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1000 ' SeArt
1010 ' by Robert Buckley
1020 ' The Astrad User, May 1988
1030
1040 BORDER 2:INK 0,26:INK 1,8:INK 2,24:INK 3,2:MODE 1:PEN
1
1050 PLOT 0,0,1:DEB:ke=0:pe=1:1(3)=2:1(8)=26:1(1)=0
1060 : (2)=24:PRINT CHR$(23):CHR$(8):ENV 1,15,-1,8:
1070 routine=0:DIM co(8,8)
1080 FOR f=0 TO 7:FOR g=0 TO 7:co(f,g)=1:NEXT:NEXT
1090 PAPER 3:CLS:WINDOW#1,2,32,2,21:PAPER#1,0:CLS#1
1100 FOR f=0 TO 6 STEP 2:PLOT 10+f,56+f:DRAW 510-f,56+f:
1110 DRAW 510-f,56+f:DRAW 10+f,56+f:NEXT
1120 PEN 0:PRINT CHR$(22):CHR$(11):
1130 PRINT " Save Load Quit Clear"
1140 PRINT CHR$(22):CHR$(8):PEN 1
1150 PAPER#1,0:WINDOW#1,35,36,3,8:CLS#1:WINDOW#2,35,38,10,
1160 PAPER#2,1:CLS#2:WINDOW#2,36,37,11,12:PAPER#2,0:CLS#2

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1170 SYMBOL AFTER 126:SYMBOL 126,0,8,46,56,22,21,8,8
1180 SYMBOL 127,6,2,1:SYMBOL 128,0,0,0,0,0,0,128,64
1190 SYMBOL 129,96,48,16,136,212,188,24
1200 SYMBOL 130,0,0,0,31,16,16,16,16
1210 SYMBOL 131,16,16,16,16,16,31
1220 SYMBOL 132,0,0,0,252,4,4,4,4:SYMBOL 133,4,4,4,4,4,252
1230 SYMBOL 134,0,0,0,0,0,0,31
1240 SYMBOL 135,23,23,19,17,17,16,56
1250 SYMBOL 136,0,0,16,32,32,16,0,246
1260 SYMBOL 137,252,254,255,254,252,248,96
1270 SYMBOL 138,0,7,0,16,32,32,64,64
1280 SYMBOL 139,64,64,64,32,32,16,14,1
1290 SYMBOL 140,0,224,24,4,2,2,1,1
1300 SYMBOL 141,1,1,2,2,4,8,24,192
1310 PRINT#1,CHR$(126):CHR$(128):CHR$(130):CHR$(132):
1320 PRINT#1,CHR$(127):CHR$(129):CHR$(131):CHR$(133):
1330 PRINT#1,CHR$(134):CHR$(136):CHR$(138):CHR$(140):
1340 PRINT#1,CHR$(135):CHR$(137):CHR$(139):CHR$(141):
1350 FOR f=0 TO 3:FOR g=0 TO 3:PLOT 596+g,286+f,1:NEXT:NEXT
T
1360 FOR f=0 TO 7:FOR g=0 TO 7:PLOT 556+g,284+f,1:NEXT:NEXT
T
1370 SYMBOL 288,34,119,255,119,34,119,255,119
1380 SYMBOL 289,255,255,255,255,255,255,255:u=288
1390 SYMBOL 284,136,68,34,17,136,68,34,17
1400 SYMBOL 285,17,34,68,136,17,34,68,136
1410 SYMBOL 289,68,17,68,17,68,17,68,17
1420 SYMBOL 210,187,238,187,238,187,238,187,238
1430 SYMBOL 211,34,34,34,265,136,136,136,265
1440 FOR f=1 TO 18:WINDOW#3,f#2,f#2-1,23,24:PAPER#3,0:CLS#
3
1450 PRINT#3,CHR$(f+199):CHR$(f+199):CHR$(f+199):CHR$(f+19
9):
1460 NEXT
1470 FOR f=0 TO 680 STEP 32:PLOT f+14,16:DRAW# 0,32:NEXT
