

digital group software systems inc.

MAXI-BASIC Game Set 5

After having loaded the MAXI-BASIC Interpreter into your computer and selected the appropriate option (i.e. TV-only or HARDCOPY) start your audio cassette playing at the proper point and then type

LOADcr

Then wait until the

READY

message appears on the screen.

The programs on this tape are recorded in the following order:

#1	FIPFOP	63-72
#2	NIM	63-77
#3	HANGMAN	63-79
#4	CHECKBOOK	63-71
#5	TAXMAN	63-76

Once the READY Message appears after the load; Type

RUNcr

to start the program running.

All programs on this tape are self documenting in terms of execution instructions, or there are instructions provided in the documentation. In addition the directions, where applicable, can be read in the source listings as well as in the run examples.

Since BASIC is a character and line oriented language these programs should run equally well with either a 32 or 64 character video display. However, there is the possibility that minor changes in some of the PRINT statements might make the output more appealing to an individual user; such changes are left to the discretion of the user since complete source and run listings have been provided.

READY
LIST

```
1 DIM A$(20)
10# THIS IS THE PUZZLE FIFFOF"
20# THE OBJECT OF THIS PUZZLE IS":#" TO CHANGE THIS:"
40# TAB(10); "X X X X X X X X X X"
50# TC THIS: ";
60# "C O O O O O O C O O"
70#
100# BY TYPING IN THE NUMBER CORRE-":#" SPONDING TO THE POSITION OF"
110# THE LETTER. ON SOME NUMBERS,":#" ONE POSITION WILL CHANGE, ON"
120# OTHERS, TWO WILL CHANGE. TO":#" RESET THE LINE TO ALL X'S,"
130# TYPE 0 (ZERO) AND TO START A":#" NEW PUZZLE IN THE MIDDLE OF A"
140# GAME, TYPE 11 (ELEVEN).
150 INPUT " (RETURN)",A$
180 REM
190 LET Q=RND(2)
200# "HERE IS THE STARTING LINEUP":#"
220 LET C=2
230# "1 2 3 4 5 6 7 8 9 10"
240# "X X X X X X X X X X"
250#
260 FOR X=1 TO 20 :LET A$=A$+" " :NEXT X
270 FOR X=1 TO 10
280 LET A$(X,X)="X"
290 NEXT X
300 GOTO 320
310# "ILLEGAL ENTRY--TRY AGAIN"
320 INPUT "INPUT THE NUMBER ",N
340 IF N<>INT(N) THEN 310
350 IF N=11 THEN 180
360 IF N>11 THEN 310
370 IF N=0 THEN 230
380 IF M=N THEN 510
390 LET M=N
400 IF A$(N,N)="O" THEN 480
410 LET A$(N,N)="O"
420 REM THE FOLLOWING IS A SUBSTITUTE
421 LET R1=SIN(Q+N/Q-N)
422 LET R2=COS(C+N/Q-N)
423 LET R=R1/R2-SIN(Q/N)+336*SIN(.8*N)
430 LET N=R-INT(R)
440 LET N=INT(10*N)+1
450 IF A$(N,N)="O" THEN 480
460 LET A$(N,N)="O"
470 GOTO 610
480 LET A$(N,N)="X"
490 IF M=N THEN 420
500 GOTO 610
510 IF A$(N,N)="O" THEN 590
520 LET A$(N,N)="O"
530 REM THE FOLLOWING IS A SUBSTITUTE
531 LET R1=SIN(Q/N+Q)
532 LET R2=COS(Q/N+Q)
533 LET R=.392*R2/R1/SIN(N*2+C)-COS(N)
540 LET N=R-INT(R)
550 LET N=INT(10*N)+1
560 IF A$(N,N)="O" THEN 590
570 LET A$(N,N)="O"
580 GOTO 610
```

```

590 LET A$(N,N)="X"
600 IF M=N THEN 530
610 PRINT "1 2 3 4 5 6 7 8 9 10"
620 FOR Z=1 TO 10
621 PRINT A$(Z,Z); " ";
622 NEXT Z
630 LET C=C+1
640# " :#
650 FOR Z=1 TO 10
660 IF A$(Z,Z)<>"0" THEN EXIT 320
670 NEXT Z
680 IF C>12 THEN 710
690#"VERY GOOD! YOU GUESSED IT IN":#"ONLY";C;" GUESSES!!!"
700 GOTO 720
710#"TRY HARDER NEXT TIME, IT TOOK":#"YOU";C;" GUESSES."
720 INPUT "DO YOU WANT ANOTHER PUZZLE? ".X$
740 IF X$="NO" THEN 9999
760 PRINT
770 GOTO 180
9999 END
READY
PRINT "SIZE=";13*1024-FREE(0)
SIZE= 1762
READY

