 DATA
610 DATA
620 DATA
630 DATA
640 DATA
650 DATA
660 DATA
670 DATA
680 DATA
690 DATA
700 END
710 CALL CLEAR
720 PRINT "    INVESTMENT PORTFOLIO"
730 FOR R=1 TO 4
740 PRINT
750 NEXT R
760 PRINT "DISPLAY LIST OF SALES(1)"
770 PRINT : :
780 PRINT "TOTAL NET RECEIPTS(2)"
790 PRINT : :
800 PRINT "EXIT(3)"
810 FOR R=1 TO 4
820 PRINT
830 NEXT R
840 INPUT "SELECT YOUR OPTION":RZ
850 IF (RZ<1)+(RZ>3)THEN 800
860 RESTORE
870 IF RZ=1 THEN 210
880 IF RZ=2 THEN 210
890 STOP
900 INPUT "WANT TO SAVE THIS DATA?(Y/N)":CH$
910 IF CH$="Y" THEN 920 ELSE 710
920 PRINT
930 INPUT "ENTER PRINTER'S NAME:":P$
940 OPEN #1:P$
950 FOR I=1 TO 12
960 PRINT #1:WS(I),XS$(I),QS(I),ZS(I),SOLD(I)
970 NEXT I
980 CLOSE #1
990 GO TO 710
```

C.O.N.N.I.
SOFTWARE CONTEST

FEE;

MEMBERS

16 AND UNDER $1.00 (YOUTH)
ADULT $3.00

NON-MEMBERS

16 AND UNDER $2.50 (YOUTH)
ADULT $4.50

This fee is for SINGLE entry, for MULTIPLE entries (more than one) Please include $1.00 more, per/entry.

Programs will be judged on: Originality, Sofistication, Use of computers features (I.E. sound, graphics, etc.). Send all entries to: CONTEST c/o Paul Powers, 15010 Hagendefer Rd. Plain City Ohio 43064. Send a SASE for additional entry blanks, or pick them up at the meeting.

RULES

ALL entries MUST be in BASIC. a.You may make use of Console, Cassette, Joysticks, TEII & Speech, or Speech Editor. (NO EXCLUSIONS)

ALL entries become the property of C.O.N.N.I. & can not be returned.

Officers and Judges are not eligible. This Means Biggie!

ONLY original work of applicant will be accepted, (NO modifications or adaptions of other programs will be accepted).

Documentation & instructions should be included within the program (if memory permits), or typwritten

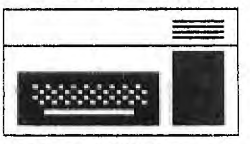
Decision of the JUDGES IS FINAL.

Each entry must be on a separate cassette (both sides), & readable by the Judges equipment.

ALL entries must be post marked no later than midnight October 6 1983, or personally turned in by noon October 8 1983 (at the October meeting). Winners will be announced at the November meeting.

Some entries may be published in the newsletter.

CENTRAL OHIO



NINETY NINERS INC

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NAME_____

ADDRESS_____

CITY_____

STATE_____

ZIP_____AGE____MEMBER(Y/N)___

TITLE OF PROGRAM & BRIEF DESCRIPTION (25 WORDS)

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ENTRY NO____

Some prizes for the software contest will be TEXTIGER, compliments of Software City, a TI Programming book compliments of B. Dalton Bookseller

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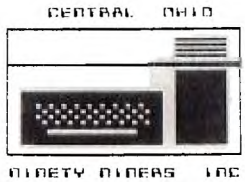

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