Alcuni modi di fare... MENU

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Pulldown 128

La routine Pulldown 128 apre a questa macchina una porta verso i programmi professionali e spettacolari.

Infatti da adesso potremo gestire comodamente menu a discesa sullo schermo a 40 colonne.

Il programma

5 dimensiona matrici necessarie
30 legge dati sprite
42-45 legge le scrite dei menu (ˆ=> cambio menu)
10000-10090 muove freccia (joy porta 2)
10100 bottone premuto
10210 e segg.: trovato menu. apre finestra. movimento freccia nella finestra. selezione opzione o ritorno.
30000 utilizzo menu selezionato.

Le linee data da 20020 a 20050: contengono gli indirizzi di inizio e fine (in caratteri) dei nomi dei menu sulla prima linea dello schermo.

Pulldown HR

Il programma Pulldown HR è molto simile a Pulldown 128, e si differenzia da quest'ultimo perché crea menu a discesa sulla bit map (schermo grafico 320x200) del 128!!!

Sbizzarriamoci con la grafica!!!

Il funzionamento del programma è molto simile a quello del Pulldown 128 e anche l'utilizzo è il medesimo.

Bisogna però fare attenzione al fatto che qui i dati sulla posizione dei nomi dei menu è espresso in PIXEL e non in caratteri (righe 20020-20050).

È disponibile, presso la redazione, il disco con i programmi pubblicati in questa rubrica. Le istruzioni per l'acquisto e l'elenco degli altri programmi disponibili sono a pag. 249.

Nota

I codici di controllo nei listati sono riportati in forma «esplicita», in conseguenza dell'impiego della stampante Star NL-10 e relativa interfaccia per Commodore. Ovviamente, nella digitazione del programma è necessario usare i consueti tasti che corrispondono alle indicazioni fra parentesi: ad esempio cursore destro per (RGHT), CTRL-3 per (RED) eccetera.

(CLR) =		(YEL) =	
(HOME) =		(RVS) =	
(DOWN) =		(OFF) =	
(UP) =		(ORNG) =	
(RGHT) =		(BRN) =	
(LEFT) =		(LRED) =	
(BLK) =		(GRY1) =	
(WHT) =		(GRY2) =	
(RED) =		(LGRN) =	
(CYN) =		(LBLU) =	
(PUR) =		(GRY3) =	
(GRN) =		(SWLC) =	
(BLU) =			