1480 PLOT 14,14:DRAW# 576,0:PLOT 14,48:DRAW# 576,0
1490 FOR f=0 TO 3:LOCATE f+35,16:PAPER f:PRINT "":
1500 LOCATE f+35,15:PRINT "":NEXT:PAPER 0
1510 FOR f=0 TO 4:PLOT 542+(f*16),144:DRAW# 0,32:NEXT
1520 FOR f=0 TO 2:PLOT 542,144+(f*16):DRAW# 64,0:NEXT
1530 WINDOW#3,35,38,18,21:PAPER#3,1:CLS#3:WINDOW#3,36,37,1
9,20
1540 PAPER#3,pe:PEN#3,pe:CLS#3

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1560 PRINT#3,CHR$(u);CHR$(u);CHR$(u);CHR$(u);
1560 FOR f=0 TO 64 STEP 32:PLOT 544+f,270:DRAW 0,96:NEXT
1570 FOR f=0 TO 96 STEP 32:PLOT 544,270+f:DRAW 64,0:NEXT
1580 a$=CHR$(126)+CHR$(128):b$=CHR$(127)+CHR$(129)
1590 x=280:y=280:x1=x:y1=y
1600 IF k=1 THEN up=0:down=2:le=8:ri=1:fi=9
1610 IF k=0 THEN up=72:down=73:le=74:ri=75:fi=76
1620 PRINT CHR$(23);CHR$(1);:TAG:PLOT 0,-2:MOVE x,y
1630 PRINT a$;MOVE x,y-16:PRINT b$;
1640 REM main bit
1650 IF INKEY (15)=0 THEN i=0:GOTO 3000
1660 IF INKEY (13)=0 THEN i=1:GOTO 3000
1670 IF INKEY (14)=0 THEN i=2:GOTO 3000
1680 IF INKEY (5)=0 THEN i=3:GOTO 3000
1690 IF INKEY (16)=0 AND (x+inx)>0 THEN inx=inx-2:GOTO 1720
1700 IF INKEY (r1)=0 AND (x+inx)<608 THEN inx=inx+2:GOTO 1720
1710 inx=0
1720 IF INKEY (up)=0 AND (y+iny)<398 THEN iny=iny+2:GOTO 1750
1730 IF INKEY (down)=0 AND (y+iny)>32 THEN iny=iny-2:GOTO 1750
1740 iny=0
1750 IF inx>16 THEN inx=16
1760 IF iny>16 THEN iny=16
1770 IF INKEY (f1)=0 THEN ROUTINE=1860
1780 IF ROUTINE=2 THEN c=0:d=0
1790 IF ROUTINE=4 AND C<0 AND D<0 THEN 2500
1800 x=x+inx:y=y+iny
1810 IF x<0 OR y<0 THEN 1830
1820 GOTO 1640
1830 PLOT 0-2,1:MOVE x1,y1:PRINT a$;MOVE x1,y1-16:PRINT b$;
1840 MOVE x,y:PRINT a$;MOVE x,y-16:PRINT b$;x1=x:y1=y
1850 GOTO 1640
1860 REM fire button pressed
1870 IF x>12 AND x<568 AND y>66 AND y<384 THEN 2570
1880 IF x>542 AND x<568 AND y>348 AND y<368 THEN 2130
1890 IF x>568 AND x<602 AND y>348 AND y<368 THEN 2250
1900 IF x>574 AND y>386 AND x<602 AND y<336 THEN 2440
1910 IF x>542 AND x<568 AND y>276 AND y<384 THEN SOUND 1,2
80,0,15,1:PO=1:GOTO 1640
1920 IF x>568 AND x<602 AND y>276 AND y<384 THEN SOUND 1,2
80,0,15,1:PO=0:GOTO 1640
1930 IF x>542 AND y>388 AND x<572 AND y<334 THEN 2360
1940 IF x>548 AND y>148 AND x<602 AND y<176 THEN 2310
1950 IF x>12 AND y>28 AND x<584 AND y<58 THEN 2170
