

27. Screen Wordgame

General Description

This is the traditional wordsquare puzzle played on the computer. You are given half a dozen topics whose words you may wish to have hidden in the wordsquare. You select the topic and wait while the computer generates the wordsquare. When the computer is ready it displays the wordsquare and you have to move a cursor with the four cursor control keys around the screen picking out the letters. When you think that you have found a letter you may use the copy key to change its colour to yellow. You will then notice that the letter is 'docked' from the word displayed at the bottom which you had to find. Of course it is possible to cheat and uncover every letter, in which case you will inevitably score the points for the letters found, but I am sure none of you would be that unsporting. This program runs on a Model 'A' and you will notice that the final score is given in terms of letters found rather than words. This is because it was quite a squeeze to fit it into a Model 'A', and those with Model 'B's may wish to enhance the program. Let me know if you succeed.

Detailed Description

See Printer Wordgame.

Educational Notes

The educational value of wordsquare hunts is dubious. It familiarises youngsters with the words in the subject under study but that is probably the limit. I have generated wordsquares for 180

other departments as requested and the other 'wordgame' program by Ian Clarke generates your chosen words onto a printer. I think that this program is more for use at home for general educative entertainment. You are free, of course, to change the data. Ian has chosen music as one of the wordsquare subjects as it is one of his own interests.

Program Listing

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10  REM *****
20  REM ** WORDGAME **
30  REM ** Written by Ian Clarke. **
40  REM ** Feb 83 **
50  REM *****
60  ON ERROR GOTO 2220
70  ENVELOPE 1,2,6,-6,0,8,8,1,1,-1,0,-1,120,100
80  ENVELOPE 2,2,2,-4,4,2,3,1,0,-1,0,1,100,80
90  ENVELOPE 3,2,4,5,6,10,6,8,1,-1,0,-1,120,100
100 ENVELOPE 4,2,10,-4,15,20,20,5,2,0,0,-3,127,127
110 CLEAR
120 C1%=0
130 E%=0
140 V%=0
150 Y=0
160 *FX4,1
170 MODE 7
180 REPEAT
190 PRINT TAB(5,5+Y) CHR$(141) CHR$(131) "SQUAREWORDS"
200 PRINT TAB(5,8+Y) CHR$(141) CHR$(131) "by Ian Clarke"
"
210 PRINT TAB(0,12+Y) CHR$(141) CHR$(133) "use the arro
w keys to move about the"
220 PRINT TAB(0,14+Y) CHR$(141) CHR$(133) "cursor to th
e letter you want and hit"
230 PRINT TAB(0,16+Y) CHR$(141) CHR$(133) "copy key if
the letter is the one you"
240 PRINT TAB(0,18+Y) CHR$(141) CHR$(133) "want to make
a word with."
250 PRINT TAB(0,20+Y) CHR$(141) CHR$(133) "Press ESCAPE
to exit program"
260 Y=Y+1
270 UNTIL Y=2
280 PRINT CHR$(131) "Type any key to continue":A$=GET$
290 PROCarr
300 OE$(1)="."
310 OE$(2)="s."
320 PROCinput
330 PROCsqr
340 PROCram
350 GOTO 1500
360 REM -----
370 REM Set up arrays.
380 DEFPROCarr
390 DIM C$(16,16),X%(8),Y%(8),T$(6),W$(10),OE$(2)
400 X%(1)=1:X%(2)=1:X%(3)=0:X%(4)=-1
410 X%(5)=-1:X%(6)=-1:X%(7)=0:X%(8)=1
420 Y%(1)=0:Y%(2)=1:Y%(3)=1:Y%(4)=1
430 Y%(5)=0:Y%(6)=-1:Y%(7)=-1:Y%(8)=-1
440 REM .....
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450  ENDPROC
460  REM -----
470  REM  Display the six topics and
480  REM  input the user's choice.
490  DEFPROCinput
500  CLS
510  SOUND 0,4,100,40
520  FOR Y=2 TO 12 STEP 2
530      READ T$(Y/2)
540      PRINT TAB(16,Y);CHR$(141);CHR$(131);(Y)/2;" ";T$(Y/
2)
550      PRINT TAB(16);CHR$(141);CHR$(131)(Y)/2;" ";T$(Y/2)
560      FOR X=1 TO 500:NEXT

570  NEXT Y
580  PRINT TAB(0,8);CHR$(141);CHR$(133);"Which topic"
590  PRINT TAB(0);CHR$(141);CHR$(133);"Which topic"
600  PRINT TAB(0,10);CHR$(141);CHR$(133);"do you want?"
610  PRINT TAB(0);CHR$(141);CHR$(133);"do you want?"
620  *FX15