Pulldown 128 — 1

```
0 FAST
1 COLOR0,1:COLOR4,1:PRINT"(LGRN)"
5 CLR:RESTORE:DIM PX%(10),LX%(10),NS%(10),SC$(10,20):COLOR1,8:DIM SS$(30)
10 GRAPHIC0,1:WINDOW0,0,39,24,1
20 FORI=1TO8:SPRITEI,0:NEXT:PRINT:PRINT
30 RESTORE10160:FORI=0TO62:READQ:S$=S$+CHR$(Q):NEXT:SPRSAVS$,1:FR$(1)=S$
35 RESTORE10180:S$="":FORI=0TO62:READQ:S$=S$+CHR$(Q):NEXT:FR$(2)=S$:H=1
40 MOVSPR1,160,100:SPRITE1,1,2,0,0,0:
42 X=160:Y=100:RESTORE20000:DO:READA$:IFA$="***"THENEXIT
43 IF A$="↑"THENH=H+1:K=0:GOTO45
44 K=K+1:SC$(H,K)=A$:NS%(H)=K
45 LOOP:D=1:READ IN$:CHAR1,0,0,IN$,1:SLOW
46 PRINT"(HOME)(DOWN)(DOWN)(DOWN)            CIAO A TUTTI"
47 H=0:DO: READQ:IFQ=-1THENEXIT
48 H=H+1:PX%(H)=Q:READ Q:LX%(H)=Q:LOOP
50 GOTO10000
100 REM ************************
110 REM *                      *
120 REM *  FINESTRE A DISCESA  *
130 REM *                      *
140 REM *       PER C-128      *
150 REM *                      *
170 REM *           DI         *
180 REM *                      *
190 REM *                      *
200 REM *   MAURIZIO GIUNTI    *
210 REM *  -----------------   *
220 REM *                      *
230 REM *   TEL. 055/714251    *
240 REM *                      *
250 REM ************************
10000 V=JOY(2):
10010 IF V=1ORV=8ORV=2THENY=Y-2:IFY<48THENY=48
10020 IF V=5ORV=6ORV=4THENY=Y+2:IFY>240THENY=240
10030 IF V=2ORV=3ORV=4THENX=X+2:D=2:IFX>332THENX=332
10040 IF V=8ORV=7ORV=6THENX=X-2:D=1:IFX<20THENX=20
10050 SX=X-17:SY=Y-43:IF W=0THEN10070
10060 IFSX<LX%(W)*8 ORSX>(LX%(W)*8+64)ORSY<9ORSY>(WG+2) THENGOSUB10400
10070 IFV=>128THENGOSUB10100
10080 SPRSAVFR$(D),1:IFMN>0THENGOSUB  30000:MN=0
10090 MOVSPR1,X,Y:GOTO10000
10100 PRINT"($7)";
10110 IF Y<53THEN10210
10120 IF W>0THEN10420
10130 REM SPAZIO PER AGGIUNTE
10140 REM (ES. MENU A ICONE)
10150 RETURN
10160 DATA0,0,0,0,0,0,0,0,0,0,0,0
10170 DATA3,192,0,3,128,0,3,192,0,2,224,0,0,112,0,0,56,0,0,16,0,0,0,0,0,0,0,0,0,
```

```
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
10180 DATA0,0,0,0,0,0,0,0,0,0,0,30
10190 DATA0,0,14,0,0,30,0,0,58,0,0,112,0,0,224,0,0,64, 0, 0, 0, 0, 0, 0
10200 DATA 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
10210 IF W>0THENRETURN
10220 W=0:FORI=1TO10:IFSX<(PX%(I)*8)AND(SX>(PX%(I-1)*8))THENW=I
10230 NEXT:WG=NS%(W)*8+16:IFW=0THENRETURN
10240 REM
10250 FORI=1TONS%(W)+1:A$="":LC=40*I+LX%(W):FORT=0TO8:A$=A$+CHR$(PEEK(1024+LC+T)
):NEXT:SS$(I)=A$:NEXT
10260 GOSUB10290:Y=Y+8
10270 REM
10280 RETURN
10290 REM DISEGNA W
10300 GOSUB10340
10310 FORI=1TONS%(W)
10320 CHAR1,(LX%(W))+1,I,SC$(W,I)
10330 NEXT:RETURN
10340 LX=INT(LX%(W)):AA$="|         |"
10350 FORI=1TO(NS%(W))
10360 CHAR1,LX,I,AA$
10370 NEXT
10380 AA$="L_________J":CHAR1,LX,I,AA$
10390 RETURN
10400 FORI=1TONS%(W)+1:LC=I*40+LX%(W):FORT=1TO9:A=ASC(MID$(SS$(I),T,1)):POKE(102
4+LC+T-1),A:NEXT:NEXT:W=0
10410 RETURN
10420 NN=INT((SY-3)/8)
10430 IF NN>NS%(W)THENRETURN
10440 A$=SC$(W,NN):MN=W:GOTO10400
20000 DATA M1A,M1B,M1C,↑,M2A,M2B,↑,M3A,M3B,M3C,M3E,M3F,***
20010 DATA " MENU1 MENU2 MENU3                  "
20020 DATA 6,0
20030 DATA 12,6
20040 DATA 18,12
20050 DATA -1
30000 W$="SCELTO MENU"+STR$(MN)
30010 CHAR1,5,10,W$
30020 W$="FUNZIONE "+STR$(NN)
30030 CHAR1,5,11,W$
30040 W$="SCRITTA="+A$
30050 CHAR1,5,12,W$:RETURN
```