1960 IF y>398 THEN 1980
1970 SOUND 1,100,0,15,1:GOTO 1640
1980 IF x>410 AND x<492 THEN 2030
1990 IF x>266 AND x<346 THEN END
2000 IF x>154 AND x<222 THEN 2060
2010 IF x>23 AND x<92 THEN 2090
2020 GOTO 1970

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2030 GOSUB 3030:TAGOFF:PRINT CHR$(23);CHR$(0);
2040 FOR f=10 TO 510 STEP 2:PLOT f,64,0:DRAW 0,314:NEXT
2050 PRINT CHR$(23);CHR$(1);:TAG:GOSUB 3030:GOTO 1640
2060 SOUND 1,200,0,15,1:SOUND 1,50,0,15,1:SOUND 1,200,0,15
1,1
2070 GOSUB 3030
2080 LOAD"smart.scr",M000:GOSUB 3030:GOTO 1640
2090 SOUND 1,200,0,15,1:SOUND 1,50,0,15,1:SOUND 1,200,0,15
1,1
2100 FOR f=1 TO 500:NEXT:GOSUB 3030
2110 q$=INKEY$:IF q$="" THEN 2110
2120 SAVE"smart.scr",b,5000,q$+000:GOSUB 3030:GOTO 1640
2130 GOSUB 3030:a$=CHR$(126)+CHR$(128):b$=CHR$(127)+CHR$(1
29)
2140 CLS#2:PRINT#2,a$;b$;a$;GOSUB 3030
2150 SOUND 1,200,0,15,1
2160 FOR f=1 TO 200:NEXT:ROUTINE=1:GOTO 1640
2170 REM choose hatch
2180 u=x-10:u=INT(u/32)
2190 u=u+200:WINDOW#3,35,38,18,21:PAPER#3,1:CLS#3
2200 WINDOW#3,36,37,19,20:PAPER#3,paper#3,pe:CLS#3
2210 PRINT#3,CHR$(u);CHR$(u);CHR$(u);CHR$(u);
2220 FOR f=0 TO 7:FOR g=0 TO 7:j=TEST((f+2)+568,(g+2)+98)
2230 co(f,g)=j:NEXT:NEXT
2240 GOTO 1960
2250 REM rectangle of box routine
2260 GOSUB 3030:a$=CHR$(130)+CHR$(132):b$=CHR$(131)+CHR$(1
33)
2270 CLS#2:PRINT#2,a$;b$;a$=CHR$(126)+CHR$(128)
2280 b$=CHR$(127)+CHR$(129):GOSUB 3030
2290 SOUND 1,200,0,15,1
2300 FOR f=1 TO 200:NEXT:ROUTINE=2:GOTO 1640
2310 k=x-540:k=INT(k/16)
2320 IF y>164 THEN pe=k ELSE pe=k
2330 WINDOW#3,36,37,19,20:PAPER#3,paper#3,pe:CLS#3
2340 PRINT#3,CHR$(u);CHR$(u);CHR$(u);
2350 FOR f=0 TO 7:FOR g=0 TO 7:j=TEST((f+2)+568,(g+2)+98)
2360 co(f,g)=j:NEXT:NEXT
2370 GOTO 1960
2380 REM set up fill command
2390 GOSUB 3030:a$=CHR$(134)+CHR$(136):b$=CHR$(135)+CHR$(1
37)
2400 CLS#2:PRINT#2,a$;b$;a$=CHR$(126)+CHR$(128)
2410 b$=CHR$(127)+CHR$(129):GOSUB 3030
2420 SOUND 1,200,0,15,1
2430 FOR f=1 TO 200:NEXT:ROUTINE=3:GOTO 1640
2440 REM rectangle of oblong routine
2450 GOSUB 3030:a$=CHR$(138)+CHR$(140):b$=CHR$(139)+CHR$(1
41)
2460 CLS#2:PRINT#2,a$;b$;a$=CHR$(126)+CHR$(128)
2470 b$=CHR$(127)+CHR$(129):GOSUB 3030
2480 SOUND 1,200,0,15,1