```

READY
RUN

THIS IS THE PUZZLE FIFFOF
THE OBJECT OF THIS PUZZLE IS
TO CHANGE THIS:
X X X X X X X X X X
TO THIS: C C C O C C C O C C

BY TYPING IN THE NUMBER CORRE-
SPONDING TO THE POSITION OF
THE LETTER. ON SOME NUMBERS,
ONE POSITION WILL CHANGE, ON
OTHERS, TWO WILL CHANGE. TO
RESET THE LINE TO ALL X'S,
TYPE 2 (ZERO) AND TO START A
NEW PUZZLE IN THE MIDDLE OF A
GAME, TYPE 11 (ELEVEN).

(RETURN)

HERE IS THE STARTING LINEUP

1 2 3 4 5 6 7 8 9 10
X X X X X X X X X X

INPUT THE NUMBER 4
1 2 3 4 5 6 7 8 9 10
X X X 0 X X X X 0 X

INPUT THE NUMBER 6
1 2 3 4 5 6 7 8 9 10
0 X X 0 X 0 X X 0 X

INPUT THE NUMBER 3
1 2 3 4 5 6 7 8 9 10
C X 0 0 0 0 X X 0 X

INPUT THE NUMBER 2
1 2 3 4 5 6 7 8 9 10
X C 0 0 0 0 X X 0 X

INPUT THE NUMBER 10
1 2 3 4 5 6 7 8 9 10
X 0 0 0 X 0 X X 0 0

INPUT THE NUMBER 8
1 2 3 4 5 6 7 8 9 10
X 0 0 0 X 0 X 0 X 0

INPUT THE NUMBER 9
1 2 3 4 5 6 7 8 9 10
X 0 0 0 X 0 0 0 0 0

INPUT THE NUMBER 5
1 2 3 4 5 6 7 8 9 10
X 0 X 0 0 0 0 0 0 0

INPUT THE NUMBER 3
1 2 3 4 5 6 7 8 9 10
X 0 0 0 X 0 0 0 0 0

INPUT THE NUMBER 1

READY
LIST

```
115#TAB(5);"THIS PROGRAM PLAYS NIM."  
120 INPUT "DO YOU WANT INSTRUCTIONS? ",Q$  
125 IF Q$="YES" THEN 135 ELSE IF Q$="NO" THEN 190  
130 GOSUB 800:GOTO 120  
135#"":#"":#TAB(13);"NIM"  
137#  
140#"NIM IS PLAYED BY TWO PEOPLE":#"TAKING TURNS. BEFORE THE PLAY"  
145#"STARTS, AN ARBITRARY NUMBER OF":#"STICKS OR OBJECTS IS PUT INTO"  
150#"AN ARBITRARY NUMBER OF PILES,":#"IN ANY DISTRIBUTION WHATSOEVER."  
155#"THEN EACH PLAYER IN HIS TURN":#"REMOVES AS MANY STICKS AS HE"  
160#"WISHES FROM ANY PILE--BUT FROM":#"ONLY ONE PILE, AND AT LEAST ONE"  
165#"STICK. THE PLAYER WHO TAKES":#"THE LAST STICK IS THE WINNER."  
170 INPUT " (RETURN) ",Q$  
175#"THIS PROGRAM ALLOWS YOU TO SET":#"UP THE INITIAL ARRANGEMENT OF"  
180#"PILES AND STICKS. IT WILL NOT":#"ACCEPT MORE THAN TWENTY PILES"  
185#"OR STICKS IN EACH PILE."  
190 REM  
195 REM STICK AND PILE INPUT  
200 DIM X(20,4),S(20),L(20),S2(20),N2(4),C(20),S3(20),V(20)  
205#"":INPUT "HOW MANY PILES? ",P :IF P>20 THEN 215  
210 IF P<>INT(P) THEN 215 ELSE IF P<=0 THEN 215 ELSE 220  
215#"":#"ILLEGAL PILES NUMBER.":#"":GOTO 205  
220#"":FOR I=1 TO P  
225#"HOW MANY STICKS IN PILE";I;:INPUT L(I):IF L(I)>20 THEN 235  
230 IF L(I)<>INT(L(I)) THEN 235 ELSE IF L(I)<=0 THEN 235 ELSE 240  
235#"":#"ILLEGAL STICKS NUMBER.":#"":GOTO 225  
240 NEXT I  
245 FOR I=1 TO P:LET S(I)=L(I) :LET G=G+L(I) :NEXT I  
