

```

10 REM ***** [1412]
20 REM * S P R I C R E A * [1025]
30 REM * [403]
40 REM * LE MOULLEU CLAUDE * [2432]
50 REM * [403]
60 REM * 83 Rue Joliot CURIE * [2430]
70 REM * 22420 PLOUARET * [1074]
80 REM * TEL 96 38 94 24 * [939]
90 REM ***** [1412]

100 IF HIMEM=42619 THEN dis=1 ELSE [2580]
dis=0
110 MEMORY &8FFF [207]
120 RESTORE 130:FOR h=&A400 TO &A45 [2875]
C:READ A$:POKE h,VAL("&"+a$):NEXT
130 DATA DD,5E,00,DD,56,01,DD,6E,02 [7395]
,DD,66,03,06,10,CD,19,BD,F3,C5,E5,0
6,04,1A,E6,88,28,06,4F,7E,E6,77,B1,
77,1A,E6,44,28,06,4F,7E,E6,BB,B1,77
,1A,E6,22,28,06,4F,7E,E6
140 DATA DD,B1,77,1A,E6,11,28,06,4F [7087]
,7E,E6,EE,B1,77,23,13,10,D0,E1,CD,5
1,A4,C1,10,C5,FB,C9,00,00,7C,C6,0B,
67,D0,D5,11,50,C0,19,D1,C9
150 REM : VARIABLES DE BASE : [2081]
160 DIM oct(20):FOR h=1 TO 20:READ [2784]
oct(h):NEXT
170 DATA 50978,53026,55074,57122,59 [5485]
170,61218,63266,65314,51058,53106,5
5154,57202,59250,61298,63346,65394,
51138,53186,55234,57282
180 deb=&9000:sp=1:temoin=0 [1050]
190 BORDER 0:MODE 1:INK 0,0:INK 1, [1724]
26:INK 2,6:INK 3,18:CLS
200 PEN 3:LOCATE 11,7:PRINT STRING$ [8785]
(20,"*"):LOCATE 11,17:PRINT STRING$
(20,"*"):FOR h=8 TO 16:LOCATE 11,h:
PRINT "*":LOCATE 30,h:PRINT"*":NEXT

210 PEN 2:LOCATE 13,9:PRINT"1 -";:P [3156]
EN 1:PRINT"SPRITE MODE 0"
220 PEN 2:LOCATE 13,12:PRINT"2 -";: [4094]
PEN 1:PRINT"SPRITE MODE 1"
230 PEN 2:LOCATE 13,15:PRINT"3 -";: [3770]
PEN 1:PRINT"MODIFICATIONS"
240 A$=INKEY$:IF a$="" THEN GOTO 24 [2062]
0:
250 a=VAL(a$) [956]
260 IF a<1 OR a>3 THEN GOTO 240 [1051]
270 IF a=1 THEN mo=0:mult=4:mx=17:m [2326]
y=21:GOTO 300
280 IF a=2 THEN mo=1:mult=2:mx=37:m [3045]
y=21:GOTO 300
290 IF a=3 THEN 2760 [968]
300 BORDER 0:MODE 1:INK 0,0:INK 1, [1724]
26:INK 2,6:INK 3,18:CLS
310 PEN 3:LOCATE 11,8:PRINT STRING$ [9244]
(20,"*"):LOCATE 11,18:PRINT STRING$
(20,"*"):FOR h=9 TO 17:LOCATE 11,h:
PRINT "*":LOCATE 30,h:PRINT"*":NEXT
320 PEN 2:LOCATE 13,11:PRINT" 1 -" [2996]
:;PEN 1:PRINT"HELP"
330 PEN 2:LOCATE 13,15:PRINT" 2 -" [4221]
:;PEN 1:PRINT"DESSIN"
340 A$=INKEY$:IF a$="" THEN GOTO 34 [1990]
0:
350 a=VAL(a$) [956]
360 IF a<1 OR a>2 THEN GOTO 340 [1354]
370 IF a=1 THEN GOTO 440 [1635]
380 IF a=2 THEN GOTO 1310 [891]
390 REM :::::::::::::::::::: [1661]
400 REM : [419]
410 REM : HELP : [592]
420 REM : [419]
430 REM :::::::::::::::::::: [1661]

440 CLS:PEN 2:LOCATE 15,2:PRINT"--* [4327]
HELP *--":LOCATE 19,3:PEN 3:PRINT"
===="
450 PEN 1:LOCATE 1,5:PRINT"1 - Comm [3234]
ent dessiner"
460 PEN 1:LOCATE 1,7:PRINT"2 - Chan [2033]
ger de couleur"
470 LOCATE 1,9:PRINT"3 - Changer de [11421]
matrice":LOCATE 1,11:PRINT"4 - Fai
re un nouveau Sprite":LOCATE 1,13:P
RINT"5 - Sauvegarder vos Sprites":L
OCATE 1,15:PRINT"6 - Effet miroir"
480 LOCATE 1,17:PRINT"7 - Temoins": [5808]
LOCATE 1,19:PRINT"8 - Modes et Exp
lications"
490 LOCATE 15,25:PEN 3:PRINT"Votre [5126]
choix ou <espace>"
500 A$=INKEY$:IF a$="" THEN GOTO 50 [1725]
0
510 IF a$="" THEN GOTO 300 [884]
520 a=VAL(a$):IF a<1 OR a>8 THEN GO [2151]
TO 500
530 DN a GOTO 540,600,680,1000,1070 [2003]
,1130,1170,190
540 CLS:PEN 2:LOCATE 13,2:PRINT"--* [4967]
DESSINER *--":LOCATE 17,3:PEN 3:PR
INT"====="
550 PEN 1:LOCATE 1,7:PRINT" A l'ai [7574]
de des fleches du curseur vous fai
tes deplacer votre crayon."
