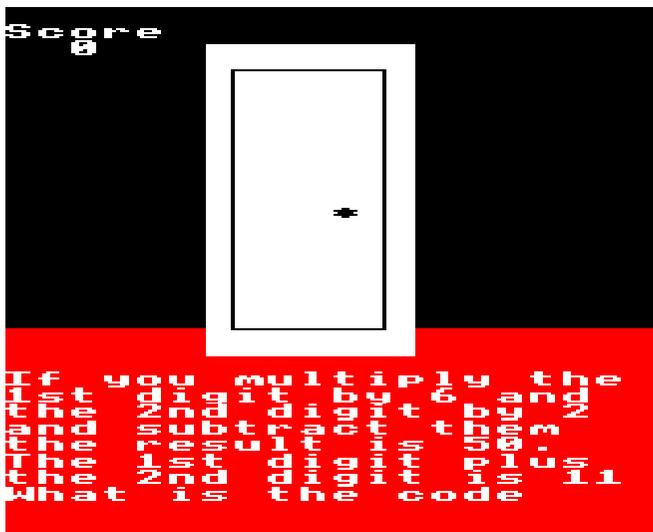# SAFECRACKER

Are you a quick-thinker or a deep thinker? I hope you are one or the other, or you will never be able to crack open someone elses's safe!

This game can be played two different ways, depending on whether you are a quick or deep thinker. If you are not sure which you are, then I suggest you play it both ways, and find out which way gives you the highest score.

In all cases, a closed safe is displayed and you are given two clues about the secret code that opens it. If you work out the exact answer before keying in the code, you are given 2 minutes to do it. If you make guesses, then you are only allowed 16 seconds. Wrong answers are ignored.

If you take too long you are surprised by the caretaker who switches on the light. He then presses the alarm button and you hear the police sirens wailing and you know all is lost!

If you do manage to crack the code in time, the safe opens, revealing gold bullion.

How to play

You are given two clues such as those shown above. The code is always two digits. Key in the number (you do not need to press RETURN).

To end the program, press E.

Programming hints

This program contains two useful procedures. PROC BLOCK draws a rectangle whose lower left hand corner is X,Y and whose width is W and height is H. PROC_PARLL draws a parallelogram with two sides vertical. Put the coordinates of the lower, left-hand corner in X1, Y1 and those of the upper right hand corner X2, Y2.

If you want to make the game easier, you can increase the time allowed to guess or reduce the number of digits allowed in the code or both.

To increase the time allowed for guesses, increase the value of TM in line 230. To increase the time allowed when only one answer is keyed in, increase the value of TM in line 210.

To the reduce the number of digits allowed, reduce the number inside the RND brackets for XX and YY in line 510.

If you find the game too easy then do the opposite.

```
   10  REM  SAFE  CRACKER
   20  REM  COPYRIGHT  (C)  G.LUDINSKI  1983
   30  MODE5:VDU23;8202;0;0;0;19,1,0;0;19
,3,0;0;
   40  BL=0:RD=1:YE=2:WH=3:B=128
   50  SC=0
   60  TIME=0
   70  COLOUR  BL+B:COLOUR  WH
   80  CLS
   90  PRINTTAB(0,1)"Score":PRINT"   ";SC
  100  REM
  110  REM  DRAW  SAFE  CLOSED
  120  REM
  130  GCOL  0,RD:PROC_BLOCK(0,0,1280,400)
  140  GCOL  0,WH:PROC_BLOCK(400,350,400,6
00)
  150  GCOL  0,BL:MOVE450,400:DRAW750,400:
DRAW750,900:DRAW450,900:DRAW450,400
  160  COLOUR  BL:COLOUR  B+WH:PRINTTAB(10,
12)"*"
  170  PROC_QUESTION
  180  COLOUR  RD+B:COLOUR  WH:PRINTTAB(0,2
2)"If  you  multiply  the  1st  digit  by  ";A1
;"  and   the  2nd  digit  by  ";ABS(B1);"   an
d  ";S1$;"    the  result  is  ";C1;"."
  190  PRINT"The  1st  digit  ";S2$
  200  PRINT"the  2nd  digit  is  ";C2:PRINT"
What  is  the  code":VDU19,1,1;0;19,2,3;0;1
9,3,7;0;
  210  TM=6000
  220  I1$=INKEY$(0):IF  TIME  <  TM  AND  I1$
=""  THEN  GOTO  220
  230  IF  I1$<>LEFT$(A$,1)  AND  I1$<>"E"  A
ND  TIME  <  TM  THEN  TM=800:GOTO220
  240  IF  I1$="E"  THEN  GOTO700
  250  IF  TIME  >=  TM  THEN  GOTO380
  260  PRINT  I1$;
  270  I2$=INKEY$(0):IF  TIME  <  TM  AND  I2$
=""  THEN  GOTO270
  280  IF  I2$<>RIGHT$(A$,1)AND  TIME  <  TM
THEN  GOTO270
  290  IF  TIME  >=  TM  THEN  GOTO  380
  300  PRINT'I2$;
  310  I$=I1$+I2$
  320  IF  I$=A$  THEN  SC=SC+1:PROC_OPEN
  330  PRINT"  No,  the  code  is  ";A$
  340  GOTO  60
  350  REM
  360  REM  SWITCH  LIGHT  ON  AND  PLAY  POLIC
E  SIREN  SOUNDS
  370  REM
  380  PRINT"  No,  the  code  is  ";A$:VDU19,
BL,3,0,0:FORI=1TO6:SOUND1,-15,109,8:SO
UND1,-15,101,8:NEXT:RB$=INKEY$(1000):VDU
19,BL,0,0,0,0:VDU19,1,0;0;19,2,0;0;19,3,
0;0;:GOTO60
  390  REM
```

```
 400  DEFPROC_BLOCK(X,Y,W,H)
 410  MOVE  X,Y:MOVE  X+W,Y
 420  PLOT  85,X,Y+H
 430  PLOT  85,X+W,Y+H
 440  ENDPROC
 450  DEFPROC_PARLL(X,Y,X1,Y1,X2,Y2)
 460  MOVE  X,Y
 470  MOVE  X1,Y1:PLOT  85,X,Y+Y2-Y1
 480  PLOT  85,X2,Y2
 490  ENDPROC
 500  DEFPROC_QUESTION
 510  A1=RND(8)+1:B1=RND(8)+1:XX=RND(10)
-1:YY=RND(10)-1
 520  W1=(-1)^RND(2):W2=(-1)^RND(2)
 530  B1=B1*W1
 540  C1=(A1*XX)+(B1*YY)
 550  C2=XX+(W2*YY)
 560  S1$="add  them  then":IF  W1=-1  THEN
S1$="subtract  them"
 570  S2$="plus":IF  W2=-1  THEN  S2$="minu
s"
 580  A$=STR$(ABS(XX))+STR$(ABS(YY))
 590  ENDPROC
 600  REM
 610  REM  DRAW  SAFE  OPEN
 620  REM
 630  DEFPROC_OPEN
 640  GCOL  0,WH:PROC_PARLL(300,350,450,4
00,450,900)
 650  GCOL  0,BL:PROC_BLOCK(450,400,300,5
00)
 660  GCOL  0,YE:PROC_BLOCK(450,400,300,2
00)
 670  GCOL  0,BL:MOVE300,330:DRAW450,400:
DRAW450,900:DRAW300,830
 680  COLOUR  B+BL:PRINTTAB(2,2);SC:RB$=I
NKEY$(1000):VDU19,1,0;0;19,2,0;0;19,3,0;
0;
 690  ENDPROC
```