250#"":#"DO YOU WANT TO GO FIRST";  
255 INPUT Q$:IF Q$="YES" THEN 340 ELSE IF Q$="NO" THEN 390  
260 GOSUB 800:GOTO 255  
265 REM GAME CONTROL SECTION  
270 IF G=0 THEN 275 ELSE IF F=1 THEN 390 ELSE 320  
275 IF F=1 THEN 315  
280#"":#"I WON! DO YOU WANT TO GO AGAIN?";:INPUT Q$  
285 IF Q$="NO" THEN 9999 ELSE IF Q$="YES" THEN 300 ELSE 295  
295 GOSUB 300:GOTO 285  
300#"":INPUT "SAME ARRANGEMENT? ",Q$  
305 IF Q$="NO" THEN 205 ELSE IF Q$="YES" THEN 245  
310 GOSUB 800:GOTO 300  
315#"":#"YOU WON! HOW ABOUT ANOTHER?":INPUT Q$  
316 IF Q$="NO" THEN 9999 ELSE IF Q$="YES" THEN 300  
317 GOSUB 300:GOTO 315  
320#"":#"PILE NUMBER","STICKS LEFT"  
325 FOR I=1 TO P: IF S(I)=0 THEN 330 ELSE PRINT %6I,I,%6I,S(I)  
330 NEXT I  
335 REM PLAYER'S MOVE  
340#"":#"WHICH PILE DO YOU WANT STICKS":#"FROM";:INPUT N  
345 IF N>P THEN 355 ELSE IF N<>INT(N) THEN 355 ELSE IF N<=0 THEN 355  
350 IF S(N)=0 THEN 355 ELSE 360  
355#"ILLEGAL PILE NUMBER.":#"":GOTO 340  
360#"":INPUT "HOW MANY STICKS? ",T  
365 IF T>S(N) THEN 370 ELSE IF T<>INT(T) THEN 370 ELSE IF T<=0 THEN 370 ELSE 375  
370#"":#"ILLEGAL STICKS NUMBER.":#"":GOTO 360  
375 LET S(N)=S(N)-T :LET G=G-T  
380 LET F=1 :GOTO 270  
385 REM MACHINE'S MOVE  
390 FOR I=0 TO 4 :LET V(I)=0 :NEXT I
```

```

395 FOR I=1 TO P
400 LET C(I)=S(I)
405 FOR E=4 TO 0 STEP -1
410 IF S(I)<2^E THEN 415
411 LET S2(I)=S2(I)+10^E
412 LET S(I)=S(I)-2^E
415 NEXT E
420 FOR Y=4 TO 0 STEP -1
425 LET X(I,Y)=INT(S2(I)/10^Y)
427 LET S2(I)=S2(I)-X(I,Y)*10^Y
430 LET V(Y)=V(Y)+X(I,Y)
435 NEXT Y
440 NEXT I
445 LET R=0
450 FOR Y=4 TO 0 STEP -1
455 IF V(Y)/2-INT(V(Y)/2)=0 THEN 480
460 IF R=1 THEN 470 ELSE LET Q=INT(P*RND(0))+1
465 IF X(Q,Y)<>1 THEN 460
466 LET X(Q,Y)=0 :LET R=1 :GOTO 480
470 IF X(Q,Y)=1 THEN 475
471 LET X(Q,Y)=1 :GOTO 480
475 LET X(Q,Y)=0
480 NEXT Y
485 FOR I=1 TO P
490 LET S2(I)=0
495 FOR Y=4 TO 0 STEP -1
500 LET S3(I)=X(I,Y)*10^Y
501 LET S2(I)=S2(I)+S3(I)
505 NEXT Y
510 FOR E=4 TO 0 STEP -1
515 IF S2(I)<10^E THEN 520
516 LET S(I)=S(I)+2^E
517 LET S2(I)=S2(I)-10^E
520 NEXT E
525 NEXT I
530 IF R=1 THEN 535 ELSE Q=INT(P*RND(0))+1
532 IF S(Q)=0 THEN 530 ELSE LET S(Q)=S(Q)-1
535 LET D=C(Q)-S(Q) :LET G=G-D
540 IF D=1 THEN 550
545#"" :#"I'LL TAKE";D;" STICKS" :#"FROM PILE";Q;".":GOTO 555
550#"" :#"I'LL TAKE 1 STICK" :#"FROM PILE";Q;".
555 LET F=0 :GOTO 270
800#"" :#"PLEASE TYPE YES OR NO.":RETURN
9999 END
READY
PRINT "SIZE=";13*1024-FREE(0)
SIZE= 3058
READY
SAVE