560 LOCATE 1,12:PRINT" La validat [5767]
ion se fait avec la touche <COPY>."
570 LOCATE 1,16:PRINT" L'effacem [8101]
ent d'un point se fait en prenant
la couleur du fond et en vali- da
nt ce point."
580 LOCATE 1,20:PEN 2:PRINT" N.B [4397]
: La touche < H > [HELP] vous perme
t le retour au menu."
590 LOCATE 33,25:PEN 3:PRINT"<ENTER [3419]
>":CALL &BB1B:GOTO 440
600 CLS:PEN 2:LOCATE 13,2:PRINT"--* [3259]
COULEURS *--":LOCATE 17,3:PEN 3:PR
INT"====="
610 PEN 3:LOCATE 1,7:PRINT" TOUCH [2386]
E < SPACE >"
620 PEN 1:LOCATE 1,10:PRINT" Le c [8591]
hangement de couleur se fait en ap
puyant sur la touche <ESPACE>"
630 IF mo=0 THEN GOTO 650 [125]
640 LOCATE 1,13:PRINT" Une fleche [12059]
sous la palette des cou- leurs vo
us indique a tout moment avec que
l crayon [PEN] vous travaillez.":GO
TO 660
650 LOCATE 1,13:PRINT" Un pave, e [9070]
n bas de l'ecran vous indi- que a to
ut moment avec quel crayon [PEN]vou
s travaillez."
660 LOCATE 1,18:PRINT" Les couleu [17597]
rs ont ete choisies arbi- traireme
nt . Par la suite il vous sera pos
sible dans votre propre programme
de definir les couleurs que vous
desirezutiliser."
670 LOCATE 33,25:PEN 3:PRINT"<ENTER [3419]
>":CALL &BB1B:GOTO 440
680 CLS:PEN 2:LOCATE 13,2:PRINT"--* [4011]
MATRICE *--":LOCATE 17,3:PEN 3:PR
INT"====="
690 IF mo=1 THEN GOTO 710 [960]
700 PEN 1:LOCATE 1,6:PRINT" La t [9223]
aille maximum de la matrice en MO
DE 0 est de 8 OCTETS de long et de
20 LIGNES de haut.":GOTO 720
710 PEN 1:LOCATE 1,6:PRINT" La t [10367]
aille maximum de la matrice en MO
DE 1 est de 9 OCTETS de long et de
20 LIGNES de haut."

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720 LOCATE 1,10:PRINT " Il vous es [7407]
t possible des maintenant de redui
re la taille de votre SPRITE."
730 LOCATE 1,14:PEN 2:PRINT " N.B : [22165]
Si vous desirez que votre sprite s'
efface automatiquement lors de son
deplacement sur l'ecran vous dev
ez con- server un OCTET de libre a
droite et a gauche ainsi qu'une LI
GNE en haut et en bas de la Matrice
"
740 PEN 3:LOCATE 2,24:PRINT"DESIREZ [4757]
VOUS CHANGER DE MATRICE (O/N)"
750 A$=INKEY$:IF A$="" THEN GOTO 75 [1739]
0
760 A$=UPPER$(A$):IF A$="N" THEN GO [1618]
TO 440
770 IF A$="O" THEN GOTO 790 [1107]
780 GOTO 750 [423]
790 CLS:PEN 2:LOCATE 9,2:PRINT"--* [5303]
NOUVELLE MATRICE *--":LOCATE 13,3:P
EN 3:PRINT"=====
800 IF mo=0 THEN GOTO 840 [55]
810 LOCATE 1,6:PRINT STRING$(40," " [5130]
):LOCATE 1,6:PEN 1:INPUT " NB D'O
CTETS EN LONGUEUR (1 a 9)":a$
820 a=VAL(a$):IF a<1 OR a>9 THEN GO [1815]
TO 810
830 mx=(a*4)+1:GOTO 870 [1275]
840 LOCATE 1,6:PRINT STRING$(40," " [5418]
):LOCATE 1,6:PEN 1:INPUT " NB D'O
CTETS EN LONGUEUR (1 a 8)":a$
850 a=VAL(a$):IF a<1 OR a>8 THEN GO [2289]
TO 840
860 mx=(a*2)+1 [655]
870 LOCATE 1,10:PRINT STRING$(40," [7837]
"):LOCATE 1,10:PEN 1:INPUT " NB D
E LIGNES EN HAUTEUR (1 a 20)":a$
880 a=VAL(a$):IF a<1 OR a>20 THEN G [1341]
OTO 870
890 my=a+1 [364]
900 IF back=1 THEN 910 ELSE 930 [1097]
910 LOCATE 1,16:PRINT STRING$(40," [6444]
"):LOCATE 1,16:PEN 2:INPUT " NB D
E TEMOINS UTILISE (0 a 9)":a$
920 a=VAL(a$):IF a>9 THEN 910 ELSE [2706]
TEMOIN=A:RETURN
930 PEN 2:LOCATE 1,13:PRINT " Voic [6616]
i la nouvelle matrice":a1=(mx-1)*2:
IF mo=0 THEN a1=(mx-1)*4
940 FOR h=1 TO a:PLOT 300,150-(h*2) [3312]
,3:DRAW 300+a1,150-(h*2):NEXT
950 PEN 3:LOCATE 8,23:PRINT "Vous c [2783]
onvient-elle ? (O/N)"
960 A$=INKEY$:IF A$="" THEN GOTO 96 [1824]
0
970 A$=UPPER$(A$):IF A$="N" THEN GO [1564]
TO 790
980 IF A$="O" THEN GOTO 440 [1145]
990 GOTO 960 [324]
1000 CLS:PEN 2:LOCATE 10,2:PRINT"-- [6306]
* NOUVEAU SPRITE *--":LOCATE 14,3:P
EN 3:PRINT"=====
1010 PEN 3:LOCATE 1,6:PRINT " TOUC [3024]
HES < N > ET < C >"
1020 PEN 1:LOCATE 1,9:PRINT " Lors [11191]
que vous avez fini votre Sprite et
que vous desirez le conserver appu
yez sur < N > [NEW] ."
