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1000 ' IBM Personal Computer BASIC Compiler Demonstration
Program
1010 ' Version 1.00 (C) Copyright IBM Corp 1982
1015 ' Licensed Material - Program Property of IBM
1020 '
1030 ON ERROR GOTO 2680
1040 HIGH=0:NM$="BASCOM"
1050 DEFINT A-Z
1060 DIM S.STAT(20), S.X(20), S.Y(20), S.SP(20), S.PAT(20), S.PIC
$(20,1), S.SCORE(20)
1070 DIM S.LEN(20), BUL(80), SND$(5)
1080 DIM B.X(20), B.Y(20), B.ACT(20)
1090 DIM N.PIC$ (10,1), N.SCORE (10), N.SP (10), N.LEN (10)
1100 DIM X.TOP$(6), X.BOT$(6)
1110 WIDTH 80:WD=80
1120 KEY OFF : COLOR 7,0,0 : CLS
1130 IF WD=80 THEN SCREEN 0,1:LOCATE ,,0
1140 M$="IBM Personal Computer" : Y=8 : GOSUB 2670
1150 M$="BASIC Compiler" : Y=10 : GOSUB 2670
1160 M$="Demonstration Program": Y=12: GOSUB 2670
1170 M$="Do you have a color monitor (Y/N)? " : Y=16 : GOSUB 2670
1180 A$=INKEY$:IF A$="" THEN GOTO 1180
1190 IF A$="Y" OR A$="y" THEN CLR=1:GOTO 1230
1200 IF A$="n" OR A$="N" THEN CLR=0:GOTO 1230
1210 IF A$=CHR$(3) THEN END
1220 GOTO 1180
1230 '
1240 '
1250 '
            Target Program
1260 '
1270 CLS
1280 M$="TTTTT
                 AAA
                       RRRR
                               GGGG
                                     EEEEE TTTTT" : Y=4 : GOSUB
2670
1290 M$="
                    Α
                       R
                           R
                              G
                                     Ε
                                               T ": Y=5 : GOSUB
                Α
2670
1300 M$="
           Τ
                Α
                    Α
                       R
                           R
                              G
                                     Ε
                                               T ": Y=6 : GOSUB
2670
1310 M$="
                AAAAA
                       RRRR
                              G
                                 GG
                                    EEE
                                               T ": Y=7 : GOSUB
2670
1320 M$="
                    Α
                       R R
                              G
                                  G
                                     Ε
                                               Τ
                                                  " : Y=8 : GOSUB
                Α
2670
1330 M$="
                Α
                    Α
                      R R
                              G
                                  G
                                     Ε
                                               Τ
                                                  " : Y=9 : GOSUB
2670
1340 M$="
                Α
                    Α
                      R
                           R
                               GGGG
                                     EEEEE
                                               T ": Y=10: GOSUB
2670
1350 LOCATE 13,1 : PRINT "Instructions:" : PRINT
1360 PRINT "Press space bar
                             to fire"
1370 PRINT "Press left arrow to move left"
1380 PRINT "Press right arrow to move right"
1390 PRINT "Press ESC
                              to return to menu"