```

READY

READY
RUN

THIS PROGRAM PLAYS NIM.
DO YOU WANT INSTRUCTIONS? YES

NIM

NIM IS PLAYED BY TWO PEOPLE
TAKING TURNS. BEFORE THE PLAY
STARTS, AN ARBITRARY NUMBER OF
STICKS OR OBJECTS IS PUT INTO
AN ARBITRARY NUMBER OF PILES,
IN ANY DISTRIBUTION WHATSOEVER.
THEN EACH PLAYER IN HIS TURN
REMOVES AS MANY STICKS AS HE
WISHES FROM ANY PILE--BUT FROM
ONLY ONE PILE, AND AT LEAST ONE
STICK. THE PLAYER WHO TAKES
THE LAST STICK IS THE WINNER.

(RETURN)

THIS PROGRAM ALLOWS YOU TO SET
UP THE INITIAL ARRANGEMENT OF
PILES AND STICKS. IT WILL NOT
ACCEPT MORE THAN TWENTY PILES
OR STICKS IN EACH PILE.

HOW MANY PILES? 3

HOW MANY STICKS IN PILE 1?3
HOW MANY STICKS IN PILE 2?2
HOW MANY STICKS IN PILE 3?1

DO YOU WANT TO GO FIRST?YES

WHICH PILE DO YOU WANT STICKS
FROM?1

HOW MANY STICKS? 1

I'LL TAKE 1 STICK
FROM PILE 3.

PILE NUMBER	STICKS LEFT
1	2
2	2

WHICH PILE DO YOU WANT STICKS
FROM?1

HOW MANY STICKS? 1

I'LL TAKE 1 STICK
FROM PILE 2.

PILE NUMBER	STICKS LEFT
1	1
2	1

WHICH PILE DO YOU WANT STICKS

FROM?1

HOW MANY STICKS? 1

I'LL TAKE 1 STICK
FROM PILE 2.

I WON! DO YOU WANT TO GO AGAIN??YES

SAME ARRANGEMENT? YES

DO YOU WANT TO GO FIRST?NO

I'LL TAKE 1 STICK
FROM PILE 2.

PILE NUMBER	STICKS LEFT
1	3
2	1
3	1

WHICH PILE DO YOU WANT STICKS
FROM?1

HOW MANY STICKS? 3

I'LL TAKE 1 STICK
FROM PILE 2.