1030 LOCATE 1,13:PRINT " Le progr [13404]
anne le memorise,vous donne son ad
resse mais ne l'efface pas .Tres u
tile si le SPRITE suivant ne differ
e que tres peu du precedent."
1040 LOCATE 1,18:PRINT " Si vous d [12100]
esirez effacer le dessin en cours s
ans qu'il soit sauvegarder en me-mo
ire utilisez la touche < C > : [CLS
] ."
1050 LOCATE 1,22:PEN 2:PRINT " N.B : [8014]
Noubliez pas de noter l'adresse d
e depart de chaque SPRITE."
1060 LOCATE 33,25:PEN 3:PRINT"<ENTE [3419]
R>":CALL &BB18:GOTO 440
1070 CLS:PEN 2:LOCATE 12,2:PRINT"-- [3997]
* SAUVEGARDE *--":LOCATE 16,3:PEN 3
:PRINT"=====
1080 PEN 3:LOCATE 1,7:PRINT " TOUC [1846]
HE < S >"
1090 PEN 1:LOCATE 1,10:PRINT " Lor [6999]
sque vous avez dessiner tous vos S
prites appuyez sur < S >"
1100 LOCATE 1,13:PRINT " Suivez le [8174]
s indications fournies par le prog
ramme."
1110 LOCATE 1,16:PRINT " La sauveg [7650]
arde de vos SPRITES se fera automat
iquement a partir de 9000."
1120 LOCATE 33,25:PEN 3:PRINT"<ENTE [3419]
R>":CALL &BB18:GOTO 440
1130 CLS:PEN 2:LOCATE 11,2:PRINT"-- [5592]
* EFFET MIROIR *--":LOCATE 15,3:PEN
3:PRINT"=====
1140 PEN 3:LOCATE 1,7:PRINT " TOUC [3300]
HE < M > [MIROR]"
1150 PEN 1:LOCATE 1,10:PRINT " L'e [15253]
ffet miroir est tres utile.Il vousp
ermet de ne pas etre obliger de red
es- siner un personnage lorsque ce d

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ernier doit changer son sens de d
eplacement ."
1160 LOCATE 33,25:PEN 3:PRINT"<ENTE [3419]
R>":CALL &BB18:GOTO 440
1170 CLS:PEN 2:LOCATE 14,2:PRINT"-- [3458]
* TEMOIN *--":LOCATE 18,3:PEN 3:PRI
NT"=====
1180 PEN 1:LOCATE 1,6:PRINT " Il e [9994]
st parfois utile,apres un sprite,de
laisser quelques octets de libres.
"
1190 LOCATE 1,10:PRINT " Par la su [14954]
ite,il vous sera possible d'y pok
er la largeur et la hauteur des sp
rites ou tout autre parametre que v
ous jugerez utile."