Pulldown HR

```
0 FAST
1 COLOR0,1:COLOR4,1:PRINT"(LGRN)"
5 CLR:RESTORE:DIM PX%(10),LX%(10),NS%(10),SC$(10,20):COLOR1,8:DIM SS$(20)
10 GRAPHIC0,1:WINDOW0,0,39,24,1
20 FORI=1TO8:SPRITEI,0:NEXT:PRINT:PRINT
30 RESTORE10160:FORI=0TO62:READQ:S$=S$+CHR$(Q):NEXT:SPRSAVS$,1:FR$(1)=S$
35 RESTORE10180:S$="":FORI=0TO62:READQ:S$=S$+CHR$(Q):NEXT:FR$(2)=S$:H=1
40 MOVSPR1,160,100:SPRITE1,1,2,0,0,0:
42 X=160:Y=100:RESTORE20000:DO:READA$:IFA$="***"THENEXIT
43 IF A$="↑"THENH=H+1:K=0:GOTO45
44 K=K+1:SC$(H,K)=A$:NS%(H)=K
45 LOOP:D=1:READ IN$:GRAPHIC1,1:CHAR1,0,0,IN$,1:SLOW
46 CIRCLE1,100,100,100,80:CIRCLE1,100,100,50,90
47 H=0:DO: READQ:IFQ=-1THENEXIT
48 H=H+1:PX%(H)=Q:READ Q:LX%(H)=Q:LOOP
50 GOTO10000
100 REM ***********************
110 REM *                     *
120 REM *  FINESTRE A DISCESA *
130 REM *                     *
140 REM *      PER C-128      *
150 REM *                     *
170 REM *         DI          *
180 REM *                     *
190 REM *                     *
200 REM *   MAURIZIO GIUNTI   *
210 REM *  -----------------  *
220 REM *                     *
230 REM *   TEL. 055/714251   *
240 REM *                     *
250 REM ***********************
```

2

3

```
10000 V=JOY(2):
10010 IF V=1ORV=8ORV=2THENY=Y-2:IFY<48THENY=48
10020 IF V=5ORV=6ORV=4THENY=Y+2:IFY>240THENY=240
10030 IF V=2ORV=3ORV=4THENX=X+2:D=2:IFX>332THENX=332
10040 IF V=8ORV=7ORV=6THENX=X-2:D=1:IFX<20THENX=20
10050 SX=X-17:SY=Y-43:IF W=0THEN10070
10060 IFSX<LX%(W)ORSX>(LX%(W)+64)ORSY<9ORSY>(WG+2) THENGOSUB10400
10070 IFV=>128THENGOSUB10100
10080 SPRSAVFR$(D),1:IFMN>0THENGOSUB  30000:MN=0
10090 MOVSPR1,X,Y:GOTO10000
10100 PRINT"($7)"
10110 IF Y<53THEN10210
10120 IF W>0THEN10420
10130 REM SPAZIO PER AGGIUNTE
10140 REM (ES. MENU A ICONE)
10150 RETURN
10160 DATA0,0,0,0,0,0,0,0,0,0,0,0
10170 DATA3,192,0,3,128,0,3,192,0,2,224,0,0,112,0,0,56,0,0,16,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
10180 DATA0,0,0,0,0,0,0,0,0,0,0,30
10190 DATA0,0,14,0,0,30,0,0,58,0,0,112,0,0,224,0,0,64, 0, 0, 0, 0, 0, 0
10200 DATA 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
10210 IF W>0THENRETURN
10220 W=0:FORI=1TO10:IF(SX<PX%(I))AND(SX>(PX%(I-1)))THENW=I
10230 NEXT:WG=NS%(W)*8+16:IFW=0THENRETURN
10240 NR=(INT(NS%(W)*8)/16):IFNR=0THENNR=1
10250 FORI=0TONR:SSHAPE SS$(I),LX%(W),8+16*I,LX%(W)+64,8+16*(I+1):NEXT
10260 GOSUB10290:Y=Y+8
10270 REM
10280 RETURN
10290 REM DISEGNA W
10300 GOSUB10340
10310 FORI=1TONS%(W)
10320 CHAR1,(LX%(W)/8)+1,I,SC$(W,I)
10330 NEXT:RETURN
10340 LX=INT(LX%(W)/8):AA$="|         |"
10350 FORI=1TO(NS%(W))
10360 CHAR1,LX,I,AA$
10370 NEXT
10380 AA$="L_________J":CHAR1,LX,I,AA$
10390 RETURN
10400 FORI=0TONR:GSHAPE SS$(I),LX%(W),8+16*I:NEXT:W=0
10410 RETURN
10420 NN=INT((SY-3)/8)
10430 IF NN>NS%(W)THENRETURN
10440 A$=SC$(W,NN):MN=W:GOTO10400
20000 DATA M1A,M1B,M1C,↑,M2A,M2B,↑,M3A,M3B,M3C,M3E,M3F,***
20010 DATA " MENU1 MENU2 MENU3                  "
20020 DATA 48,0
20030 DATA 96,48
20040 DATA 144,96
20050 DATA -1
30000 W$="SCELTO MENU"+STR$(MN)
30010 CHAR1,5,10,W$
30020 W$="FUNZIONE "+STR$(NN)
30030 CHAR1,5,11,W$
30040 W$="SCRITTA="+A$
30050 CHAR1,5,12,W$:RETURN
```