PILE NUMBER	STICKS LEFT
3	1

WHICH PILE DO YOU WANT STICKS
FROM?3

HOW MANY STICKS? 1

YOU WON! HOW ABOUT ANOTHER?
?NO
READY

READY
LIST

```
10 REM      -HANGMAN-
20 REM      T.H. 12/76
30 FORS1=1TO7:PRINT"":NEXT
40#""      GAME OF HANGMAN":#"":#"":#""
50 DIM A$(20),B$(20),G$(20),D$(20)
60 DIM P(12,12),L$(20),N$(20),U(50)
70 FORI=1TO12:FORJ=1TO12
80 P(I,J)=32.
90 NEXT:NEXT
100 FORI=1TO12:P(I,1)=88:NEXT
110 FORI=1TO7:P(1,I)=88:P(2,7)=88:NEXT
120 M=0
130 PRINT"":PRINT"":PRINT""
140 FORI=1TO20
150 B$=B$+"":A$=A$+"":G$=G$+"":N$=N$+"":N$(I,I)=" "
160 L$=L$+"":D$=D$+"":NEXT
170 C=1:N=50
180 FORI=1TO20:D$(I,I)="-":NEXT
190 IF C<N THEN 210
200 IF NOT C<N THEN PRINT"YOU DID ALL THE WORDS!!":STOP
210 Q=INT(N*RND(1)+1)
220 IF U(Q)=1 THEN 210
230 IF NOT U(Q)=1 THEN U(Q)=1:C=C+1:RESTORE:T1=0
240 FORI=1TOQ:READA$:NEXT
250REM
260 L=LEN(A$):FORI=1TOL:L$(I,I)=A$(I,I):NEXT
270 #""HERE ARE THE LETTERS YOU USED:
280 FORI=1TO26:PRINT N$(I,I);
290 IF N$(I+1,I+1)=" THEN310
300 PRINT"";:NEXTI
310 PRINT"":PRINT"":FORI=1TOL
320 PRINT D$(I,I);:NEXTI
330 PRINT"":PRINT""
340 INPUT"GUESS A LETTER ",G$:R=0
350 FORI=1TO20
360 IF N$(I,I)=" THEN390
370 IF G$=N$(I,I) THEN PRINT"YOU GUESSED THAT LETER BEFORE":GOTO270
380 NEXTI:STOP
390 N$(I,I)=G$:T1=T1+1:FORI=1TOL
400 IF L$(I,I)=G$ THEN430
410 NEXT I:IF R=0 THEN 440
420 IF R<>0 THEN450
430 D$(I,I)=G$:R=R+1:GOTO410
440 M=M+1:GOTO600
450 FOR I=1 TO L
460 IF D$(I,I)="-" THEN 490
470 NEXT I
480 GOTO 590
490 FORI=1TOL:PRINT D$(I,I);:NEXTI:PRINT"":PRINT""
500 INPUT"WHAT IS YOUR GUESS FOR THE WORD?",B$
510 IF B$=A$THEN550
520 PRINT"WRONG. TRY ANOTHER LETTER."
530 GOTO270
540 GOTO860
550 PRINT"RIGHT. IT TOOK YOU";T1;" GUESSES!"
560 INPUT"WANT ANOTHER WORD? ",W$
570 IFW$(1,1)="Y"THEN70
```

```

580#":#"ITS BEEN FUN! BYE FOR NOW.":STOP
590#"YOU FOUND THE WORD!":GOTO560
600 PRINT":PRINT":PRINT SORRY-"
610 PRINT"THAT LETTER ISN'T IN THE WORD."
620 ON M GOTO 630,650,660,670,680,690,700,710,720,730
630 PRINT"FIRST, WE DRAW A HEAD"
640 GOTO740
650#"NOW WE DRAW A BODY":GOTO740
660#"NEXT, WE DRAW AN ARM":GOTO740
670#"THIS TIME ITS THE OTHER ARM":GOTO740
680#"NOW, LETS DRAW THE RIGHT LEG.":GOTO740
690#"THIS TIME WE DRAW THE LEFT LEG.":GOTO740
700#"NOW WE PUT UP A HAND":GOTO740
710#"NEXT, THE OTHER HAND":GOTO740
720#"NOW WE DPAW ONE FOOT":GOTO740
730#"THERE'S THE OTHER FOOT---" YOUR HUNG!!"
740 ON M GOTO 750,770,780,790,800,810,820,830,840,850
750 P(3,6)=45:P(3,7)=45:P(3,8)=45:P(4,5)=40:P(4,6)=46
760 P(4,8)=46:P(4,9)=41:P(5,6)=45:P(5,7)=45:P(5,8)=45:GOTO540
770 FORI=6TO9:P(I,7)=88:NEXT:GOTO860
780 FORI=4TO7:P(I,I-1)=92:NEXT:GOTO860
790 P(4,11)=47:P(5,10)=47:P(6,9)=47:P(7,8)=47:GOTO860
800 P(10,6)=47:P(11,5)=47:GOTO860
810 P(10,8)=92:P(11,9)=92:GOTO860
820 P(3,11)=92:GOTO860
830 P(3,3)=47:GOTO860
840 P(12,12)=92:P(12,11)=45:GOTO860
850 P(12,3)=45:P(12,4)=47
860 FORI=1TO12:FORJ=1TO12
870 PRINTCHR$(P(I,J));
880 NEXT J:PRINT":NEXT I
890FORX1=1TO2000:NEXT
900 FORI=1TO15:PRINT":NFXT
910 IF M<>10 THEN 270
920 PRINT"SORRY, YOU LOSE. THE WORD WAS ";A$
930 PRINT"YOU MISSED THAT ONE. DO YOU":GOTO560
940 DATA"GUM","SIN","CRY","FOR","LUG","BYE","FLY"
950 DATA"UGLY","EACH","FROM","WORK","TALK","WITH","SELF"
960 DATA"PIZZA","THING","FEIGN","FIEND","ELBOW","FAULT","DIRTY"
970 DATA"BUDGET","SPIRIT","QUAINT","MAIDEN","ESCORT","PICKAX"
980 DATA"EXAMPLE","TENSION","QUININE","KIDNEY","REPLICA","SLEEPER"
990 DATA"TRIANGLE","KANGAROO","MAHOGANY","SERGEANT","SEQUENCE"
1000 DATA"MOUSTACHE","DANGEROUS","SCIENTIST","DIFFERENT","QUIESCENT"
1010 DATA"MAGISTRATE","ERRONEOUSLY","LOUDSPEAKER","PHYTOTOXIC"
1020 DATA"MATRIMONIAL","PARASYMPATHOMIMETIC","THIGMOTROPISM"
1030 END
READY