1200 LOCATE 1,15:PRINT " Par defau [3780]
t,le nombre de temoin est: 0"
1210 PEN 3:LOCATE 2,18:PRINT"DESIRE [4630]
Z VOUS LAISSER DES TEMOINS (O/N)"
1220 A$=INKEY$:IF A$="" THEN GOTO 1 [1965]
220
1230 A$=UPPER$(A$):IF A$="N" THEN G [1618]
OTO 440
1240 IF A$="O" THEN GOTO 1260 [1286]
1250 GOTO 1220 [359]
1260 LOCATE 1,20:PRINT STRING$(40," [6520]
"):LOCATE 1,20:PEN 2:INPUT " NB
DE TEMOINS DESIRE (0 a 9)":a$
1270 a=VAL(a$):IF a>9 THEN GOTO 126 [3128]
0 ELSE TEMOIN=A
1280 LOCATE 1,22:PEN 2:PRINT "OK":A [4098]
,"OCTETS APRES CHACUN DES SPRITES"
1290 LOCATE 33,25:PEN 3:PRINT"<ENTE [3419]
R>":CALL &BB18:GOTO 440
1300 REM :: CADRE MODE 1 :: [1687]
1310 IF mo=0 THEN GOTO 1600 [298]
1320 x=2:y=2:x1=x:y1=y:enc=1:co=2:D [3375]
IM c(mx-1,my-1):fo=1
1330 A$="1234" [647]
1340 MODE 1:INK 0,0:INK 1,26:INK 2, [2654]
6:INK 3,18:CLS
1350 PEN 1:LOCATE 1,1:PRINT CHR$(20 [7839]
7):FOR h=0 TO ((mx-1)/4)-1:LOCATE 2
+(h*4),1:PEN enc:PRINT a$:enc=enc+1
:IF enc>3 THEN enc=1
1360 NEXT [350]
1370 b$="12345678901234567890" [990]
1380 FOR h=1 TO (my-1):LOCATE 1,h+1 [6755]
:b1$=MID$(b$,h,1):PEN enc:PRINT b1$
:enc=enc+1:IF enc>3 THEN enc=1
1390 NEXT:enc=1: [877]
1400 PEN 3:PLOT 1,63,3:DRAW 639,63: [7900]
DRAW 639,1:DRAW 1,1:DRAW 1,63:PLOT
593,63:DRAW 593,399:DRAW 639,399:DR
AW 639,63:PLOT 465,63:DRAW 465,1
1410 PEN 3: LOCATE 39,5:PRINT"H" [1505]
1420 PEN 2:LOCATE 39,8:PRINT"N" [1738]
1430 LOCATE 39,11:PRINT"C" [1472]
1440 LOCATE 39,14:PRINT"M" [1285]
1450 LOCATE 39,17:PRINT"S" [940]
1460 SYMBOL 249,255,128,128,128,128 [2483]
,128,128,255
1470 SYMBOL 250,255,1,1,1,1,1,1,255 [1896]
1480 SYMBOL 251,255,0,0,0,0,0,0,255 [1955]
1490 z$=CHR$(249)+CHR$(251)+CHR$(25 [2092]
0)
1500 z1$=CHR$(143)+CHR$(143)+CHR$(1 [1769]
43)
1510 WINDOW #1,2,28,23,24:CLS #1 [1432]
1520 GOSUB 1530:GOTO 1560 [1635]
1530 IF mo=0 THEN GOTO 1670 [292]
1540 PEN 3:LOCATE 5,23:PRINT z$:PEN [5216]
1:LOCATE 11,23:PRINT z1$:PEN 2:LO
DATE 17,23:PRINT z1$:LOCATE 23,23:P
EN 3:PRINT z1$

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1550 PEN 1:LOCATE 3,24:PRINT"P=":LO [3669]
DATE 12,24:PRINT CHR$(240):enc=1:RE
TURN
1560 WINDOW #2,2,37,2,21: [1533]
1570 IF back=1 THEN RETURN [854]
1580 PEN 1:LOCATE x,y:PRINT CHR$(20 [1725]
2):GOTO 1760
1590 REM :: CADRE MODE 0 :: [1683]
1600 MODE 0:INK 0,0:INK 1,26:INK 2, [8414]
13:INK 3,24:INK 4,6:INK 5,16:INK 6,
18:INK 7,9:INK 8,2:INK 9,11:INK 10,
14:INK 11,8:INK 12,4:INK 13,3:INK 1
4,1,24:INK 15,16,11
1610 x=2:y=2:x1=x:y1=y:enc=2:co=2:D [3947]
IM c(mx-1,my-1):fo=1
1620 A$="12":PEN 1:LOCATE 1,1:PRINT [5586]
CHR$(207):FOR h=0 TO ((mx-1)/2)-1:
LOCATE 2+(h*2),1:PEN enc:PRINT a$:e
nc=enc+1:NEXT
1630 b$="12345678901234567890" [990]
1640 FOR h=1 TO (my-1):LOCATE 1,h+1 [4099]
:b1$=MID$(b$,h,1):PEN 1:PRINT b1$:N
EXT:enc=1
1650 PEN 3:PLOT 1,63,3:DRAW 639,63: [7981]
DRAW 639,1:DRAW 1,1:DRAW 1,63:PLOT
545,63:DRAW 545,399:DRAW 639,399:DR
AW 639,63:PLOT 465,63:DRAW 465,1
1660 PEN 3:LOCATE 19,5:PRINT"N":PEN [7412]
2:LOCATE 19,8:PRINT"N":LOCATE 19,1
1:PRINT"C":LOCATE 19,14:PRINT"N":LO
DATE 19,17:PRINT"S"
1670 WINDOW #1,2,14,23,24:CLS #1:PE [11176]
