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5 REM - LOGOS64 BY MILES DYCK; NOVEMBER 2022
8 REM — DIMENSIONING ARRAYS AND POPULATING THE SCREEN KEYBOARD ARRAY
10 CLR:DIMU%(675):DIMKY%(26):DIMQ$(4):DIMF$(12):DIMF%(11):DIML$(5):DIML1%(26)
20 DIML2%(26):DIML3%(26):DIMG1%(26):DIMG2%(26):DIMG3%(26):DIMS1%(5):DIMGG$(5)
30 DIMGY$(5):DIMG$(6)
40 KYX(1)=120:KYX(2)=2100:KYX(3)=1700:KYX(4)=160:KYX(5)=15:KYX(6)=180
50 KY%(7)=200:KY%(8)=220:KY%(9)=25:KY%(10)=240:KY%(11)=260:KY%(12)=280
60 KYX(13)=2500:KYX(14)=2300:KYX(15)=27:KYX(16)=29:KYX(17)=11:KYX(18)=17
70 KY%(19)=140:KY%(20)=19:KY%(21)=23:KY%(22)=1900:KY%(23)=13:KY%(24)=1500
80 KY%(25)=21:KY%(26)=1300
85 REM — WELCOME SCREEN, CHOOSE RANDOM OR DAILY, NAME AND DATE INPUT, CHECK PLAY
ER DATABASE
90 POKE53280,0:POKE53281,0:POKE53272,21:CK%=0:R%=0:ER%=0:NA$="":Z%=0
140 GETU$:IFU$=""GOTO140
150 IF(U$<>"1"ANDU$<>"2")GOT0140
160 PRINTU$;"≡"
180 PRINT"X";SPC(15);"⊾@Ⅱ";
190 GETB$:IFB$=""GOTO190
200 IF(Z%=0ANDB$=CHR$(20))THENB$="":Z%=Z%-1:GOT0190
   IF(Z%>0ANDB$=CHR$(20))THENPRINT"■ ■";:B$="":Z%=Z%-1:NA$=LEFT$(NA$,LEN(NA$)-1
210
):GOTO190
220 IF(B$=CHR$(13)ANDZ)0)GOTO250
230 IF(ASC(B$)>31ANDASC(B$)<91)THENPRINTB$;:Z%=Z%+1:NN$=NN$+B$:NA$=NN$:GOTO190
240 IFLEN(NA$)>5THENNA$=LEFT$(NA$,5)
245 REM – CALL CHECK PLAYER DATABASE (SCORES.REL) SUBROUTINE
255 GOSUB3585
260 PRINT"################";
265 REM — DEPENDING ON VALUE OF CK%, THE PLAYER IS WELCOMED BACK OR GREETED FOR
   FIRST TIME
THE
   IFCK%=0THENGOT0290
270
280 IFCK%=1THENGOTO300
290 PRINT"HELLO, ";NN$;", NICE TO MEET YOU!":GOTO310
300 PRINT"WELCOME BACK, ";NN$;"!"
305 REM — IF THE RANDOM GAME WAS CHOSEN, THE PROMPT TO ENTER THE DATE IS SKIPPED
310 IFU$="1"GOTO340
320 IFU$="2"THENGOSUB2735
   ĪFŪ$="2"GOTO720
330
335 REM — PLAYER IS PROMPTED TO ENTER THE DATE IF THE DAILY GAME WAS CHOSEN
350 PRINT".<mark>Tydddde</mark>nter date (MM / DD):⊾ @@ / @@#######";
360 J%=0
370 GET X$:IF X$=""GOTO370
380 IF((J%>0ANDJ%<2)AND%$=CHR$(20))THENPRINT"#@##";:X$="":J%=J%-1:Q$(J%)="":GOTO3
70.