Menu a frasi

Menu a frasi è una routine che sarà molto utile a tutti coloro che hanno bisogno di menu interattivi e diversi dalla norma.

Infatti con questa routine potremo selezionare una qualsiasi scritta del video con una freccia comandata dal caro vecchio JOYSTICK (in porta 2).

Il programma

Le linee da 0 a 190 servono a preparare la routine ed a settare una videata di prova.

In particolare:

140 ➔ carica sprite freccia in fr$(x)

170 ➔ scrive alcune parole casuali.

La routine vera e propria inizia alla linea numero 10000:

10000 – 10190 ➔ legge la frase sotto la freccia (solo chars dalla A alla Z!!!)

10200 ➔ uscita dal menu, in a$ c'è la scritta che abbiamo 'clickato'.

Il Drawer

Questo è solo un esempio di come si possono utilizzare le routine di menu Pulldown in alta risoluzione.

Certamente non è un programma dedicato direttamente all'end user, ma piuttosto vorrebbe rappresentare un punto di partenza sfruttabile da volenterosi per raggiungere risultati di qualità.

Il Basic lo rende molto lento (una compilatina non guasterebbe) e per questo ho inserito la possibilità di regolare la velocità della freccia, da uno a nove pixel (premendo i tasti numerici corrispondenti).

All'inizio il programma necessita di circa un minuto per caricare i vettori contenenti i dati del font per le operazioni CHAR1 e CHAR2 (scrive char in doppia grandezza).

Il funzionamento del programma, una volta capito il funzionamento della routine per il Pulldown, è estremamente chiaro: in a$ ci sono i comandi che vengono eseguiti tramite subroutine chiamate con IF A$ = «comando» then xxx.

Niente di complicato dunque per chi conosce un minimo di Basic. MC

Menu a frasi

```
10 REM ********************
20 REM *                  *
30 REM *   MENU A FRASI   *
40 REM *   PER JOYSTICK   *
50 REM *                  *
60 REM * MAURIZIO GIUNTI  *
70 REM *                  *
80 REM *      (1987)      *
90 REM ********************
100 COLOR0.1:COLOR4.1:PRINT"(LGRN)"
110 CLR:RESTORE
120 GRAPHIC0.1:WINDOW0.0.39.24.1
130 FORI=1TO8:SPRITEI.0:NEXT:PRINT:PRINT
140 RESTORE10220:FORI=0TO62:READQ:S$=S$+CHR$(Q):NEXT:SPRSAVS$.1:FR$(1)=S$
150 RESTORE10240:S$="":FORI=0TO62:READQ:S$=S$+CHR$(Q):NEXT:FR$(2)=S$
160 MOVSPR1.160.160:SPRITE1.1.2.0.0.0
170 X=160:Y=160:RESTORE30000:DO:READA$:PRINT:IFA$="***"THENEXIT
180 PRINTA$:LOOP:D=1:PRINT"(HOME)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN)(DOWN
)(DOWN)(DOWN)(DOWN)MAURIZIO"
190 REM MAURIZO GIUNTI TEL. 055/714251
10000 V=JOY(2):
10010 IF V=1ORV=8ORV=2THENY=Y-2:IFY<48THENY=48
10020 IF V=5ORV=6ORV=4THENY=Y+2:IFY>240THENY=240
10030 IF V=2ORV=3ORV=4THENX=X+2:D=2:IFX>332THENX=332
10040 IF V=8ORV=7ORV=6THENX=X-2:D=1:IFX<20THENX=20
10050 IFV->128THENGOSUB10080
10060 SPRSAVFR$(D).1
10070 MOVSPR1.X.Y:GOTO10000
10080 LC=INT((X-18)/8)+INT((Y-45)/8)*40
10090 CH=PEEK(1024+LC)
10100 IF CH>31THENRETURN
10110 CA=CH+64:A$="":A$=CHR$(CA):H=0
10120 DO:H=H+1:IFPEEK(1024+LC+H)>31THENEXIT
10130 IF1024+LC+H>2023THENEXIT
10140 A$=A$+CHR$(PEEK(1024+LC+H)+64)
10150 LOOP
10160 H=0:DO:H=H-1:IFPEEK(1024+LC+H)>31THENEXIT
10170 IF1024+LC+H<1024THENEXIT
10180 A$=CHR$(PEEK(1024+LC+H)+64)+A$
10190 LOOP
10200 PRINT"(HOME)":A$;"                    ":REM QUI VIENE UTILIZZATO
10210 RETURN
10220 DATA0.0.0.0.0.0.0.0.0.0.0.0
10230 DATA3.192.0.3.128.0.3.192.0.2.224.0.0.112.0.0.56.0.0.16.0.0.0.0.0.0.0.0.0.
0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0
10240 DATA0.0.0.0.0.0.0.0.0.0.0.0.0.30
10250 DATA0.0.14.0.0.30.0.0.58.0.0.112.0.0.224.0.0.64. 0. 0. 0. 0. 0. 0
10260 DATA 0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0
30000 DATA UNO.DUE.TRE QUATTRO CINQUE.CIAO SALVE TELEFONO.FINE.***
```