```

READY
RUN

GAME OF HANGMAN

HERE ARE THE LETTERS YOU USED:

GUESS A LETTER E

SORRY-
THAT LETTER ISN'T IN THE WORD.
FIRST, WE DRAW A HEAD

XXXXXXXX

X X
X ---
X (. .)
X ---
X
X
X
X
X
X
X
X
X

HERE ARE THE LETTERS YOU USED:

E

GUESS A LETTER

```
590 PRINT"***** ACCOUNT OVERDRAW *****"  
600 GOTO 470  
610 PRINTN(J);" NOT RETURNED"  
620 LET N=N+1  
630 GOTO 490  
640 PRINT  
650 PRINT L,"NUMBER OF STATEMENT (DEPOSITS)"  
660 PRINT  
670 PRINT %C$15F2;T,"DEPOSITS (TOTAL)"  
680 PRINT  
690 PRINT E,"NUMBER OF STATEMENTS (CHECKS)"  
700 PRINT  
710 PRINT %C$15F2;T1,"CHECKS (TOTAL AMOUNT)"  
720 PRINT  
730 PRINT  
740 PRINT N,"CHECKS NOT ACCOUNTED FOR"  
750 INPUT"ANOTHER CHECK RUN ? (YES OR NO) ",A$  
760 IF A$="YES" THEN 130  
770 PRINT  
780 PRINT" GOODBYE AND HAPPY CHECKS TO YOU *****"  
790 END  
READY
```

READY
LIST

```
10 REM DIMS IN LINES 110 & 120 MAY BE SET AS REQUIRED
20 PRINT TAB(16); "<***** BALANCE ACCOUNT *****>"
30 FOR Z=1 TO 5
40 PRINT
50 NEXT Z
60 PRINT "WHEN I ASK TYPE IN FIRST CHECK NUMBER.(EX 100) ENTER DEPCISIT"
70 PRINT "BY (EX 500.45). ENTER CHECK BY (EX -34.50). WHEN ALL ENTRIES"
80 PRINT "COMPLETED ENTER 99999. OUTSTANDING OR VOID CHECKS ENTER BY"
90 PRINT "TYPING 000. OK HERE WE GO. *****"
100 DIM A$(3)
110 DIM A(300)
120 DIM N(300)
130 LET N=0
140 LET T=0
150 LET T1=0
160 LET E=0
170 LET L=0
180 LET C=0
190 PRINT
200 PRINT
210 INPUT "FIRST CHECK NUMBER ",X
220 PRINT
230 LET C=C+1
240 LET N(C)=X
250 INPUT "AMT ",A(C)
260 IF A(C)=99999 THEN 320
270 IF A(C)>0 THEN 220
280 LET T1=T1+A(C)
290 PRINT " # ";X
300 LET X=X+1
310 GOTO 230
320 PRINT
330 LET C=C-1
340 LET B=0
350 FOR Z=1 TO 5
360 PRINT
370 NEXT Z
380 PRINT "CK # ", " AMOUNT ", " BALANCE "
390 PRINT "-----", "-----", "-----"
400 FOR J=1 TO C
410 IF A(J)=0 THEN 610
420 IF A(J)>0 THEN 510
430 LET B=B+A(J)
440 LET E=E+1
450 IF B<=0 THEN 590
460 IF B<50 THEN 570
470 PRINT N(J);
480 PRINT %C$14F2;A(J);B
490 NEXT J
500 GOTO 640
510 LET B=B+A(J)
520 LET T=T+A(J)
530 LET L=L+1
540 PRINT " DEP";%C$14F2;A(J);B
550 GOTO 490
560 GOTO 640
570 PRINT "WARNING ACCOUNT UNDER 50.00,BANK MAY CHARGE FOR CHECK"
580 GOTO 470
```

READY
RUN

<***** BALANCE ACCOUNT *****>

WHEN I ASK TYPE IN FIRST CHECK NUMBER.(EX 100) ENTER DEPOSIT
BY (EX 500.45). ENTER CHECK BY (EX -34.50). WHEN ALL ENTRIES
COMPLETED ENTER 99999. OUTSTANDING OR VOID CHECKS ENTER BY
TYPING 000. OK HERE WE GO. *****

FIRST CHECK NUMBER 123

AMT 2345
AMT -54.00 # 123
AMT -34.55 # 124
AMT -23.78 # 125
AMT 567
AMT -654.33 # 126
AMT -54.21 # 127
AMT 99999

CK #	AMOUNT	BALANCE
DEP	\$2,345.00	\$2,345.00
123	\$-54.00	\$2,291.00
124	\$-34.55	\$2,256.45
125	\$-23.78	\$2,232.67
DEP	\$567.00	\$2,799.67
126	\$-654.33	\$2,145.34
127	\$-54.21	\$2,091.13