390 IF((J%>2ANDJ%<5)ANDX$=CHR$(20))THENPRINT"#00#";:X$="":J%=J%-1:Q$(J%)="":GOTO3
70
400 IF(J%=2ANDX$=CHR$(20))THENPRINT"||||||||||||||||";:X$="":J%=J%-1:Q$(J%)="":GOTO370
410 IF(J%=4ANDX$<>CHR$(13))GOTO370
420 IF(J%=4ANDX$=CHR$(13))GOTO550
440 PRINT X$;
450 Q$(J%)=X$
460 IFJ%=1THENM$=Q$(0)+Q$(1)
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470 IF (J%=1ANDLEFT$(M$,1)="0")THENM$=RIGHT$(M$,1)
    IF J%=1 THEN M%=VAL(M$)
480
    IF(J%=1AND(M%=>13 OR M%<1)>THENJ%=0:PRINT"###@@###";:GOTO370
49A
500 IFJ%=3THEND$=Q$(2)+Q$(3)
510 IF (J%=3ANDLEFT$(D$,1)="0")THEND$=RIGHT$(D$,1)
520 IF J%=3THEND%=VAL(D$)
530 IF(J%=3AND(D%>30AND(M%=40RM%=60RM%=11)))THENJ%=1:PRINT"##@@###";:GOTO370
540 IF(J%=3AND(D%>310R(D%>29ANDM=2)))THENJ%=1:PRINT"!||@@@@#";:GOTO370
550 J%=J%+1
560 IF(J%=2ANDX$<>CHR$(20))THENPRINT"DDDN";
570 IFJ%<5GOTO370
580 PRINT CHR$(13);"XXXXXX**₽₽₽₽BETTING UP THE GAME FOR";M%;"/";D%
585 REM — DATE IS CONVERTED TO JULIAN DAY IN ORDER TO FIND THE RIGHT WORD IN THE
 2022WORDS.REL FILE
590 IFM%=1THENJD%=D%
600 IFM%=2THENJD%=31+D%
610 IFM%=3THENJD%=60+D%
620 IFM%=4THENJD%=91+D%
630 IFM%=5THENJD%=121+D%
640 IFM%=6THENJD%=152+D%
650 IFM%=7THENJD%=182+D%
660 IFM%=8THENJD%=213+D%
670 IFM%=9THENJD%=244+D%
680 IFM%=10THENJD%=274+D%
690 IFM%=11THENJD%=305+D%
700 IFM%=12THENJD%=335+D%
705 REM — CALL WORD RETRIEVAL BASED ON DATE SUBROUTINE
710 GOSUB2325
715 REM — W$ IS THE THE DAILY WORD AND IS SPLIT INTO SINGLE LETTERS
718 REM — L1 ARRAY RECORDS THE LOCATION (1 THROUGH 5) OF EACH LETTER; L2 AND L3
USED IF A LETTER IS REPEATED
720 FOR K=1T05:L$(K)=MID$(W$,K,1):NEXT
730 FORK=1T05
740 Y=ASC(L$(K))-64
750 IF(L2%(Y)>0ANDL3%(Y)=0)THENL3%(Y)=K
760 IF(L1%(Y)>0ANDL2%(Y)=0)THENL2%(Y)=K
770 IF(L1%(Y)=0)THENL1%(Y)=K
780 NEXT K
790 FORK=1T05:Y=ASC(L$(K))-64
IFL3%(Y)=0THENL3%(Y)=-100
810
820 NEXTK
825 REM - POPULATE MASTER WORDS.REL INDEX ARRAY BEFORE MOVING TO THE GAME SCREEN
830 FORK=0T0675:READA%:U%(K)=A%:NEXTK
835 REM — GAME SCREEN; USER IS PROMPTED TO ENTER GUESSES
840 PRINT"Ლ";TAB(6);"HIT RETURN AFTER EACH GUESS"
850 PRINT CHR$(13);"혦 L쿽";SPC(13);"레 로 레 로
860 PRINT CHR$(13);"앱 O쿽";SPC(13);"레 로 레 로
                                                    - 調 里";SPC(13);"縄L"
                                            레 트 레 트 레 트";SPC(13);"250"
870 PRINT CHR$(13);"M G■";SPC(13);"W ■
880 PRINT CHR$(13);"M O■";SPC(13);"W ■
                                            # ■
                                                    副 ■";SPC(13);"配G"
                                        레르
                                                a =
                                                3 💻
                                            3
890 PRINT CHR$(13);"™ Sa";SPC(13);"#I ■ #I ■ #I ■ #I ■ #I ■ #I ■";SPC(13);"#S"
900 PRINT CHR$(13);"論的知47時;SPC(13);"故 里 故 里 故 里 故 里 故 里";SPC(13);"語知知47時
905 REM — MIGHT AS WELL INTIALIZE GUESS COUNTER SINCE I THOUGHT OF IT
910 NG%=0
920 PRINT"XXXX";SPC(10);"Q W E R T Y U I O P"
940 PRINT"M";SPC(12);"Z X C
950 PRINT"XXXX";
960 PRINT"≡";SPC(15)
965 REM — G1 ARRAY RECORDS THE LOCATION (1 THROUGH 5) OF EACH LETTER IN THE GUES
S; G2 AND G3 USED IF A LETTER IS REPEATED
970 FORK=0T026:G1%(K)=0:G2%(K)=0:G3%(K)=0:NEXTK
980 FOR K=1TO6
990 GET G$(K):IF G$(K)="" GOTO 990
1000 IF(K=6ANDG$(K)=CHR$(13))THENPRINTG$(K):GOTO1140