Drawer

```
100 FAST
110 COLOR0.1:COLOR4.1:PRINT"(LGRN)"
120 CLR:RESTORE:DIM PX%(10).LX%(10).NS%(10).SC$(10.20):COLOR1.8:DIM SS$(20).CH%(
128.8)
130 GRAPHIC0.1:WINDOW0.0.39.24.1
140 FORI=1TO8:SPRITEI.0:NEXT:PRINT:PRINT
150 RESTORE720:FORI=0TO62:READQ:S$=S$+CHR$(Q):NEXT:SPRSAVS$.1:FR$(1)=S$
160 RESTORE740:S$="":FORI=0TO62:READQ:S$=S$+CHR$(Q):NEXT:FR$(2)=S$:H=1
170 MOVSPR1.160.100:SPRITE1.1.2.0.0.0:GOSUB1200
180 X=160:Y=100:RESTORE1370:DO:READA$:IFA$="***"THENEXIT
190 IF A$="!"THENH=H+1:X=0:GOTO210
200 K=K+1:SC$(H.K)=A$:NS%(H)=K
210 LOOP:D=1:READ IN$:GRAPHIC1.1:CHAR1.0.0.IN$.1:SLOW:OK$="":RESTORE770:FORI=0TO
62:READQ:OK$=OK$+CHR$(Q):NEXT
220 RESTORE1390
230 H=0:DO: READQ:IFQ=-1THENEXIT
240 H=H+1:PX%(H)=Q:READ Q:LX%(H)=Q:LOOP
250 FF=1:FS=0:VV=1
260 REM ******************************
270 REM *                            *
280 REM * DRAWER HR MONOCROME        *
290 REM *                            *
300 REM *        PER C-128           *
310 REM *                            *
320 REM *              DI            *
330 REM *                            *
340 REM *                            *
350 REM *   MAURIZIO GIUNTI          *
360 REM *   ________________         *
370 REM *                            *
380 REM *   TEL. 055/714251          *
390 REM *                            *
400 REM ******************************
410 A$=SC$(1.FF)+" "
420 CHAR1.31.0.A$.1
430 V=JOY(2):IFV>127THENV=V-128:FR=1:ELSEFR=0
440 GETA$:A=VAL(A$):IF A<>0THEN VV=A
450 IFA$="(HOME)"THENY=50
460 IFA$=CHR$(20)THENFS=0:FORI=2TO8:SPRITEI.0:NEXT
470 IF FF=4ANDFS=2THEN500
480 IF V=1ORV=8ORV=2THENY=Y-VV:IFY<47THENY=47
490 IF V=5ORV=6ORV=4THENY=Y+VV:IFY>245THENY=245
500 IF FF=4ANDFS=3THEN530
510 IF V=2ORV=3ORV=4THENX=X+VV:D=2:IFX>336THENX=336
520 IF V=8ORV=7ORV=6THENX=X-VV:D=1:IFX<17THENX=17
530 REM
540 SX=X-17:SY=Y-46:IF W=0THEN560
550 IFSX<LX%(W)ORSX>(LX%(W)+64)ORSY<80RSY>(WG) THENGOSUB1000
560 IFFR=1THENGOSUB590
570 SPRSAVFR$(D).1:IFMW>0THENGOSUB  1430:MW=0
580 MOVSPR1.X.Y:GOTO430
590 REM SMISTA
600 IFSY<8THEN810