1400 PRINT "Press Ctrl-Break to exit the program"
1410 PRINT: PRINT "NOTE - Only 1 shell per position"
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1420 PRINT : PRINT "Press any key to continue"
1430 A$=INKEY$:IF A$="" THEN 1430
1440 IF A$=CHR$(3) THEN SCREEN 0,0,0:END
1450 \text{ NL} = 24 : \text{WIDTH WD : LOCATE , , } 0
1460 IF CLR THEN COLOR 7,1,1
1470 CLS
1480 M.S=12
1490 M.B=12
1500 M.N=5 : GOSUB 2550
1510 FOR I=1 TO 5
       X.TOP$(I) = "\"+STRING$(I, "|") + "/" : X.BOT$(I) = "/" + STRING
1520
$(I,"|")+"\"
1530 IF A=3 THEN END
1540 NEXT I
1550 BULLIT$=CHR$ (127)
1560 PLAY "mbt255132"
1570 LOCATE 25,1 : IF WD=80 THEN PRINT "IBM Personal Computer ";
1580 PRINT "Basic Compiler Demo"; :
1590 M$="(ESC to restart)": LOCATE 25, WD-LEN(M$): PRINT M$;
1600 D.T=12: M.T=(WD-5) *D.T-1
1610 LOCATE NL-1,3: PRINT STRING$ (WD-5, BULLIT$);
1620 FOR I=3 TO WD-3: BUL(I)=1: NEXT: NB=WD-5
1630 FOR I=2 TO NL-1
1640
      LOCATE I,1 : PRINT CHR$ (186); : LOCATE I, WD-1 : PRINT CHR
$(186);
1650 NEXT
1660 LOCATE 1,1 : PRINT CHR$(201); STRING$(WD-3,205); CHR$(187);
1670 LOCATE NL,1 : PRINT CHR$(200); STRING$(WD-3,205); CHR$(188);
1680 LOCATE NL-2,1 : PRINT CHR$(199); STRING$(WD-3,196); CHR$(182);
1690 BX=WD\2: LOCATE NL-2, BX: PRINT CHR$ (208);
1700 LOCATE 1,8*(WD/40):PRINT " SCORE = ";SCORE:LOCATE 1,26*
(WD/40):PRINT " TIME LEFT"; (899-C.T) \10
1710 FOR C.T=1 TO M.T
1720 FOR I=3 TO M.S
1730
         ON S.STAT(I)+1 GOTO 1740,1800,1930,1960,2080,2120
1740
         ' Inactive
1750
         IF RND>.17 THEN 2190
1760
         J=4*RND
1770
         S.STAT(I)=1 : S.X(I)=3 : S.Y(I)=I : S.SP(I)=N.SP(J) :
S.PAT(I)=0
1780
         S.PIC$(I,0)=N.PIC$(J,0):S.PIC$(I,1)=N.PIC$(J,1):
S.SCORE(I) = N.SCORE(J)
        S.LEN(I)=N.LEN(J):LOCATE S.Y(I),S.X(I)-1:PRINT S.PIC
1790
$(I,0); : GOTO 2190
         ' Fly
1800
1810
         X1=S.X(I) : Y=S.Y(I) : X2=S.X(I)+S.LEN(I)
1820
         IF C.T AND S.SP(I) THEN X2=X2-1 : GOTO 1860
1830
         LOCATE S.Y(I),X1
1840
         PRINT S.PIC(I, S.PAT(I)); : X1=X1+1 : S.X(I)=X1
1850
         S.PAT(I)=1-S.PAT(I): IF X1=WD-7 THEN S.STAT(I)=2
1860
        FOR J=0 TO M.B
1870
           IF B.ACT(J)=0 THEN 1910
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IF B.Y(J) <>Y THEN 1910
1880
1890
           IF B.X(J) >= X1 THEN IF B.X(J) <= X2 THEN 1900 ELSE 1910
ELSE 1910
1900
           S.STAT(I)=3: B.ACT(J)=0: SCORE=SCORE+S.SCORE(I)
1910
         NEXT J
         GOTO 2190
1920
1930
         ' Final
1940
         LOCATE S.Y(I), S.X(I) : PRINT "; : S.STAT(I)=0
1950
         GOTO 2190
        ' Hit
1960
1970
         PLAY SND\$ (S.LEN(I)-1)
1980
         X=S.X(I): Y=S.Y(I): LN=S.LEN(I)
         IF CLR THEN COLOR 4
1990
2000
         LOCATE Y-1, X-1: PRINT X.TOP$ (LN);
         LOCATE Y, X-1 : PRINT "-";
2010
         LOCATE Y, X+LN : PRINT "-";
2020
         LOCATE Y+1, X-1: PRINT X.BOT$ (LN);
2030
         IF CLR THEN COLOR 7
2040
2050
         S.STAT(I)=4
2060
         LOCATE 1,8* (WD/40):PRINT " SCORE = ";SCORE
2070
         GOTO 2190
         ' Blown
2080
2090
        LOCATE S.Y(I), S.X(I) : PRINT SPC(S.LEN(I));
2100