630  D=GET
640  IF D>48 AND D<55 GOTO 690
650  VDU 7
660  FOR X=1 TO 200:NEXT
670  *FX15
680  GOTO 630
690  PRINT TAB(5);CHR$(141);CHR$(133);D-48
700  PRINT TAB(5);CHR$(141);CHR$(133);D-48
710  FOR X=1TO 1000:NEXT
720  RESTORE (D-49)*30+1950
730  FOR C=1 TO 10
740      READ W$(C)
750      C1%=C1%+LEN(W$(C))
760  NEXT C
770  DIM Y2%(C1%),X2%(C1%),T(C1%),S(C1%)
780  V%=C1%
790  C1=10
800  REM .....
810  ENDPROC
820  REM -----
830  REM      Thinks of grid for
840  REM      topic chosen.
850  DEFPROCsq
860  CLS
870  PRINT TAB(5,12);CHR$(141);CHR$(136);CHR$(133);"Thinki
ng of puzzle."
880  PRINT TAB(5);CHR$(141);CHR$(136);CHR$(133);"Thinking
of puzzle."
890  FOR N%=1 TO 10
900      W$=W$(N%)
910      P%=RND(8)
920      Y%=Y%(P%) : X%=X%(P%)
930      X4%=RND(15):Y4%=RND(15)
940      U$=C$(X4%,Y4%)
950      IF U$="" THEN GOTO 1030
960      I%=0
970      REPEAT
980          I%=I%+1
990          IF MID$(W$,I%,1)=U$ THEN X4%=X4%-(I%-1)*X%:Y4%=Y4
%-((I%-1)*Y%):UNTIL I%>0:GOTO 1020
1000     UNTIL I%=LEN(W$)
1010     GOTO 910
1020     IF X4%<1 OR X4%>15 OR Y4%<1 OR Y4%>15 THEN GOTO 910
1030     X1%=X4%:Y1%=Y4%
1040     W%=0
1050     REPEAT
1060         W%=W%+1

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1070 IF C$(X1%,Y1%)<>" AND C$(X1%,Y1%)<>MID$(W$,W%,1) THE
N UNTIL W%>1:GOTO 910
1080 X1%=X1%+X%:Y1%=Y1%+Y%
1090 IF X1%<1 OR X1%>15 OR Y1%<1 OR Y1%>15 THEN UNTIL W%>1
:GOTO 900
1100 UNTIL W%=LEN(W$)
1110 X1%=X4%:Y1%=Y4%
1120 FOR K%=1 TO LEN(W$)
1130 C$(X1%,Y1%)=MID$(W$,K%,1)
1140 E%=E%+1
1150 Y2%(E%)=Y1%-1
1160 X2%(E%)=X1%-1
1170 X1%=X1%+X%:Y1%=Y1%+Y%
1180 T(E%)=N%
1190 S(E%)=K%
1200 NEXT K%
1210 NEXT N%
1220 REM .....
1230 ENDPROC
1240 DEFPROCram
1250 REM -----
1260 REM Display grid on VDU.
1270 CLS
1280 FOR Y%=1 TO 15
1290 FOR X%=1 TO 15
1300 IF C$(X%,Y%)<>" THEN GOTO 1320
1310 C$(X%,Y%)=CHR$(RND(26)+64)
1320 PRINT TAB((X%-1)*2,Y%-1);CHR$(130);C$(X%,Y%)
1330 NEXT X%
1340 NEXT Y%
1350 Y=17
1360 Q=0
1370 FOR X=1 TO 10
1380 IF Q=15 THEN Y=12
1390 PRINT TAB(Q,X+Y);CHR$(133);W$(X)
1400 IF X=5 THEN Q=15
1410 NEXT
1420 PRINT TAB(0,13)
1430 VDU 9
1440 X1=0:Y1=14
1450 REM .....
1460 ENDPROC
1470 REM User enters cursor position
1480 REM or copy key. The copy key
1490 REM enters letters.
1500 FOR X=1 TO 200:NEXT
1510 *FX15
1520 C=GET
1530 IF C>134 AND C<140 THEN GOTO 1560
1540 VDU 7
1550 GOTO 1500
1560 ON C-134 GOSUB 1580,1780,1820,1860,1900
1570 GOTO 1510
1580 Q=0
1590 S=0
1600 REPEAT
1610 Q=Q+1
1620 IF Y2%(Q)=Y1 AND X2%(Q)=X1 THEN V%=V%-1:GOTO 1640
1630 UNTIL Q=C1%:GOTO 1740
1640 Y2%(Q)=-1
1650 S=1
1660 IF T(Q)>5 THEN X=15:Y=12 ELSE X=0:Y=17
1670 PRINT TAB(X+S(Q),T(Q)+Y);" "
1680 PRINT TAB(X1*2,Y1);CHR$(131);C$(X1+1,Y1+1)
1690 FOR X=1 TO X1*2+1
1700 VDU 9
1710 NEXT X
1720 VDU 11
1730 UNTIL Q=C1%