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1020 IF (ASC(G$(K))<65 OR ASC(G$(K))>90) THEN G$(K)="":GOTO 990
1030
            IF(K=6ANDG$(K)<>CHR$(13))THENGOT0990
1040 BS%=0
1050 Y=ASC(G$(K))-64
1060 IF(G3%(Y)>0ANDBS%=0)THENG$(K)="":GOTO990
1070 IF(G2%(Y)>0ANDG3%(Y)=0ANDBS%=0)THENG3%(Y)=K
1080 IF(G1%(Y)>0ANDG2%(Y)=0ANDBS%=0)THENG2%(Y)=K
1090 IF(G1%(Y)=0ANDBS%=0)THENG1%(Y)=K
1100 IF(G3%(Y)>0ANDBS%=1)THENG3%(Y)=0:G$(K)="":GOTO990
1110 IF(G2%(Y)>0ANDG3%(Y)=0ANDBS%=1)THENG2%(Y)=0:G$(K)="":GOTO990
1120 IF(G1%(Y)>0ANDG2%(Y)=0ANDBS%=1)THENG1%(Y)=0:G$(K)="":GOTO990
1130 PRINT G$(K);"W";
1140 NEXT K
1150 FORJ=0T05:S1%(J)=0:NEXTJ
1155 REM — CALL SUBROUTINE TO CHECK IF THE GUESS IS IN THE MASTER WORDS FILE (WO
RDS.REL)
1160 GOSUB2445
1165 REM — SUBROUTINE ASSIGNS VALUE TO IO% DEPENDING ON WHETHER THE GUESS WORD W
AS MATCHED TO A WORD IN WORDS.REL
1168 REM - IF
                                   THE GUESS IS NOT A WORD, THE SQUARES TURN RED AND THE USER IS PROM
MPTED TO RE-ENTER A GUESS
1170 IFIO%=1THENGOTO1190
1180 PRINT"TT"; SPC(15); "88 로 # 로 # 로 # 로 # 로#": PRINT"TT": GOT0960
1195 REM - IF GUESS IS A WORD, THE GUESS COUNTER IS INCREMENTED
1200 NG%=NG%+1
1205 REM — SUBROUTINES COMPARING GUESS TO WORD ARE CALLED, DEPENDING ON REPEATED
  LETTERS IN THE WORD
1210 FOR K=1T026
1220 IFL3%(K)>0THENNY%=3:G0SUB2275
            IF(L3%(K)=-100ANDL2%(K)>0)THENNY%=2:G0SUB2275
1230
1240 IF(L3%(K)=-100ANDL2%(K)=-100ANDL1%(K)>0)THENNY%=1:GOSUB2275
1250 NEXTK
1255 REM — SUBROUTINES ASSIGN A VALUE TO THE S1% ARRAY FOR EACH GUESSED LETTER -
  GREEN[1], YELLOW[2] OR GRAY[0]
1258 REM — SCORE COUNTER, SC%, RESET TO ZERO; EACH GREEN LETTER INCREMENTS THE C
OUNTER BY 1
1260 SC%=0
1280 FOR K=1T05
1290 IF S1%(K)=1
                                           THEN PRINT"解";G$(K);"侧耳";
                                           THEN PRINT"A"; G$(K); "Ma";
1300 IF
                    $12(K)=2
                    $1%(K)=0 THEN PRINT"NO";G$(K);"NO";
1310 IF
1320 IF S1%(K)=1 THEN SC%=SC%+S1%(K)
1330 NEXT K
1335 REM - GREEN, YELLOW AND GRAY LETTERS ARE PRINTED TO THE SCREEN KEYBOARD
1340 PRINT CHR$(13)
1350 FORK=1T05
1360 Y=ASC(G$(K))-64
1370 S1%(0)=0:DX=0
1380 IF(KY%(Y)<100)THENDX=KY%(Y)-1:GOT01410
1390 IF(KY%(Y)>100ANDKY%(Y)<1000)THENDX=(KY%(Y)/10)-1:GOTO1420
1400 IF(KY%(Y)>1000)THENDX=(KY%(Y)/100)-1:GOTO1430
1410 PRINT"#################";SPC(DX):GOTO1440
1420 PRINT" SECUEDA DE LA COMPANIA DEL COMPANIA DE LA COMPANIA DEL COM
1430 PRINT" SOLUTION DE LA CONTRE LA
1435 REM — SUBROUTINES TO KEEP GREEN LETTERS GREEN — AND YELLOW LETTERS YELLOW U
NLESS THEY TURN GREEN - ARE CALLED
1440 IF(S1%(K)=0)THENGOSUB3235
1450 IF(S1%(K)=2)THENGOSUB3285
1460 IF(S1%(K)=1)THENPRINT"N";G$(K)
1470 NEXTK
1475 REM - IF SC%=5, THE GUESSED WORD IS CORRECT AND MESSAGES ARE PRINTED TO THE
  SCREEN ACCORDING TO NUMBER OF GUESSES
1480 IF SC%=5 GOTO 1520
1490 IFNG%<6THENGOT01510
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1500 IFNG%=6THENGOT01590
1510 PRINT"$00";:FORK=1TONG%:PRINT"0":NEXT:GOTO960
         IFNG%=1THENPRINT"$ AND ADDITIONAL AND ADDITIONAL TRANSPORT OF A PROPERTY OF A PROPERT
1520
              NG%=2 THEN PRINT" SAMMANAMANAMAN"; TAB(15); "NFANTASTIC!"
NG%=3 THEN PRINT" SAMMANAMANAMAN"; TAB(17); "NICE!"
1530 IF
1540 IF
              NGZ=4 THEN PRINT" SECRETARIO DE LA TRANSPORTA DE LA DONE!"
