



Defining Characters

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19 REM*****C64*****
20 REM* USER-DEFINED CHAR-GEN *
21 REM*****C64*****
50 POKE 52,56:POKE 56,56:CLR
60 PRINT CHR$(147)"PLEASE WAIT 22
  SEC'S"
70 GOSUB 61000: REM COPY CHAR.SET.
100 GOSUB 1000: REM INITIALISE
120 FOR CT=0 TO 1 STEP 0
140 GOSUB 2500: REM INPUT
160 GOSUB 3000: REM VALIDATE
180 ON PT GOSUB 3500,4000,4500,7000
200 NEXT CT
900 END
999 REM*****
1000 REM* INITIALISE *
1001 REM*****
1020 DIM BD(8,8),C$(2,2),OF(2,7),
  CX(4)
1040 SH$=CHR$(19):S$=CHR$(147):R$=
CHR$(18):N$=CHR$(146):CD$=CHR$(17)
1060 P$=CD$+CD$:C$=P$+P$:P$=P$+P$:
  P$=P$+P$:P$=SH$+P$
1080 C1$=CHR$(144):C2$=CHR$(5)
1200 REM-----INITIALISE SCREEN-----
1210 SO=1024:PRINT SC$C1$
1220 RO=4:CO=3:RL=8:CL=8:OF=16
1230 Z$="USER-DEFINED CHARACTERS"
1240 C=4:GOSUB2100:R=24:GOSUB2100
1250 L$=" 76543210 ":S$=" "
1260 Z$=L$:R=R0:C=CO:GOSUB 2100
1270 C=C0-1:FOR R=R0+1 TO R0+8
1280 Z$=STR$(R-R0-1):Z$=Z$+S$+Z$
1290 GOSUB2100:C=C+OF:GOSUB2100
1300 C=C-OF:NEXT R
1310 C=CO:Z$=L$:GOSUB2100
1320 L$=" 01234567 "
1330 Z$=L$:R=R0:C=CO+OF:GOSUB 2100
1350 C=C+OF:R=R0+CL+1:GOSUB2100
1370 PRINT C2$
1400 C$(1,1)=R$+" "+N$:C$(1,2)=" "
1410 C$(2,1)=R$+"*"+N$:C$(2,2)="*"
1420 REM-----CURSOR OFFSETS-----
1440 DATA 0,-1,+1,0,-1,0,0,+1
1460 FOR K=1 TO 2:FOR L=1 TO 4:
1480 READ OF(K,L):NEXT L,K
1500 REM-----CHAR CONVERSIONS-----
1520 DATA 64,0,32,64
1540 FOR K=0 TO 3:READ CX(K):NEXT K
1620 RP=1:CP=1:CN=1:GOSUB 6000
1990 RETURN
1999 REM*****
2000 REM* PUT CRSR @ R,C *
2001 REM*****
2050 PRINT LEFT$(P$,R+1)TAB(C);
2070 RETURN
2099 REM*****
2100 REM* PRINT Z$ @ R,C *
2101 REM*****
2150 PRINT LEFT$(P$,R+1)TAB(C)Z$;
2170 RETURN
2499 REM*****
2500 REM* FLASH CRSR @ RP,CP*
2501 REM*****
2520 CF=1+BD(RP,CP):R=RP+RO:C=CP+CO
2540 FOR LP=0 TO 1 STEP 0
2560 FOR CS=1 TO 2:DE=10:GOSUB 2800
2580 GET GT$
2600 IF GT$(">") THEN LP=1:CS=2
2620 Z$=C$(CF,CS):GOSUB 2100
2640 DE=10:GOSUB 2800
2660 NEXT CS,LP:RETURN
2799 REM*****
2800 REM* DELAY FOR DE *
2801 REM*****
2820 FOR NN=1 TO DE:NEXT:RETURN
2999 REM*****
3000 REM* VALIDATE INPUT *
3001 REM*****