610 IF W>0THEN1020
```

```
620 IF FF=1THEN DRAW1,SX,SY
630 IF FF=3THEN PAINT 1,SX,SY
640 IF FF=8THEN DRAW0,SX,SY
650 IF FF=2THEN1630
660 IF FF=4THEN1660
670 IF FF=5THEN1720
680 IF FF=6THEN1750
690 REM (ES. MENU A ICONE)
700 IF FF=7THEN1820
710 RETURN
720 DATA0,0,0,0,0,0,0,0,0,0,0,0
730 DATA3,192,0,3,128,0,3,192,0,2,224,0,0,112,0,0,56,0,0,16,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
740 DATA0,0,0,0,0,0,0,0,0,0,0,0,30
750 DATA0,0,14,0,0,30,0,0,58,0,0,112,0,0,224,0,0,64, 0, 0, 0, 0, 0, 0
760 DATA 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
770 DATA 0,0,0,0,0,0,0,0,0,0,0,0,0,0
780 DATA 255,255,255,127,255,254,184
790 DATA27,189,219,219,187,219,219,123,219,219,123,219,218,251,219,216,251,219,2
18,251,219,219,123,219,219,123,219,219,187,184,27,189,127,255,254,255,255,255
800 DATA 0,0,0
810 IF W>0THENRETURN
820 W=0:FORI=1TO10:IF(SX<PX%(I))AND(SX>(LX%(I)))THENW=I
830 NEXT:WG=NS%(W)*8+16:IFW=0THENRETURN
840 NR=(INT(NS%(W)*8)/16):IFNR=0THENNR=1
850 FORI=0TONR:SSHAPE SS$(I),LX%(W),8+16*I,LX%(W)+64,8+16*(I+1):NEXT
860 GOSUB890:Y=Y+8
870 REM
880 RETURN
890 REM DISEGNA W
900 GOSUB940
910 FORI=1TONS%(W)
920 CHAR1,(LX%(W)/8)+1,I,SC$(W,I)
930 NEXT:RETURN
940 LX=INT(LX%(W)/8):AA$="│        │"
950 FORI=1TO(NS%(W))
960 CHAR1,LX,I,AA$
970 NEXT
980 AA$="└────────┘":CHAR1,LX,I,AA$
990 RETURN
1000 FORI=0TONR:GSHAPE SS$(I),LX%(W),8+16*I:NEXT:W=0
1010 RETURN
1020 NN=INT((SY)/8)
1030 IF NN>NS%(W)THENRETURN
1040 A$=SC$(W,NN):MN=W:GOTO1000
1050 REM WINDOW
1060 FORI=0TO8:SS$(I)="":SSHAPESS$(I),80,56+(I*8),264,56+(I+1)*8:NEXT
1070 A$="┌":FORI=1TO20:A$=A$+"─":NEXT:A$=A$+"┐":CHAR1,10,7,A$
1080 A$="│ ":FORI=1TO20:A$=A$+" ":NEXT:A$=A$+" │ ":FORI=1TO6:CHAR1,10,7+I,A$:NEXT:
  LL=I
1090 A$="└":FORI=1TO20:A$=A$+"─":NEXT:A$=A$+"┘ ":CHAR1,10,LL+7,A$
1100 A$="":FORI=1TO20:A$=A$+" ":NEXT:A$=A$+"  ":CHAR1,11,LL+7+1,A$
1110 RETURN
1120 FORI=0TO8:GSHAPESS$(I),80,56+(I*8):NEXT
1130 RETURN
1140 REM CONVERTER
1150 REM Q=NUMERO B$ BD$ RISPOSTA
1160 B$="":BD$="":FORI=0TO7:QQ=2↑I