2490 FOR f=1 TO 200:NEXT:ROUTINE=4:GOTO 1640
2500 REM draw circle

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2510 PLOT c,d,pe:DRAW c1,d1:DRAW c,d1:DRAW c,d
2520 TAGOFF:PRINT CHR$(23);CHR$(8);
2530 c1=(c-x)/2;d1=(d-y)/2:PLOT c1+x+c1*SIN(8),d1+y+d1*COS
(8),1
2540 FOR f=0 TO 360 STEP 10
2550 DRAW c1+x+c1*SIN(f),d1+y+d1*COS(f):NEXT
2560 PRINT CHR$(23);CHR$(1);:TAG:c=0:d=0:GOTO 1800
2570 REM find out routine
2580 ON routine GOSUB 2600,2690,2760,2690
2590 GOTO 1800
2600 TAGOFF:PRINT CHR$(23);CHR$(8);
2610 IF inx>2 THEN inx=2 ELSE IF inx<-2 THEN inx=-2
2620 IF iny>2 THEN iny=2 ELSE IF iny<-2 THEN iny=-2
2630 IF po=0 THEN 2670
2640 PLOT x,y-2,co((x MOD 16)/2,(y MOD 16)/2)
2650 PLOT x,y,co((x MOD 16)/2,((y+2)MOD 16)/2)
2660 PLOT x+2,y,co(((x+2)MOD 16)/2,((y+2)MOD 16)/2)
2670 PLOT x+2,y-2,co(((x+2) MOD 16)/2,(y MOD 16)/2)
2680 PRINT CHR$(23);CHR$(1);:TAG:RETURN
2690 REM box bit
2700 IF c<>0 OR d<>0 THEN 2730
2710 c=x:d=y:c1=c:d1=d
2720 PLOT c,d,pe:DRAW x,d:DRAW x,y:DRAW c,y:DRAW c,d
2730 PLOT c,d,pe:DRAW c1,d:DRAW c1,d1:DRAW c,d1:DRAW c,d
2740 PLOT c,d:DRAW x,d:DRAW x,y:DRAW c,y:DRAW c,d:c1=x:d1=
y
2750 RETURN
2760 REM fill routine
2770 GOSUB 3030:TAGOFF:PRINT CHR$(23);CHR$(8)

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2780 x=x+4:y=y-4:a=TEST(x,y):s=x
2790 FOR f=y TO 380 STEP 2
2800 IF TEST(s,f-2)<>a THEN 2830
2810 PLOT s,f-2,co((s MOD 16)/2,(f MOD 16)/2)
2820 NEXT
2830 FOR f=y-2 TO 66 STEP-2
2840 IF TEST(s,f-2)<>a THEN 2870
2850 PLOT s,f-2,co((s MOD 16)/2,(f MOD 16)/2)
2860 NEXT
2870 IF TEST (s-2,y)<>a THEN s2=x+2:GOTO 2890
2880 s=s-2:GOTO 2790
2890 FOR f=y TO 380 STEP 2
2900 IF TEST(s,f-2)<>a THEN 2930
2910 PLOT s,f-2,co((s MOD 16)/2,(f MOD 16)/2)
2920 NEXT
2930 FOR f=y-2 TO 66 STEP-2
2940 IF TEST(s,f-2)<>a THEN 2970
2950 PLOT s,f-2,co((s MOD 16)/2,(f MOD 16)/2)
2960 NEXT
2970 IF TEST(s+2,y)<>a THEN PRINT CHR$(23);CHR$(1);:TAG:s=x-
4:y=y+4:GOSUB 3030:RETURN
2980 s=s+2:GOTO 2890
2990 REM data for hatching
3000 i(1)=i(1)+1:IF i(1)>26 THEN i(1)=0
3010 INK i,i(1):BORDER i(3):FOR f=1 TO 280:NEXT
3020 GOTO 1690
3030 REM exchange characters
3040 PLOT 0,-2,1:MOVE x,y:PRINT a$;:MOVE x,y-16
3050 PRINT b$;:RETURN

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