3020 IF GT$="!" THEN R=18:C=0:
  GOSUB2000:STOP
3040 GT=ASC(GT$)-132:F=2*INT(GT/2)
3060 IF (GT<1)OR(GT>8) THEN PT=0:
  RETURN
3080 IF GT<5 THEN PT=1:RETURN
3100 PT=GT-3
3490 RETURN
3499 REM*****
3500 REM* MOVE THE CURSOR *
3501 REM*****
3520 NY=RP+OF(2,GT):NX=CP+OF(1,GT)
3540 IF (NY<1)OR(NY>RL) THEN RETURN
3560 IF (NX<1)OR(NX>CL) THEN RETURN
3580 RP=NY:CP=NX
3620 RETURN
3999 REM*****
4000 REM* TOGGLE A CELL *
4001 REM*****
4020 TG=1-BD(RP,CP):Z$=C$(1+TG,2)
4040 R=R0+RP:C=C0+CP:GOSUB2100
4060 BD(RP,CP)=TG:MP=NCGEN+CN*8-1
4120 PE=PEEK(MP+RP)
4140 PE=PE+(TG*2-1)*(2^(8-CP))
4160 POKE(MP+RP),PE:GOSUB6500:
  RETURN
4499 REM*****
4500 REM* DEFINE NEW CHAR *
4501 REM*****
4520 FOR K=1 TO 1
4540 Z$=R$+" CHANGE CHAR "
4550 R=14:C=7:GOSUB2100
4560 Z$=" NEW NUMBER "
4570 R=15:GOSUB2100
4580 C=19:GOSUB2000:INPUT A$
4600 CN=VAL(A$):PRINT C2$
4620 IF (CN<0)OR(CN>127) THEN K=0
4640 NEXT K:GOSUB 6000
4660 Z$=" ":C=7
4670 R=14:GOSUB2100:R=15:GOSUB2100
4680 RETURN
5999 REM*****
6000 REM* DISPLAY CHAR *
6001 REM*****
6020 MP=NCGEN+CN*8-1
6040 FOR RP=1 TO 8:PE=PEEK(MP+RP):
  Z$=""
6060 FOR CP=8 TO 1 STEP-1:
  N=INT(PE/2)
6080 Q=PE-2*N:BD(RP,CP)=Q:PE=N
6100 Z$=C$(Q+1,2)+Z$:NEXT CP
6120 R=R0+RP:C=C0+1:GOSUB2100
6130 NEXT RP
6140 X$=CHR$(CN+CX(INT(CN/32)))
6150 Z$=R$+"CHARACTER":R=1:C=11
6160 GOSUB2100:R=R+2:GOSUB2100
6170 Z$=" "+X$+" "
6180 R=R-1:GOSUB2100
6190 C=C+4:Z$=STR$(CN)+N$:GOSUB2100
6220 RP=1:CP=1
6490 GOSUB6500:RETURN
6499 REM*****
6500 REM* DISPLAY BYTES *
6501 REM*****
6540 C=C0+CL+2:FOR R=R0+1 TO R0+8
6560 Z$=STR$(PEEK(MP+R-RO))+ " "
6580 GOSUB2100:NEXT:RETURN
6999 REM*****
7000 REM* PLACE A CHAR *
7001 REM*****
7020 Z$=X$:C=C+OF:GOSUB2100:RETURN
60999 REM*****
61000 REM* RELOCATE CHARGEN *
61001 REM*****
61100 CGEN=53248:NCGEN=14336
61120 ITRPT=56334:IOPT=1:PO=53272
61125 RETURN
61150 POKE IT,PEEK(IT)AND254
61200 POKE IO,PEEK(IO)AND251
61250 FOR J=0 TO 2047
61300 POKE (NCGEN+J),PEEK(CGEN+J)
61350 NEXT J
61400 POKEIO,PEEK(IO)OR4
61450 POKE IT,PEEK(IT)OR1
61500 POKE PO,(PEEK(PO)AND240)OR14
61990 RETURN

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