1550 IF
1560 IF NGZ=5 THEN PRINT"SHOUNDHUNDHUNDHUN"; TAB(18); "LOK!"
1580 IF(NG%=6ANDSC%=5)THENPRINTTAB(9);"NCRIKEY, THAT WAS CLOSE!"
1585 REM - IF WORD NOT GUESSED IN 6 TRIES, THEN THE PLAYER GETS A BUMMER MESSAGE
1590 IF(NG%=6ANDSC%<>5)THENPRINT"#NUMBUNUMUNUMUNUMUNUMUN";
1600 IF(NG%=6ANDSC%<>5)THENPRINT"NBUMMER, ";NN$;"! THE WORD WAS, &";W$;"."
1605 REM — UPDATE F$ AND F% ARRAYS TO BE WRITTEN TO SCORES.REL FOR NEXT GAME
1610 IFCK%=0THENF$(0)=NA$:F%(2)=0
1620 IFU$="2"THENM$="12":F$(1)=M$:D$="31":F$(2)=D$
1630 IFU$="1"THENF$(1)=M$:F$(2)=D$
1640 REM F%(11) IS AVAILABLE FOR WHATEVER F%(11)=F%(11)+1
1650 F%(3)=F%(3)+1:F$(4)=STR$(F%(3))
1660 IFNG%=1THENF%(4)=F%(4)+1:F%(10)=F%(10)+1
1670 F$(5)=STR$(F%(4))
1680 IFNG%=2THENF%(5)=F%(5)+1:F%(10)=F%(10)+1
1690 F$(6)=STR$(F%(5))
1700 IFNG%=3THENF%(6)=F%(6)+1:F%(10)=F%(10)+1
1710 F$(7)=STR$(F%(6))
1720 IFNGX=4THENFX(7)=FX(7)+1:FX(10)=FX(10)+1
1730 F$(8)=STR$(F%(7))
1740 IFNG%=5THENF%(8)=F%(8)+1:F%(10)=F%(10)+1
1750 F$(9)=STR$(F%(8))
1760 IF(NG%=6ANDSC%=5)THENF%(9)=F%(9)+1:F%(10)=F%(10)+1
1770 F$(10)=STR$(F%(9))
1780 IF(NG%=6ANDSC%<>5)THENF%(10)=0
1790 F$(11)=STR$(F%(10))
1800 F$(12)=STR$(F%(11))
1810 IFF%(10)=>F%(2)THENF%(2)=F%(10):F$(3)=STR$(F%(2))
1820 WNX=FX(4)+FX(5)+FX(6)+FX(7)+FX(8)+FX(9):WPX=INT((WNX/FX(3)*100)+0.5)
1830 A0%=F%(4):FORK=4T09
1840 IFF%(K)>A%THENA%=F%(K):LG%=K
1850 NEXTK:L0%=-1
1860 L0%=L0%+1
1870 IF(INT((F%(LG%)/WN%)*(20+L0%))(20)GOTO1860
1880 T1$="":FORJ=0T0INT((F%(4)/WN%)*(20+L0%)):T1$=T1$+"###"=":NEXTJ
1890 T2$="":FORJ=0T0INT((F%(5)/WN%)*(20+L0%)):T2$=T2$+"###"=":NEXTJ
1900 T3$="":FORJ=0T0INT((F%(6)/WN%)*(20+L0%)):T3$=T3$+"###"=":NEXTJ
1910 T4$="":FORJ=0T0INT((F%(7)/WN%)*(20+L0%)):T4$=T4$+"#####":NEXTJ
1920 T5$="":FORJ=0T0INT((F%(8)/WN%)*(20+L0%)):T5$=T5$+"####":NEXTJ
1930 T6$="":FORJ=0T0INT((F%(9)/WN%)*(20+L0%)):T6$=T6$+"###"=":NEXTJ
1935 REM AFTER SHORT DELAY, THE STATISTICS SCREEN IS PRINTED OVER THE GAME SCREE
1940 PRINT" SEPRED
1950 PRINT" PREPARIA
                                                 STATISTICS
                                                                                       .
1960 PRINT"
1970 PRINT" DDDDDW PLAYED WIN% CURRENT MAX
1980 PRINT" PREPARA
                                                                         STREAK ■"
                                                         STREAK
1990 PRINT" PREPERING
                                                                                       _____
2000 PRINT" PREPERIA
                                                                                       _____
2010 PRINT"##############;F%(3);
2050 PRINT" PREPERIA
2070 PRINT" DEPEN
                                          GUESS DISTRIBUTION
                                                                                       ...
■"
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2120 PRINT" INTERNAL
                                      _____
                                      _____
2130 PRINT" PREPERIN
2150 PRINT":NUMUMANUMANUMANAAAAA | EE";T1$;"|||||";F2(4);"|||";
2220 PRINT"########
                                      ____
2230 PRINT"••••••
                                      SAVING YOUR SCORE...