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1740 IF S=1 THEN S=0:SOUND 1,2,120,5 ELSE SOUND 1,12,120,1
0
1750 FOR X=1 TO 500:NEXT
1760 IF V%=0 THEN GOTO 2140
1770 RETURN
1780 IF X1=0 THEN GOTO 1810
1790 X1=X1-1
1800 VDU 8,8
1810 RETURN
1820 IF X1=14 THEN GOTO 1850
1830 X1=X1+1
1840 VDU9,9
1850 RETURN
1860 IF Y1=14 THEN GOTO 1890
1870 Y1=Y1+1
1880 VDU 10
1890 RETURN
1900 IF Y1=0 THEN GOTO 1930
1910 Y1=Y1-1
1920 VDU 11
1930 RETURN
1940 DATA MUSIC,PHYSICS,ELECTRONICS,COMPUTER STUDIES,MATHS
,SPORT
1950 DATA ORGAN,FRENCHHORN,BEETHOVEN,STRAVINSKY
1960 DATA MUSICSTAND,CLARINET,CORANGLAIS
1970 DATA RECORDER,TRUMPET,CONCERTHALL
1980 DATA ELECTRIC,NEUTRON,NEWTON,DENSITY
1990 DATA HOOKESLAW,ELASTICITY,PHYSICS
2000 DATA MOMENTS,REFRACTION,LENSES
2010 DATA OSCILLOSCOPE,TRANSISTOR,VEROBOARD,CATHODE
2020 DATA INTEGRATED,TRANSDUCER,FEEDBACK
2030 DATA CAPACITOR,CIRCUIT,RESISTOR
2040 DATA MICROCOMPUTER,ASSEMBLER,COMPILERR
2050 DATA INTERPRETER,DISKETTES,PROCESSOR
2060 DATA MICROCHIP,DISKDRIVE,MONITOR,KEYBOARD
2070 DATA DIVISION,TRIGONOMETRY,COSINERULE,MULTIPLICATION
2080 DATA ADDITION,SINE,PERCENTAGE
2090 DATA INTEGRATION,MATRIX,GEOMETRY
2100 DATA FOOTBALL,SQUASH,CURLING,POLEVaulTING
2110 DATA STEEPLECHASE,GYMNASTICS,TABOGANNING
2120 DATA ICEHOCKEY,BADMINTON,HORSERACING
2130 REM Print congratulation message.
2140 CLS
2150 SOUND 1,3,100,50
2160 PRINT TAB(3,8);CHR$(141);CHR$(129);"Well done. You f
ound all"
2170 PRINT TAB(3);CHR$(141);CHR$(129);"Well done. You fou
nd all"
2180 PRINT TAB(11);CHR$(141);CHR$(129);"the words."
2190 PRINT TAB(11);CHR$(141);CHR$(129);"the words."
2200 FOR X=1 TO 4000:NEXT
2210 GOTO 2270
2220 CLS
2230 IF C1%-V%=0 THEN GOTO 2290
2240 IF C1%-V%=1 THEN Q=1:ELSE Q=2
2250 PRINT TAB(8,10);CHR$(141);CHR$(129);"You found "C1%-V
%," letter";OE$(Q)
2260 PRINT TAB(8);CHR$(141);CHR$(129);"You found "C1%-V%,"
letter";OE$(Q)
2270 IF C1%-V%=1 THEN Q=1 ELSE Q=2
2280 FOR X=1 TO 4000:NEXT
2290 PRINT TAB(5,12);CHR$(141);CHR$(129);"Do you want anot
her game?"
2300 PRINT TAB(5);CHR$(141);CHR$(129);"Do you want another
game?"
2310 *FX15
2320 YN$=GET$
2330 IF YN$="Y" OR YN$="y" THEN GOTO 110
2340 SOUND 1,1,90,70

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2350 PRINT TAB(14);CHR$(141);CHR$(136);CHR$(129);"BYE!!!"
2360 PRINT TAB(14);CHR$(141);CHR$(136);CHR$(129);"BYE!!!"
2370 FOR X=1 TO 10000:NEXT
2380 CLS
2390 *FX4
2400 END
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