#1,1:LOCATE #1,1,1:PRINT#1,"PEN
1 =" :PLOT 340,20,3:DRAW 394,20:DR
AW 394,56:DRAW 340,56:DRAW 340,20:LO
DATE #1,11,1:PEN #1,enc:PRINT #1,CH
R$(143):enc=1
1680 WINDOW #2,2,17,2,21:CLS #2 [1490]
1690 IF back=1 THEN RETURN [854]
1700 PEN 1:LOCATE x,y:PRINT CHR$(20 [1725]
2):GOTO 1760
1710 REM :::::::::::::::::::: [1691]
1720 REM : [419]
1730 REM : ROUTINE PRINCIPALE: [2225]
1740 REM : [419]
1750 REM :::::::::::::::::::: [1691]
1760 A$=UPPER$(INKEY$) [789]
1770 IF A$="" THEN GOTO 1760 ELSE a [1478]
=ASC(A$)
1780 IF a=240 AND y>2 THEN y=y-1:GO [866]
TO 1960
1790 IF a=241 AND y<my THEN y=y+1:G [2450]
OTO 1960
1800 IF a=242 AND x>2 THEN x=x-1:GO [1891]
TO 1960
1810 IF a=243 AND x<mx THEN x=x+1:G [2345]
OTO 1960
1820 IF a=224 THEN GOTO 2040 [1120]
1830 IF a$=" " THEN GOTO 2560 [816]
1840 IF a$="N" THEN GOTO 2130 [956]
1850 IF a$="C" THEN 1910 [1028]
1860 IF a$="S" THEN GOTO 2370 [1136]
1870 IF a$="M" THEN GOTO 2690 [1228]
1880 IF a$="H" THEN ERASE c:fo=0:MO [3265]
DE 1:GOTO 440
1890 GOTO 1760 [363]
1900 REM ::::: CLS ::::: [839]
1910 IF mo=0 THEN 1930 [471]
1920 FOR h=0 TO 45:PLOT 527,48-h,0: [4912]
DRAW 630,48-h:NEXT:CLS #1:GOSUB 153
0:CLS #2:GOTO 1940
1930 FOR h=0 TO 45:PLOT 527,48-h,0: [5556]
DRAW 630,48-h:NEXT:CLS #2:LOCATE 12
,23:PEN 1:PRINT CHR$(143)
1940 ERASE c:x=2:y=2:x1=x:y1=y:enc= [5145]
1:co=2:DIM c(mx-1,my-1):PEN 1:LOCAT
E x,y:PRINT CHR$(202):GOTO 1760
1950 REM :: DEP CURSEUR :::: [688]
1960 LOCATE x1,y1:PEN 0:PRINT CHR$( [2542]
143)
1970 bn=c(x1-1,y1-1):PEN bn:LOCATE [3607]
x1,y1:PRINT CHR$(143)
1980 PRINT CHR$(22)+CHR$(1) [1678]
1990 IF c(x-1,y-1)<>0 THEN PEN 0 EL [1398]
SE PEN 1
2000 LOCATE x,y:PRINT CHR$(202) [1071]
2010 PRINT CHR$(22)+CHR$(0) [1674]
2020 x1=x:y1=y:GOTO 1760 [1109]
2030 REM :: VALIDATION :: [1336]
2040 PEN enc:LOCATE x,y:PRINT CHR$( [3122]
143):c(x-1,y-1)=enc
2050 PRINT CHR$(22)+ CHR$(1) [1678]
2060 IF c(x-1,y-1)<>0 THEN PEN 0 EL [1398]
SE PEN 1
2070 LOCATE x,y:PRINT CHR$(202):GOS [1469]
UB 2100
2080 PRINT CHR$(22)+ CHR$(0):PEN en [4111]
c:GOTO 1760
2090 REM ::::: PLOTAGE ::::: [1091]
2100 px=527+((x-1)*mult):py=48-((y- [2089]
1)*2)
2110 PLOT px,py,co-1:RETURN [1775]
2120 REM ::::: NEW MODE 1 ::::: [621]
2130 FOR h=16 TO 58:PLOT 16,h,0:DR [3691]
AW 448,h:NEXT:IF back=1 THEN GOTO 31
90
2140 IF mo=0 THEN GOTO 2210 [344]
2150 LOCATE 2,23:PRINT "SPRITE nr" [5617]
:SP:"en :&":HEX$(deb):nrt=sp:debt=d

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eb
2160 GOSUB 2270:deb=deb+temoin:sp=s [1695]
p+1:
2170 PEN 3:LOCATE 15,24:PRINT "<ENT [3842]
ER>":CALL &BB18
2180 CLS #1:GOSUB 1530 [899]
2190 enc=1:co=2:GOTO 1760 [451]
2200 REM : : NEW MODE 0 : : [772]
2210 LOCATE 2,23:PRINT "NR";S [4230]
P;"en &";HEX$(deb):nrt=sp:debt=deb
2220 GOSUB 2270:deb=deb+temoin:sp=s [1695]
p+1:
2230 PEN 1:LOCATE 8,24:PRINT "<ENTE [3413]
R>":CALL &BB18
2240 WINDOW #1,2,14,23,24:CLS #1:PE [10213]
N #1,1:LOCATE #1,1,1:PRINT#1,"PEN
1 =":PLOT 340,20,3:DRAW 394,20:DRA
W 394,56:DRAW 340,56:DRAW 340,20:LO
CATE #1,11,1:PEN #1,1:PRINT #1,CHR$
(143):enc=1
2250 co=2:GOTO 1760 [1744]
2260 REM : : POKE : : [433]
2270 ha=my-1:lg=(mx-1)/4:IF mo=0 TH [1734]