____
2245 REM — CALL SUBROUTINE TO STORE UPDATED SCORES IN SCORES.REL
2250 GOSUB3785
2270 END
2272 REM - END OF MAIN PROGRAM
2275 REM — SUBROUTINE CALLED ON LINE 1220—1240; CALLS OTHER SUBROUTINES TO COMPA
RE GUESS TO WORD DEPENDING ON REPEATED LETTERS IN GUESS
2280 P1%=G1%(K):P2%=G2%(K):P3%=G3%(K)
2290 IFG3%(K)>0THENGOSUB2835
2300 IF(G3%(K)=0ANDG2%(K)>0)THENGOSUB3045
2310 IF(G3%(K)=0ANDG2%(K)=0ANDG1%(K)>0)THENGOSUB3175
2320 RETURN
2325 REM — SUBROUTINE CALLED ON LINE 710 TO RETRIEVE WORD ACCORDING TO DATE
2330 B%=JD%:C%=B%:D%=B%+20
2340 OPEN3,8,4,"2023WORDS"
2350 OPEN15,8,15
2360 IF(BX)=256)THENBX=BX-256:GOT02360
2370 R1%=B%
2380 R2%=INT(JD%/256)
2390 PRINT#15,"P"+CHR$(100)+CHR$(R1%)+CHR$(R2%)+CHR$(1)
2400 INPUT#3,W$
2410 REM PRINTW$
2420 CLOSE3
2430 CLOSE15
2440 RETURN
2445 REM — SUBROUTINE CALLED ON LINE 1160 TO CHECK IF GUESS IS AN ACTUAL WORD
2460 M1%=ASC(MID$(A$,1,1))-65:M2%=ASC(MID$(A$,2,1))-65:M3%=M1%*26+M2%:V%=0
2470 REM PRINTCHR$(13):PRINT"3";M3%,U%(M3%)
2480 REM GETH$:IFH$=""THENGOTO3030
2490 IFU%(M3%)=-1THENIO%=0:GOTO2730
2500 V%=V%+1:NX%=U%(M3%+V%)
2510 IFNX%<>-1G0T02530
2520 IF(NX%=-1AND(M3%+V%)<675)GOTO2500
2530 B1%=U%(M3%):B2%=U%(M3%+V%)
2540 REM PRINTCHR$(13):PRINTB1%,B2%
2550 REM GETH$:IFH$=""THENGOTO3073
2560 IFB2%=-1THENB2%=5757
2570 W1%=INT(B1%/256):W2%=B1%-W1%*256
2580 W3%=INT(B2%/256):W4%=B2%-W3%*256
2590 REM PRINTCHR$(13):PRINT"B2:";B2%,"W1:";W1%,"W2:";W2%,"W3:";W3%,"W4:";W4%
2600 REM GETH$:IFH$=""THENGOTO3078
2610 OPEN3,8,2,"WORDS"
2620 OPEN15,8,15
2630 V%=0:R1%=W2%:R2%=W1%
2640 FORK=B1%TOB2%-1
2650 IF((R1%+V%)=256)THENR1%=0:V%=0:R2%=W3%
2660 PRINT#15,"P"+CHR$(96+2)+CHR$(R1%+V%)+CHR$(R2%)+CHR$(1)
2670 INPUT#3,N$
2680 REM PRINT"R1+V:";R1%+V%,"R2:";R2%,A$,N$
2690 V%=V%+1
2700 IFA$=N$THENIO%=1:K=B2%-1
2710 NEXTK
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2720 CLOSE3:CLOSE15
2730 RETURN
2735 REM — SUBROUTINE TO RANDOMLY CHOOSE A WORD FROM WORDS.REL CALLED ON LINE 32
2750 RC%=INT(RND(0)*5756)+1
2760 W1%=INT(RC%/256):W2%=RC%-W1%*256
2770 OPEN3,8,3,"WORDS"
2780 OPEN15,8,15
2790 PRINT#15,"P"+CHR$(96+3)+CHR$(W2%)+CHR$(W1%)+CHR$(1)
2800 INPUT#3,W$
2810 CLOSE3
2820 CLOSE15
2830 RETURN
2835 REM — SUBROUTINE CALLED ON LINE 2290 FOR GUESSES WITH A LETTER REPEATED 3 T
IMES
2840 CYX=0
2850 D0X=0:D1X=0:D2X=0:D3X=0:D4X=0:D5X=0:D6X=0:D7X=0:D8X=0
2870 D0%=ABS(D0%):D1%=ABS(D1%):D2%=ABS(D2%)
2880 D3%=L2%(K)-G1%(K):D4%=L2%(K)-G2%(K):D5%=L2%(K)-G3%(K)
2890 D3%=ABS(D3%):D4%=ABS(D4%):D5%=ABS(D5%)
2900 D6%=L3%(K)-G1%(K):D7%=L3%(K)-G2%(K):D8%=L3%(K)-G3%(K)
2910 D6%=ABS(D6%):D7%=ABS(D7%):D8%=ABS(D8%)
2920 IF(D0%=0ANDCY%<NY%)THENCY%=CY%+1:S1%(G1%(K))=1:GG$(G1%(K))=G$(G1%(K))
2930 IF(D3%=0ANDCY%<NY%)THENCY%=CY%+1:S1%(G1%(K))=1:GG$(G1%(K))=G$(G1%(K))