2 NUMBER OF STATEMENT (DEPOSITS)

\$2,912.00 DEPOSITS (TOTAL)

5 NUMBER OF STATEMENTS (CHECKS)

\$-820.87 CHECKS (TOTAL AMOUNT)

2 CHECKS NOT ACCUNTED FOR
ANOTHER CHECK RUN ? (YES OR NO) NO

GOODBYE AND HAPPY CHECKS TO YOU *****
READY

READY
LIST

```
1 REM      TAXMAN
2 REM      T.H. 12/76
10 DIM L(50),T(10)
20 FOR I=1 TO 10:PRINT "":NEXT I:PRINT TAB(10);"TAXMAN"
21 PRINT "":PRINT "":PRINT
30 PRINT "HI, I'M THE TAXMAN."
40 INPUT "DO YOU WANT THE REGULATIONS? ",I$
50 IF I$(1,1)="Y" THEN 1200
60 REM
70 GOSUB 940
80 GOSUB 150
90 GOSUB 420
100 GOSUB 520
110 GOSUB 610
120 IF M=1 THEN 80
130 GOSUB 830
140 GOTO 890
150 PRINT "":PRINT ""
160 PRINT "YOU TAKE ";
170 INPUT K
180 K=INT(K)
190 IF K<=0 THEN 890
200 IF K<=N THEN 240
210 PRINT K;" IS NOT IN THE LIST -"
220 PRINT "TRY AGAIN."
230 GOTO 150
240 IF L(K)=0 THEN 210
250 IF K>1 THEN 310
260 PRINT "THERE ARE NO FACTORS"
270 PRINT "OF ";K;" FOR ME."
280 PRINT "ARE YOU TRYING TO SHORT"
290 PRINT "CHANGE THE TAXMAN?"
300 GOTO 150
310 M=0
320 FOR I=1 TO K/2
330 IF L(I)=0 THEN 380
340 IF K<>I*INT(K/I) THEN 380
350 M=M+1
360 T(M)=I
370 L(I)=0
380 NEXT
390 IF M=0 THEN 260
400 L(K)=0
410 RETURN
420 Y=Y+K
430 PRINT "YOUR TOTAL IS";Y
440 PRINT "I GET";
450 FOR I=1 TO M
460 PRINT T(I);
470 Z=Z+T(I)
480 NEXT
490 PRINT
500 PRINT "MY TOTAL IS";Z
510 RETURN
520 PRINT
530 PRINT "NEW LIST:";
540 M=0
550 FOR I=1 TO N
```

```

560 IF L(I)=0 THEN 590
570 PRINT I;
580 M=1
590 NEXT
600 RETURN
610 IF M=0 THEN 820
620 FOR I=N TO 4 STEP -1
630 FOR J=2 TO I/2
640 IF L(J)=0 THEN 680
650 IF I<>J*INT(I/J) THEN 680
660 M=1
670 RETURN
680 NEXT J
690 NEXT I
700 PRINT
710 PRINT"I GET ";
720 FOR I=1 TO N
730 IF L(I)=0 THEN 760
740 PRINT I;
750 Z=Z+I
760 NEXT I
770 PRINT
780 PRINT"BECAUSE NO FACTORS OF ANY"
790 PRINT"NUMBER ARE LEFT."
800 PRINT"MY TOTAL IS";Z
810 M=0
820 RETURN
830 PRINT
840 IF Z>Y THEN 870
850 PRINT"YOU";Y;" - TAXMAN";Z;" YOU WIN!"
860 RETURN
870 PRINT"TAXMAN";Z;" YOU";Y;" TAXMAN WINS."
880 RETURN
890 PRINT
900 PRINT
910 INPUT"AGAIN? ",I$
920 IF I$(1,1)="N"THEN1470
930 GOTO 70
940 PRINT
950 PRINT"HOW MANY NUMBERS DO YOU"
960 PRINT"WANT IN THE LIST";
970 INPUT N
980 N=INT(N)
990 IF N<=0 THEN 1470
1000 IF N<=50 THEN 1040
1010 PRINT"AT THIS TIME REGULATIONS ALLOW"
1020 PRINT"A MAXIMUM OF 50 NUMBERS."
1030 GOTO 940
1040 REM
1050 Y=0
1060 Z=0
1070 PRINT
1080 PRINT"THE LIST IS:"
1090 FOR I=1 TO N
1100 PRINT I;
1110 LET L(I)=1
1120 NEXT
1130 IF N>1 THEN 1190
1140 PRINT
1150 PRINT"HOW VERY GENEROUS OF YOU TO"
1160 PRINT"FORFEIT ALL TO THE TAXMAN."

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```
1170 PRINT "TAXMAN 1 YOU 0. TAXMAN WINS."
1180 GOTO 890
1190 RETURN
1200 PRINT
1210 PRINT "YOU TRY TO BEAT THE TAXMAN."
1220 PRINT
1230 PRINT "WE START WITH A LIST OF WHOLE"
1240 PRINT "NUMBERS IN NUMERICAL ORDER."
1250 PRINT "TAKE A NUMBER FROM THE LIST."
1260 PRINT "THE TAXMAN GETS ALL THE FACTORS"
1270 PRINT "OF YOUR NUMBER THAT ARE STILL"
1280 PRINT "LEFT. YOUR NUMBER AND ALL ITS"
1290 PRINT "FACTORS ARE THEN DELETED FROM"
1300 PRINT "THE LIST."
1309 PRINT "    SUPPOSE YOU WANT"
1310 PRINT "10 NUMBERS TO BE IN THE LIST."
1320 PRINT "THEN THE LIST WOULD BE:"
1330 PRINT "1 2 3 4 5 6 7 8 9 10"
1340 PRINT "IF YOU TOOK 8, THE TAXMAN"
1350 PRINT "WOULD GET 1 2 AND 4 -"
1360 PRINT "AND THE NEW LIST WOULD BE:"
1370 PRINT "3 5 6 7 9 10"
1380 PRINT "THE TAXMAN MUST GET SOMETHING"
1390 PRINT "EVERY TIME SO YOU CAN ONLY PICK"
1400 PRINT "A NUMBER THAT HAS FACTORS LEFT."
1410 PRINT "WHEN NONE OF THE REMAINING"
1420 PRINT "NUMBERS HAS ANY FACTORS, THE"
1430 PRINT "TAXMAN GETS THEM!! YOUR SCORE"
1440 PRINT "IS THE SUM OF THE NUMBERS YOU"
1450 PRINT "TAKE. TO GIVE UP, TAKE 0."
1460 GOTO 70
1470 END
READY
```