        S.STAT(I) = 5
2110
        GOTO 2190
2120
        ' Down
2130
         X=S.X(I): Y=S.Y(I): LN=S.LEN(I)+2
2140
         LOCATE Y-1, X-1: PRINT SPC(LN);
2150
         LOCATE Y, X-1: PRINT SPC(LN);
         LOCATE Y+1, X-1 : PRINT SPC(LN);
2160
2170
       S.STAT(I)=0
2180
       GOTO 2190
2190 NEXT I
2200 FOR I=0 TO M.B
2210
         IF B.ACT(I)=0 THEN 2250
2220
         IF B.Y(I)=NL-2 THEN 2240
2230
         LOCATE B.Y(I), B.X(I):PRINT " ";:IF B.Y(I)=2 THEN B.ACT
(I) = 0:GOTO 2350
2240
        B.Y(I)=B.Y(I)-1: LOCATE B.Y(I), B.X(I): PRINT BULLIT$;
: GOTO 2350
2250
         A\$=INKEY\$: IF LEN(A$)=0 THEN 2350
2260
         A=ASC(A$): IF A<>32 THEN IF A=3 THEN SCREEN 0,0,0:COLOR
7,0:END ELSE GOTO 2300
2270
        IF BUL(BX) = 0 THEN 2300
2280
         BUL(BX) = 0 : B.X(I) = BX : B.Y(I) = NL-2 : B.ACT(I) = 1 : NB = NB-1
         LOCATE NL-1, BX : PRINT " "; : PLAY "N35"
2290
2300 '
2310
        IF A=0 THEN A=ASC(MID\$(A\$,2))-23
2320
         IF A=52 AND BX>3 THEN BX=BX-1 : LOCATE NL-2,BX : PRINT
CHR$(208); CHR$(196); : GOTO 2350
2330
         IF A=54 AND BX<WD-3 THEN LOCATE NL-2, BX : BX=BX+1 :
PRINT CHR$ (196); CHR$ (208);
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IF A=27 THEN SCORE = 0:GOTO 1270
2350 NEXT I
2360 IF NB<>0 THEN GOTO 2390
2370 NB=WD-5:FOR I=3 TO WD-3:BUL(I)=1:NEXT
2380 LOCATE NL-1, 3:PRINT STRING$ (WD-5, BULLIT$);
2390 LOCATE 1,26*(WD/40):PRINT " TIME LEFT"; (899-C.T) \10:NEXT
C.T
2400 FOR I=0 TO M.B
2410 B.Y(I) = 2
2420 NEXT I
2430 CLS:LOCATE 10,16*(WD/40):PRINT "YOUR SCORE WAS ";SCORE
2440 IF SCORE<=HIGH THEN GOTO 2470
2450 HIGH=SCORE:LOCATE 11,10*(WD/40):PRINT "CONGRATULATIONS!
THAT'S THE NEW HIGH SCORE!"
2460 LOCATE 15,15*(WD/40):INPUT "TYPE IN YOUR NAME-",NM$:FOR I=1
TO 20000:NEXT:CLS:SCORE=0:GOTO 1610
2470 LOCATE 12,17*(WD/40):PRINT "NICE TRY, BUT "
2480 BEGN=WD/2-LEN(NM$)/2:LOCATE 14,BEGN:PRINT NM$:SCORE=0
2490 LOCATE 16,13*(WD/40):PRINT "STILL HAS THE HIGH SCORE -";HIGH
2500 LOCATE 25,30:PRINT "HIT ENTER TO CONTINUE"
2510 A$=INKEY$:IF A$="" THEN GOTO 2510
2520 IF A$=CHR$(13) THEN CLS:GOTO 1610
2530 IF A$=CHR$(3) THEN SCREEN 0,0,0:COLOR 7,0:END
2540 GOTO 2510
2550 N.PIC$(0,0)=" *" : N.PIC$(0,1)=" +" : N.SCORE(0)=30
: N.SP(0) = 0
2560 N.PIC$ (1,0) = *** : N.PIC$ (1,1) = *+* : N.SCORE (1) = 20
: N.SP(1)=1
2570 N.PIC\$(2,0) = " ***"
                           : N.PIC$(2,1) = " +++"
                                                  : N.SCORE(2) = 15
: N.SP(2)=1
2580 N.PIC\$(3,0)=" ****" : N.PIC\$(3,1)=" ++++" : N.SCORE(3)=10
: N.SP(3) = 3
2590 N.PIC$(4,0)=" *****" : N.PIC$(4,1)=" +++++" : N.SCORE(4)= 5
: N.SP(4) = 7
2600 FOR I=0 TO 10 : N.LEN(I)=I+1 : NEXT
2610 \text{ SND} \$ (0) = "N65N56"
2620 SND$ (1) = "N37N47N33"
2630 SND$(2) = "n37N28N35"
2640 SND$(3)="N45N35N55N35"
2650 \text{ SND}$ (4) = "N55N35N45N65"
2660 RETURN
2670 LOCATE Y, (WD-LEN(M\$)+2)\2: PRINT M\$; : RETURN
2680 IF ERR=51 THEN PRINT "INTERNAL ERROR":BEEP:END
2690 PRINT "ERROR "; ERR; " ON LINE "; ERL: END
\rightarrow)+2)\2 : PRINT M$; : RETURN
2680 IF ERR=51 THEN PRINT "INTERNAL ERROR":BEEP:END
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