2940 IF(D6%=0ANDCY%(NY%)THENCY%=CY%+1:S1%(G1%(K))=1:GG$(G1%(K))=G$(G1%(K))
2950 IF(D4%=0ANDCY%<NY%)THENCY%=CY%+1:S1%(G2%(K))=1:GG$(G2%(K))=G$(G2%(K))
2960 IF(D1%=0ANDCY%<NY%)THENCY%=CY%+1:S1%(G2%(K))=1:GG$(G2%(K))=G$(G2%(K))
2970 IF(D7%=0ANDCY%(NY%)THENCY%=CY%+1:S1%(G2%(K))=1:GG$(G2%(K))=G$(G2%(K))
    IF(D8%=0ANDCY%CNY%)THENCY%=CY%+1:S1%(G3%(K))=1:GG$(G3%(K))=G$(G3%(K))
2980
2990
    IF(D2%=0ANDCY%CNY%)THENCY%=CY%+1:S1%(G3%(K))=1:GG$(G3%(K))=G$(G3%(K))
3000 IF(D5%=0ANDCY%<NY%)THENCY%=CY%+1:S1%(G3%(K))=1:GG$(G3%(K))=G$(G3%(K))
3020 IFS1%(P2%)<>1THENGOSUB3375
3030 IFS1%(P3%)<>1THENGOSUB3415
3040 RETURN
3045 REM — SUBROUTINE CALLED ON LINE 2300 FOR GUESSES WITH A LETTER REPEATED 2 T
IMES
3050 CY%=0
3060 H0%=0:H1%=0:H2%=0:H3%=0
3070 H0%=L1%(K)-G1%(K):H1%=L1%(K)-G2%(K)
3080 H0%=ABS(H0%):H1%=ABS(H1%)
3090 H2%=L2%(K)-G1%(K):H3%=L2%(K)-G2%(K)
3100 H2%=ABS(H2%):H3%=ABS(H3%)
3110 IF(H0%=0ANDCY%(NY%)THENCY%=CY%+1:S1%(G1%(K))=1:GG$(G1%(K))=G$(G1%(K))
3120 IF(H2X=0ANDCYX<NYX)THENCYX=CYX+1:S1X(G1X(K))=1:GG$(G1X(K))=G$(G1X(K))
3130 IF(H3%=0ANDCY%<NY%)THENCY%=CY%+1:S1%(G2%(K))=1:GG$(G2%(K))=G$(G2%(K))
3140 IF(H1%=0ANDCY%CNY%)THENCY%=CY%+1:S1%(G2%(K))=1:GG$(G2%(K))=G$(G2%(K))
3150
    IFS1%(P1%)<>1THENGOSUB3455
3160 IFS1%(P2%)<>1THENGOSUB3485
3170 RETURN
3175 REM — SUBROUTINE CALLED ON LINE 2310 FOR GUESSES WITH NO REPEAT LETTERS
3180 CY%=0
3190 IF(G1%(K)=L1%(K)ANDCY%(NY%)THENCY%=CY%+1:S1%(P1%)=1:GG$(P1%)=G$(P1%)
3200 IF(G1%(K)=L2%(K)ANDCY%(NY%)THENCY%=CY%+1:S1%(P1%)=1:GG$(P1%)=G$(P1%)
3210 IF(G1%(K)=L3%(K)ANDCY%(NY%)THENCY%=CY%+1:S1%(P1%)=1:GG$(P1%)=G$(P1%)
3220 IFS1%(P1%)<>1THENGOSUB3515
3230 RETURN
3235 REM — SUBROUTINE CALLED ON LINE 1440 TO PRINT GRAY LETTERS ON SCREEN KEYBOA
RD
3240 FORJ=1T05
3250 IF(G$(K)=GG$(J)ORG$(K)=GY$(J))THENRETURN
3260 NEXTJ
3270 PRINT"∭";G$(K)
3280 RETURN
```

```
3285 REM — SUBROUTINE CALLED ON LINE 1450 TO PRINT YELLOW LETTERS ON SCREEN KEYB
OARD
3290 FORJ=1TO5
3300 IFG$(K)=GG$(J)THENRETURN
3310 NEXTJ
3320 PRINT"$#";G$(K)
3330 RETURN
3335 REM — SUBROUTINE CALLED ON LINE 3010; CONTSTRAINT FOR PRINTING YELLOW LETTE
RS.
3340 IF(D3%>0ANDD3%<10ANDCY%<NY%)THENCY%=CY%+1:81%(P1%)=2:GY$(P1%)=G$(P1%)
3350 IF(D0%>0ANDD0%<10ANDCY%<NY%)THENCY%=CY%+1:S1%(P1%)=2:GY$(P1%)=6$(P1%)
3360 IF(D6%>0ANDD6%<10ANDCY%<NY%)THENCY%=CY%+1:S1%<P1%)=2:GY$(P1%)=G$(P1%)
3370 RETURN
3375 REM — SUBROUTINE CALLED ON LINE 3020; CONTSTRAINT FOR PRINTING YELLOW LETTE
RS.
3380 IF(D1%>0ANDD1%<10ANDCY%<NY%)THENCY%=CY%+1:81%(P2%)=2:GY$(P2%)=G$(P2%)
3390 IF(D4%>0ANDD4%<10ANDCY%<NY%)THENCY%=CY%+1:81%<P2%)=2:GY$(P2%)=G$(P2%)
3400 IF(D7%>0ANDD7%<10ANDCY%<NY%)THENCY%=CY%+1:S1%(P2%)=2:GY$(P2%)=G$(P2%)
3410 RETURN
3415 REM — SUBROUTINE CALLED ON LINE 3030; CONTSTRAINT FOR PRINTING YELLOW LETTE
RS.