READY
RUN

TAXMAN

HI, I'M THE TAXMAN.
DO YOU WANT THE REGULATIONS? YES

YOU TRY TO BEAT THE TAXMAN.

WE START WITH A LIST OF WHOLE
NUMBERS IN NUMERICAL ORDER.
TAKE A NUMBER FROM THE LIST.
THE TAXMAN GETS ALL THE FACTORS
OF YOUR NUMBER THAT ARE STILL
LEFT. YOUR NUMBER AND ALL ITS
FACTORS ARE THEN DELETED FROM
THE LIST.

SUPPOSE YOU WANT
10 NUMBERS TO BE IN THE LIST.
THEN THE LIST WOULD BE:
1 2 3 4 5 6 7 8 9 10
IF YOU TOOK 8, THE TAXMAN
WOULD GET 1 2 AND 4 -
AND THE NEW LIST WOULD BE:
3 5 6 7 9 10
THE TAXMAN MUST GET SOMETHING
EVERY TIME SO YOU CAN ONLY PICK
A NUMBER THAT HAS FACTORS LEFT.
WHEN NONE OF THE REMAINING
NUMBERS HAS ANY FACTORS, THE
TAXMAN GETS THEM!! YOUR SCORE
IS THE SUM OF THE NUMBERS YOU
TAKE. TO GIVE UP, TAKE 0.

HOW MANY NUMBERS DO YOU
WANT IN THE LIST? 10

THE LIST IS:
1 2 3 4 5 6 7 8 9 10

YOU TAKE ??
YOUR TOTAL IS 7
I GET 1
MY TOTAL IS 1

NEW LIST: 2 3 4 5 6 8 9 10

YOU TAKE ?9

YOUR TOTAL IS 16
I GET 3
MY TOTAL IS 4

NEW LIST: 2 4 5 6 8 10

YOU TAKE 76
YOUR TOTAL IS 22
I GET 2
MY TOTAL IS 6

NEW LIST: 4 5 8 10

YOU TAKE 78
YOUR TOTAL IS 30
I GET 4
MY TOTAL IS 10

NEW LIST: 5 10

YOU TAKE 710
YOUR TOTAL IS 40
I GET 5
MY TOTAL IS 15

NEW LIST:
YOU 40 - TAXMAN 15 YOU WIN!

AGAIN? NO
READY