EN lg=(mx-1)/2
2280 FOR h=1 TO ha [593]
2290 FOR g=0 TO lg-1 [766]
2300 pee=PEEK(oct(h)+g): [1424]
2310 POKE deb,pee [686]
2320 deb=deb+1 [365]
2330 NEXT g [377]
2340 NEXT h [372]
2350 RETURN [555]
2360 REM : : SAUVEGARDE : : [981]
2370 MODE 1:CLS:PEN 2:LOCATE 12,2:P [5382]
RINT"--* SAUVEGARDE *--":LOCATE 16,
3:PEN 3:PRINT"====="
2380 IF sp=0 THEN PEN 1:LOCATE 1, [9360]
6:PRINT" Pas de SPRITES a sauvegar
der":PEN 3:LOCATE 33,24:PRINT"<ENTE
R>":CALL &BB18:ERASE c:GOTO 180
2390 IF dis=0 THEN GOTO 2460 [978]
2400 PEN 1:LOCATE 1,7:PRINT" CASS [2110]
ETTE DU DISQUETTE ( C / D )"
2410 A$=INKEY$:IF A$="" THEN GOTO 2 [2038]
410
2420 a$=UPPER$(a$):IF a$="D" THEN G [2323]
OTO 2460
2430 IF a$="C" THEN GOTO 2450 [1409]
2440 GOTO 2410 [353]
2450 ITAPE [350]
2460 GOSUB 2490:GOSUB 2540:SAVE F$, [2975]
B,&9000,deb-&9000
2470 LOCATE 23,22:PEN 3:PRINT"<ENTE [4992]
R>":CALL &BB18:ERASE c:GOTO 170
2480 GOSUB 2490:GOSUB 2540:SAVE F$, [4148]
B,&9000,deb-&9000:ERASE c:GOTO 170
2490 LOCATE 1,10:INPUT " NOM DU FI [2066]
CHIER ";F$
2500 IF dis=1 AND LEN(F$)>8 THEN F$ [1408]
=LEFT$(F$,8)
2510 IF dis=0 AND LEN(F$)>16 THEN F [1756]
$=LEFT$(F$,16)
2520 LOCATE 1,10:PRINT STRING$(40," [4283]
"):LOCATE 1,10:PRINT " NOM DU FIC
HIER ";F$
2530 RETURN [555]
2540 PEN 3:LOCATE 4,13:PRINT sp-1; [4572]
Sprite(s) de &9000 a &";HEX$(deb)
:RETURN
2550 REM : CHANG DE COULEUR : [1069]
2560 IF mo=0 THEN GOTO 2640 [187]
2570 co=co+1:IF co>4 THEN co=1 [1713]
2580 ON co GOTO 2590,2600,2610,2620 [1525]
2590 LOCATE 24,24:PRINT CHR$(32):PE [5046]
N 1:LOCATE 6,24:PRINT CHR$(240):enc
=0:GOTO 1760
2600 LOCATE 6,24:PRINT CHR$(32):PEN [3829]
1:LOCATE 12,24:PRINT CHR$(240):enc
=1:GOTO 1760
2610 LOCATE 12,24:PRINT CHR$(32):PE [3242]
N 2:LOCATE 18,24:PRINT CHR$(240):en
c=2:GOTO 1760
2620 LOCATE 18,24:PRINT CHR$(32):PE [4424]
N 2:LOCATE 24,24:PRINT CHR$(240):en
c=3:GOTO 1760
2630 REM : : COULEUR MODE 0 : : [1734]
2640 co=co+1:IF co>16 THEN co=1 [1829]
2650 LOCATE 6,23:PEN 1:PRINT co-1 [1399]
2660 enc=co-1:LOCATE #1,11,1:PEN #1 [3054]
,enc:PRINT #1,CHR$(143):GOTO 1760
2670 REM : : MIROIR : : [1133]
2680 REM : FONCTION MIROIR : [605]
2690 x=mx:y=2:DIM c1(mx-1,my-1) [3108]
2700 FOR h=1 TO mx-1:FOR g=1 TO my- [5189]
1:col=c(h,g):PEN col:LOCATE x,y:PRI
NT CHR$(143)
2710 c1(x-1,y-1)=col:y=y+1:NEXT g:x [4376]
=x-1:y=2:NEXT h
2720 FOR h=1 TO mx-1:FOR g=1 TO my- [3466]
1:col=c1(h,g):c(h,g)=col
2730 px=527+(h*mult):py=48-(g*2):PL [4093]
OT px,py,col:NEXT g,h
2740 ERASE c1:x=2:y=2:x1=x:y1=y:GOT [1583]
O 1960
2750 REM : : MODIFIER : : [1565]
2760 CLS:PEN 2:LOCATE 13,2:PRINT"-- [5416]
* MODIFIER *--":LOCATE 17,3:PEN 3:P
RINT"====="
2770 PEN 1:LOCATE 1,8:PRINT" Cett [10541]

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e fonction vous permettra de modifi
er un SPRITE dans un fichier deja s
au-vegarde sur cassette ou sur disq
ue."
2780 LOCATE 1,12:PRINT" Il vous s [5392]
uffit de repondre aux deman-des du
programme ."
2790 LOCATE 1,15:PRINT" Lorsque vo [9988]
tre SPRITE est modifie vous pouvez
sauvegarder votre fichier ou l'
enrichir de nouveaux SPRITES."