3420 IF(D2%>0ANDD2%<10ANDCY%<NY%)THENCY%=CY%+1:81%(P3%)=2:GY$(P3%)=G$(P3%)
3430 IF(D8%>0ANDD8%<10ANDCY%<NY%)THENCY%=CY%+1:S1%(P3%)=2:GY$(P3%)=G$(P3%)
3440 IF(D5%>0ANDD5%<10ANDCY%<NY%)THENCY%=CY%+1:S1%(P3%)=2:GY$(P3%)=G$(P3%)
3450 RETURN
3455 REM — SUBROUTINE CALLED ON LINE 3150; CONTSTRAINT FOR PRINTING YELLOW LETTE
RS
3460 IF(H2%>0ANDH2%<10ANDCY%<NY%)THENCY%=CY%+1:S1%<P1%)=2:GY$(P1%)=G$(P1%)
3470 IF(H0%>0ANDH0%<10ANDCY%<NY%)THENCY%=CY%+1:S1%(P1%)=2:GY$(P1%)=G$(P1%)
3480 RETURN
3485 REM — SUBROUTINE CALLED ON LINE 3160; CONTSTRAINT FOR PRINTING YELLOW LETTE
RS.
3490 IF(H1%>0ANDH1%<10ANDCY%<NY%)THENCY%=CY%+1:S1%(P2%)=2:GY$(P2%)=G$(P2%)
3500 IF(H3X>0ANDH3X<10ANDCYX<NYX)THENCYX=CYX+1:S1X(P2X)=2:GY$(P2X)=G$(P2X)
3510 RETURN
3515 REM — SUBROUTINE CALLED ON LINE 3220; CONTSTRAINT FOR PRINTING YELLOW LETTE
RS
3520 M1%=ABS(L1%(K)-G1%(K))
3530 M2%=ABS(L2%(K)-G1%(K))
3540 M3%=ABS(L3%(K)-G1%(K))
3550 IF(M1%>0ANDM1%<10ANDCY%<NY%)THENCY%=CY%+1:81%<P1%)=2:6Y$(P1%)=6$(P1%)
3560 IF(M2%>0ANDM2%<10ANDCY%<NY%)THENCY%=CY%+1:81%<P1%)=2:GY$(P1%)=G$(P1%)
3570 IF(M3%>0ANDM3%<10ANDCY%<NY%)THENCY%=CY%+1:S1%(P1%)=2:GY$(P1%)=G$(P1%)
3580 RETURN
3585 REM — SUBROUTINE CALLED ON LINE 245 TO CHECK FOR PLAYER IN DATABASE
3590 OPEN3,8,4,"SCORES"
3600 OPEN15,8,15
3610 FORK=1T015
3620 PRINT#15,"P"+CHR$(100)+CHR$(K)+CHR$(0)+CHR$(1)
3630 INPUT#3,N$
3640 IF(ER%=0ANDN$=CHR$(255))THENER%=K
3650 IFN$=NA$THENCK%=1:R%=K
3660 NEXTK
3670 FORJ=0T011:F%(J)=0:NEXTJ
3680 IFCK%=1THENGOTO3710
3690 CLOSE3:CLOSE15
3700 RETURN
3710 PRINT#15,"P"+CHR$(100)+CHR$(R%)+CHR$(0)+CHR$(1)
3720 J%=0
3730 INPUT#3,F$(J%)
3740 IF(ST=0ANDJ%>0)THENF%(J%-1)=YAL(F$(J%)):J%=J%+1:GOTO3730
3750 IF(ST<>0ANDJ%=12)THENF%(J%-1)=VAL(F$(J%)):J%=J%+1:GOTO3770
3760 IF(ST<>64ANDJ%=0)THENNM$=F$(J%):J%=J%+1:GOTO3730
3770 CLOSE3:CLOSE15
3780 RETURN
3785 REM — SUBROUTINE CALLED ON LINE 2250 TO UPDATE PLAYERS SCORES
```

```
3790 B$=""
3800 FORJ=0TO12
3810 B$=B$+F$(J)+CHR$(13)
3820 NEXTJ
3830 OPEN3,8,4,"SCORES"
3840 OPEN15,8,15
3850 PRINT#15,"P"+CHR$(100)+CHR$(R%)+CHR$(0)+CHR$(1)
3860 PRINT#3,B$;
3870 CLOSE3:CLOSE15
3880 RETURN
3890 DATA 1,2,27,43,62,64,70,85,88,-1,99,100,137
          161,187,188,204,206,229,247,255,266,274,283,292,293
3900 DATA
3910 DATA
          296,-1,-1,-1,375,-1,-1,439,441,-1,-1,480,-1
          -1,528,-1,-1,604,-1,-1,666,-1,723,-1,724,-1
3920 DATA
          728,-1,-1,-1,812,-1,-1,823,891,-1,-1,904,-1
3930 DATA
3940 DATA
          -1,955,-1,-1,1060,-1,-1,1125,-1,-1,-1,1163,1167
3950 DATA 1168,-1,-1,-1,1200,-1,-1,1257,1258,1322,-1,-1,-1
          -1,1323,-1,-1,1386,-1,-1,1432,-1,1470,-1,1474,-1
3960 DATA
3970 DATA 1479,1493,1495,1497,1505,-1,1506,-1,1510,1512,1513,1514,1527
          1537,-1,1552,1560,1562,1569,1573,-1,1579,-1,1586,1605,-1
3980 DATA