1170 IF(Q AND QQ)>0 THENB$= "1"+B$:BD$="11"+BD$:GOTO1190
1180 B$="0"+B$:BD$="00"+BD$
1190 NEXT:RETURN
1200 REM FONT NORMAL
1210 BANK 14
1220 FORC=0TO128:FORT=0TO7
1230 CH%(C,T)=PEEK(53248+C*8+T)
1240 COLOR4,(CH%(C,T)AND15)+1
1250 NEXTT:NEXTC:BANK15:COLOR4,1
1260 RETURN
1270 IFSX<0THENSX=SX+CF:X=X+CF:
1280 IFSX>319THENSX=SX-CF:X=X-CF:
1290 MOVSPR1,X,Y:GETKEYA$:IFA$=CHR$(20)THENSX=SX-CF:X=X-CF:IFSX<0THENSX=SX+CF:X=
X+CF:
1300 IFA$=CHR$(29)THENSX=SX+CF:X=X+CF:IFSX>320THENSX=SX-CF:X=X-CF:
1310 PRINT"($7)";
1320 MOVSPR1,X,Y:IFA$=CHR$(20)THEN1270
1330 WINDOW0,0,39,24,1:PRINT"(CLR)";A$:IFA$=CHR$(13)THENRETURN
1340 CC=PEEK(1024):IFCC>64THEN1270
1350 IF CC=32ANDA$<>" "THEN1270
1360 RETURN
1370 DATA DRAW,LINE,PAINT,CIRCLE,BOX,CHAR,CHAR2,DELETE,↑,DCLEAR,COLL,DIR,LOAD,SA
VE,STATUS,↑,CLEAR,BASIC,***
1380 DATA " COMM. DISK SPECIAL        --->"
1390 DATA 48,8
1400 DATA 88,56
1410 DATA 152,96
1420 DATA -1
1430 PRINT"($7)";
```



```
1440 IFA$="DCLEAR"THENDCLEAR:MN=0:GOTO430
1450 IFA$="COLL"THENCOLLECT:MN=0:GOTO430
1460 IFA$="STATUS"THENGOSUB1050:CHAR1,12,9,"DISK STATUS:":CHAR1,12,11,DS$:GOSUB1
900:GOSUB1120:MN=0:GOTO430
1470 IFA$="DIR"THENWINDOW7,5,33,20,1:GRAPHIC0:SPRITE1,0:DIRECTORY"←*":PRINT:GETK
EYA$:GRAPHIC1:SPRITE1,1,2:MN=0:GOTO430
1480 IF MN=1THEN1610
1490 IF A$="SAVE"THEN GOSUB3000:MN=0:GOTO410
1500 IF A$="LOAD"THEN GOSUB4000:MN=0:GOTO410
1510 IF A$="CLEAR"THEN RUN
1520 IF A$="BASIC"THEN GRAPHIC0:END
1530 REM
1540 REM
1550 REM
1560 REM
1570 REM
1580 W$="COMANDO NON ANCORA OPERATIVO"
1590 CHAR1,3,12,W$:MN=0:RETURN
1600 RETURN
1610 MN=0:FS=0:FORI=2TO8:SPRITEI,0:NEXT
1620 FF=NN:GOTO410
1630 IFFS=2THEN1650
1640 X(1)=SX:Y(1)=SY:SPRSAV FR$(D),2:MOVSPR2,X,Y:SPRITE2,1,2,0,0,0:PRINT"($7)":F
S=2:RETURN
1650 SPRITE2,0:DRAW1,X(1),Y(1) TOSX,SY:FS=0:PRINT"($7)":RETURN
1660 IFFS=2THEN1690
1670 IFFS=3THEN1700
1680 X(1)=SX:Y(1)=SY:SPRSAV FR$(D),2:MOVSPR2,X,Y:SPRITE2,1,2,0,0,0:PRINT"($7)":F
S=2:XX=X:YY=Y:RETURN
1690 X(2)=ABS(X(1)-SX):SPRSAV FR$(D),3:MOVSPR3,X,Y:SPRITE3,1,2,0,0,0:FS=3:X=XX:Y
=YY:PRINT"($7)";:RETURN