2800 PEN 3:LOCATE 2,24:PRINT"DESIRE [2061]
Z VOUS MODIFIER UN SPRITE (O/N)"
2810 A$=INKEY$:IF A$="" THEN GOTO 2 [2022]
810
2820 a$=UPPER$(a$):IF a$="N" THEN G [1352]
OTO 170
2830 IF a$="O" THEN back=1:GOTO 285 [1985]
0
2840 GOTO 2810 [337]
2850 IF fo=1 THEN ERASE c [605]
2860 WINDOW #5,1,40,5,25:CLS #5 [2399]
2870 PEN 1:LOCATE 1,8:PRINT" LE SPR [2985]
ITE EST EN MEMOIRE ? ( O / N )"
2880 A$=INKEY$:IF A$="" THEN GOTO 2 [2000]
880
2890 a$=UPPER$(a$):IF a$="N" THEN 2 [1740]
920
2900 IF a$="O" THEN GOTO 3020 [1077]
2910 GOTO 2880 [315]
2920 LOCATE 1,12:INPUT " NOM DU FIC [2576]
HIER ";F$:f$=UPPER$(f$)
2930 IF dis=0 THEN GOTO 3000 [935]
2940 LOCATE 1,16:PRINT" SUR CASSETT [1983]
E DU DISQUETTE ( C / D )"
2950 A$=INKEY$:IF A$="" THEN GOTO 2 [2018]
950
2960 a$=UPPER$(a$):IF a$="D" THEN 3 [2180]
000
2970 IF a$="C" THEN GOTO 2990 [1389]
2980 GOTO 2950 [381]
2990 ITAPE [350]
3000 LOCATE 1,20:LOAD F$,&9000 [1445]
3010 lgfi=PEEK(&A76D)+256*PEEK(&A76 [2642]
D+1)
3020 CLS #5:PEN 1:LOCATE 1,8:PRINT" [2862]
MODE UTILISE ? ( O / 1 )"
3030 A$=INKEY$:IF A$="" THEN GOTO 3 [1947]
030
3040 IF a$="O" THEN mo=0:mult=4:GOT [2249]
O 3070
3050 IF a$="1" THEN mo=1:mult=2:GOT [2418]
O 3070
3060 GOTO 3030 [658]
3070 LOCATE 1,12:INPUT" NUMERO DU S [3932]
PRITE ";nrsp:sp=nrsp:nrsp=nrsp-1
3080 CLS :PEN 2:LOCATE 1,1:PRINT" I [4641]
NITIALISATION MATRICE":PEN 3:LOCATE
2,2:PRINT"-----"
3090 GOSUB 800 [820]
3100 IF mo=0 THEN mx1=(mx-1)/2 ELSE [2070]
mx1=(mx-1)/4
3110 my1=my-1:ad=(mx1*my1)+temoin:d [3749]
eb=&9000+(ad*nrsp):tsp=INT(lgfi/ad)
3120 GOSUB 1310 [948]
3130 POKE &A415,mx1 [1319]
3140 POKE &A40D,my1 [402]
3150 CALL &A400,&C722,deb [1576]
3160 FOR h=1 TO mx-1:FOR g=1 TO my- [2400]
1
3170 col=TEST(527+(h*mult),48-(g*2) [4425]
):LOCATE h+1,g+1:PEN col:PRINT CHR$
(143):c(h,g)=col:NEXT g,h
3180 x=2:y=2:x1=x:y1=y:GOTO 1960 [1936]

3190 IF mo=0 THEN GOTO 3210 [336]
3200 LOCATE 2,23:PRINT "SPRITE nr" [7577]
;SP;" modifier":GOSUB 2270:deb=&900
0+lgfi:sp=tsp+1:back=0:fo=0:GOTO 21
70
3210 LOCATE 2,23:PEN 2:PRINT "NR";S [6886]
P;"modifier":GOSUB 2270:deb=&9000+1
gfi:sp=tsp+1:back=0:fo=0:GOTO 2230

10 * *****
20 * Datas de 4 sprites *
30 * *****

40 MEMORY &8FFF
50 A=&9000:F=&9100:L=70:WHILE A<F:FOR A=A
TO A+15:READ C$:K=VAL("&"+C$):S=S+K+65536*(
S+K>32767):IF A<F THEN POKE A,K
60 NEXT:READ D$:T=VAL("&"+D$):IF T<>S THEN
PRINT CHR$(7);"Erreur ligne";L:END ELSE L=L
+10:WEND
70 DATA 00,40,00,00,40,80,08,00,84,08,0C,00
,0C,0C,0C,00,01C4
80 DATA 00,0C,00,08,00,00,88,88,00,44,88,8B
,00,44,88,CC,0654
90 DATA 00,88,88,CC,00,88,00,30,00,88,A0,0C
,00,20,A0,0C,0AEB
100 DATA 00,0C,0C,08,00,04,0C,08,00,00,0C,0
0,00,40,C0,00,0C2C
110 DATA 00,40,00,00,00,40,80,08,00,84,08,0C,0
0,0C,0C,0C,00,0DF0
120 DATA 00,0C,00,88,00,00,88,88,00,44,88,8

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8,50,44,CC,44,128C
130 DATA 50,CC,44,44,00,CC,00,44,00,CC,50,1
0,00,30,50,08,16F4
140 DATA 00,0C,0C,0C,80,0C,08,0C,40,84,55,C
0,00,80,EA,80,1B7B
150 DATA 00,14,AB,00,00,14,AB,00,00,14,AB,0
0,00,14,AB,00,1E6B
160 DATA 00,9C,BC,00,44,96,A9,28,C9,BC,A9,1
6,D6,00,00,16,249E
170 DATA D6,00,00,16,D6,00,00,16,D6,00,00,1
6,D6,00,00,16,284E
180 DATA D6,14,AB,16,C3,BC,A9,16,41,96,A9,2
8,00,96,BC,00,2F2E
190 DATA 00,00,00,00,00,00,00,00,00,00,00,0
0,00,00,00,00,2F2E
200 DATA 00,00,00,00,00,00,00,00,00,00,00,0
0,00,00,00,00,2F2E
210 DATA 00,00,00,00,00,00,00,00,00,00,00,0
0,00,00,00,00,2F2E
220 DATA 00,00,00,00,00,00,00,00,00,00,00,0
0,00,00,00,00,2F2E
230 DATA 00,00,00,00,00,00,00,00,00,00,00,0
0,00,00,00,00,2F2E
240 CLS:PRINT "FICHIER DES 4 SPRITES CORREC
T..."