3990 DATA
          1608,-1,-1,-1,1665,-1,-1,-1,1701,1754,-1,1755,-1
4000 DATA -1,1814,-1,-1,1861,-1,1894,1895,-1,-1,-1,-1,-1
4010 DATA 1926,-1,-1,-1,1975,-1,-1,1992,1995,-1,-1,2024,-1
4020 DATA
          2056,-1,2061,-1,2104,-1,-1,2167,-1,2199,-1,2200,-1
4030 DATA 2205,-1,-1,-1,2269,-1,-1,-1,2314,-1,-1,-1,-1
4040 DATA
          -1,2339,-1,-1,-1,-1,-1,2403,-1,-1,-1,2434,-1
4050 DATA 2444,-1,2445,2451,-1,-1,2461,-1,-1,-1,2462,2464,2468
4060 DATA
          2477,2501,-1,-1,2505,2509,2512,-1,2514,-1,2517,-1,-1
4070 DATA
          2518,-1,-1,-1,2531,-1,-1,-1,2544,-1,-1,-1,-1
4080 DATA
          -1,2558,-1,-1,-1,-1,-1,2574,-1,-1,-1,-1,-1
          2591,-1,-1,-1,2602,-1,-1,2619,2621,-1,-1,2643,-1
4090 DATA
          2648, 2668, -1, -1, 2673, -1, -1, 2678, -1, -1, -1, 2681, -1
4100 DATA
4110 DATA
          2682,-1,-1,-1,2750,-1,-1,-1,2790,-1,-1,2849,-1
          -1,2850,-1,-1,-1,-1,-1,2916,-1,-1,-1,2947,-1
4120 DATA
4130 DATA 2953,-1,-1,-1,3031,-1,-1,-1,3073,-1,-1,-1,-1
4140 DATA
          -1,3124,-1,-1,3203,-1,-1,3204,-1,-1,-1,3246,-1
          3251,-1,-1,-1,3278,-1,-1,-1,3301,-1,-1,-1,-1
4150 DATA
          -1,3322,-1,-1,-1,-1,3355,-1,-1,-1,3367,-1
4160 DATA
4170 DATA
          3369,3376,3381,3387,3392,-1,3397,3401,3403,-1,3407,3410,3416
          3420,3423,3427,-1,3434,3444,3445,3447,3458,3466,3472,-1,3476
4180 DATA
          3477,-1,-1,-1,3557,3605,-1,3606,3614,-1,-1,3663,-1
-1,3704,-1,-1,3764,3816,-1,3822,-1,-1,-1,3859,-1
4190 DATA
4200 DATA
          -1, -1, -1, -1, -1, -1, -1, -1, -1, -1, -1, -1
4210 DATA
4220 DATA
          -1,3863,-1,-1,-1,-1,-1,3864,-1,-1,-1,-1,-1
4230 DATA 3902,-1,-1,-1,3962,-1,-1,4038,4043,-1,-1,-1,-1
          -1,4085,-1,-1,-1,-1,4139,-1,-1,-1,-1,-1
4240 DATA
4250 DATA 4170,-1,4221,-1,-1,4273,-1,4321,4411,-1,4455,4477,4535
4260 DATA
          4553,4586,4633,4711,-1,-1,4717,4817,-1,4848,-1,4889,-1
4270 DATA 4894,-1,-1,-1,4957,-1,-1,5002,5042,-1,-1,-1,-1
4280 DATA
          -1,5082,-1,-1,5146,5206,-1,5207,5242,-1,-1,5261,5269
4290 DATA
          -1,-1,-1,5270,-1,-1,-1,-1,-1,5271,5272,5276
          5282,-1,5324,-1,5328,5334,5341,-1,5344,-1,-1,-1,-1
4300 DATA
4310 DATA 5345,-1,-1,-1,5366,-1,-1,-1,5392,-1,-1,-1,-1
4320 DATA
          -1,5433,-1,-1,5451,-1,-1,5452,-1,-1,-1,5453,-1
          5454,-1,-1,-1,5512,-1,-1,5542,5588,-1,-1,-1,-1
4330 DATA
          -1,5630,-1,-1,5663,-1,-1,5681,-1,-1,-1,-1,-1
4340 DATA
4350 DATA
          -1,-1,-1,-1,5682,-1,-1,-1,-1,-1,-1,-1,-1
          -1,5684,-1,-1,-1,-1,-1,-1,-1,-1,5685,-1
4360 DATA
          5686,-1,-1,-1,5696,-1,-1,-1,5706,-1,-1,-1,-1
4370 DATA
4380 DATA -1,5709,-1,-1,-1,-1,-1,5727,-1,-1,-1,-1,-1
4390 DATA 5733,-1,-1,-1,5735,-1,-1,-1,5742,-1,-1,5747,-1
4400 DATA -1,5748,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1
```