1700 X(3)=ABS(Y(1)-SY):
1710 SPRITE2,0:SPRITE3,0:CIRCLE1,X(1),Y(1),X(2),X(3):FS=0:PRINT"($7)":RETURN
1720 IFFS=2THEN1740
1730 X(1)=SX:Y(1)=SY:SPRSAV FR$(D),2:MOVSPR2,X,Y:SPRITE2,1,2,0,0,0:PRINT"($7)":F
S=2:RETURN
1740 SPRITE2,0:BOX 1,X(1),Y(1),SX,SY:FS=0:PRINT"($7)":RETURN
1750 PRINT"($7)":REM CHAR
1760 SPRSAV FR$(2),1
1770 CF=8: GOSUB1270
1780 IF A$=CHR$(13)THEN410
1790 FORYY=1TO8:Q=CH%(CC,YY-1):GOSUB1140:FORXX=1TO8:CQ=VAL(MID$(B$,XX,1)):
1800 DRAWCQ,SX+XX-1,SY+YY-1
1810 NEXT:NEXT:SX=SX+8:X=X+8:MOVSPR1,X,Y:GOTO1770
1820 PRINT"($7)";:  REM CHAR2
1830 SPRSAV FR$(2),1
1840 CF=16:GOSUB1270
1850 IF A$=CHR$(13)THEN410
1860 FORYY=1TO8:Q=CH%(CC,YY-1):GOSUB1140:FORXX=1TO16:CQ=VAL(MID$(BD$,XX,1)):
1870 DRAWCQ,SX+XX-1,SY+(YY-1)*2
1880 DRAWCQ,SX+XX-1,SY+(YY-1)*2+1
1890 NEXT:NEXT:SX=SX+16:X=X+16:MOVSPR1,X,Y:GOTO1840
1900 SPRSAV OK$,8:MOVSPR8,250,140:SPRITE8,1,8,0,0,0
1910 T=0:V=JOY(2):IFV>127THENV=V-128:FR=1:ELSEFR=0
1920 IF V=1ORV=8ORV=2THENY=Y-5:IFY<47THENY=47
1930 IF V=5ORV=6ORV=4THENY=Y+5:IFY>245THENY=245
1940 IF V=2ORV=3ORV=4THENX=X+5:D=2:IFX>336THENX=336
1950 IF V=8ORV=7ORV=6THENX=X-5:D=1:IFX<17THENX=17
1960 SX=X-17:SY=Y-46
1970 IFFR=1THENGOSUB2010:IFT=1THENRETURN
1980 SPRSAVFR$(D),1:
1990 FORT=0TOLO*20:NEXTT
2000 MOVSPR1,X,Y:GOTO1900
2010 A=BUMP(1):IFA<>129THENRETURN
2020 SPRITE8,0:T=1:RETURN
3000 GRAPHIC2,0,20:FORI=1TO8:SPRITEI,0:NEXT:WINDOW 0,20,39,24,1
3010 PRINT"  SALVA DISEGNO SU DISCO."
3020 PRINT:INPUT"FILENAME ";FF$
3030 IF FF$=""THEN3070
3040 FI$="←"+FF$
3050 CHAR1,0,0,"                                        ":GRAPHIC1,0
3060 BSAVE""+FI$,B0,P7168 TO P16384
3070 GRAPHIC1,0:SPRITE1,1:CHAR1,0,0,IN$,1:RETURN
4000 GRAPHIC2,0,20:FORI=1TO8:SPRITEI,0:NEXT:WINDOW 0,20,39,24,1
4010 PRINT"  LOAD DISEGNO DA DISCO."
4020 PRINT:INPUT"FILENAME ";FF$
4030 IF FF$=""THEN3070
4040 FI$="←"+FF$
4050 CHAR1,0,0,"                                        ":GRAPHIC1,0
4060 BLOAD""+FI$,B0,P7168
4070 GRAPHIC1,0:SPRITE1,1:CHAR1,0,0,IN$,1:RETURN
5000 FF=1:GRAPHIC1,0:MN=0:CHAR1,0,0,IN$,1:GOTO410
```