250 PRINT:PRINT:PRINT
260 PRINT "NOM DE SAUVEGARDE : 4SPRITES.BIN
"
270 SAVE "4SPRITES",B,&9000,&100

10 * *****
20 * Routines d'affichage *
30 * des sprites *
40 * *****

50 MEMORY &8FFF
60 A=&A000:F=&A170:L=80:WHILE A<F:FOR A=A
TO A+15:READ C$:K=VAL("&"+C$):S=S+K+65536*(
S+K>32767):IF A<F THEN POKE A,K
70 NEXT:READ D$:T=VAL("&"+D$):IF T<>S THEN
PRINT CHR$(7);"Erreur ligne";L:END ELSE L=L
+10:WEND
80 DATA 7C,C6,08,67,D0,D5,11,50,C0,19,D1,C9
,00,DD,5E,00,0765
90 DATA DD,56,01,DD,6E,02,DD,66,03,06,10,CD
,19,BD,F3,C5,0E9D
100 DATA E5,06,04,1A,77,13,23,10,FA,E1,CD,0
0,A0,C1,10,EF,156B
110 DATA FB,C9,00,00,00,00,DD,5E,00,DD,56,0
1,DD,6E,02,DD,1BCB
120 DATA 66,03,06,10,CD,19,BD,F3,C5,E5,06,0
4,1A,E6,AA,28,2263
130 DATA 06,4F,7E,E6,55,B1,77,1A,E6,55,28,0
6,4F,7E,E6,AA,2979
140 DATA B1,77,23,13,10,E6,E1,CD,00,A0,C1,1
0,DB,FB,C9,00,318B
150 DATA 00,00,00,11,00,A4,DD,6E,00,DD,66,0
1,06,10,C5,E5,368F
160 DATA 06,04,7E,12,13,23,10,FA,E1,CD,00,A
0,C1,10,EF,C9,3D40
170 DATA 00,00,00,11,00,A4,DD,6E,00,DD,66,0
1,06,10,C5,E5,4244
180 DATA 06,04,1A,77,23,13,10,FA,E1,CD,00,A
0,C1,10,EF,C9,48F6
190 DATA 00,00,00,DD,5E,00,DD,56,01,DD,6E,0
2,DD,66,03,06,4DFE
200 DATA 10,CD,19,BD,F3,C5,E5,06,04,7E,E6,A
A,20,09,7E,E6,55F3
210 DATA 55,4F,1A,E6,AA,B1,77,7E,E6,55,20,0
9,7E,E6,AA,4F,5DAB
220 DATA 1A,E6,55,B1,77,23,13,10,E0,E1,CD,0
0,A0,C1,10,D5,653F
230 DATA FB,C9,00,00,00,DD,5E,00,DD,56,01,D
D,6E,02,DD,66,6C02
240 DATA 03,06,10,CD,19,BD,F3,C5,E5,06,04,1
A,AE,77,13,23,71DA
250 DATA 10,F9,E1,CD,00,A0,C1,10,EE,FB,C9,0
0,00,00,DD,5E,79EF
260 DATA 00,DD,56,01,DD,6E,02,DD,66,03,06,1
0,CD,19,BD,F3,8062
270 DATA C5,E5,06,04,1A,E6,88,28,06,4F,7E,E
6,77,B1,77,1A,B738
280 DATA E6,44,28,06,4F,7E,E6,BB,B1,77,1A,E
6,22,28,06,4F,80C5
290 DATA 7E,E6,DD,B1,77,1A,E6,11,28,06,4F,7
E,E6,EE,B1,77,9636
300 DATA 23,13,10,D0,E1,CD,00,A0,C1,10,C5,F
B,C9,00,00,00,9CF4
310 DATA 00,00,00,00,00,00,00,00,00,00,00,0
0,00,00,00,00,9CF4
320 CLS:PRINT "FICHIER DES ROUTINES CORRECT
..."
330 PRINT:PRINT:PRINT
340 PRINT " NON DE SAUVEGARDE : ROUTINE.BIN
"
350 SAVE "ROUTINE",B,&A000,&170

10 REM : : : : : [1691]
20 REM : : : : : [419]
30 REM : DEMONSTRATION : [1129]
40 REM : : : : : [419]
50 REM : : : : : [1691]

60 MEMORY &8FFF [2071]

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