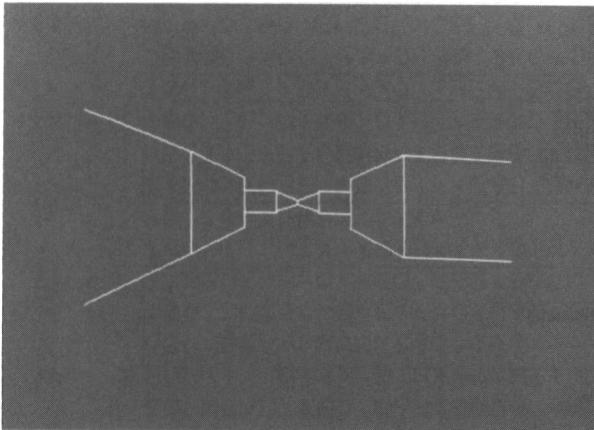


Laberinto en 3-D

4



Clasificación:

GRAFICOS INTERACTIVOS

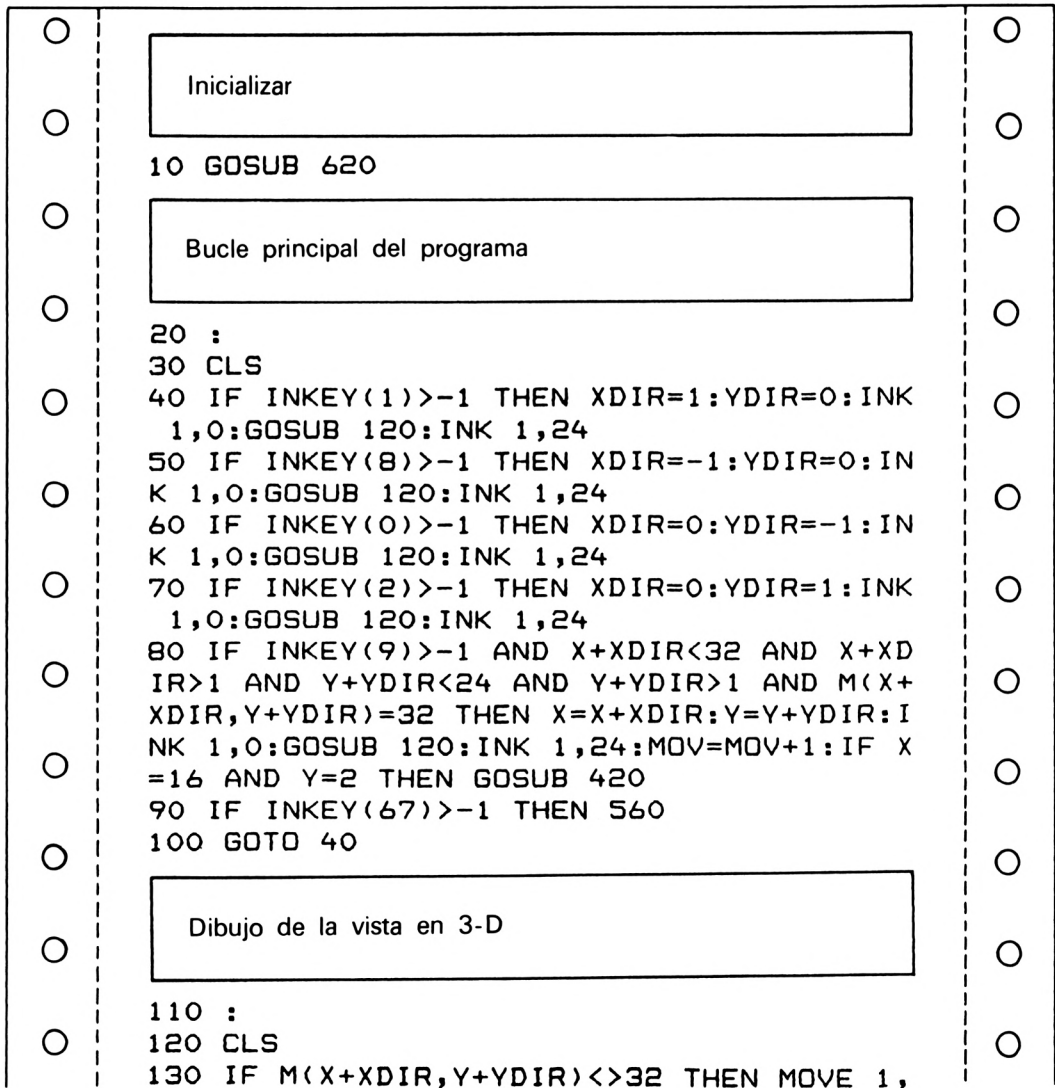
Quando el programa se inicializa por primera vez debes definir un laberinto y seguir los mensajes. Para mover este, oeste, norte o sur, utiliza las teclas del cursor. Para mover hacia adelante utiliza la tecla "COPY"; también puedes usar la tecla COPY para definir el laberinto y las teclas del cursor para moverte alrededor. Para terminar pulsa "Q".

Variables del programa

MOV	Número de movimientos.
M(N,N)	Matriz del laberinto conteniendo los muros.
X, Y	Tus coordenadas en el laberinto.
XDIR, YDIR	Direcciones de X e Y en las que estás mirando. Pueden ser -1, 0 o +1.
A, B	Posición del cursor cuando defines el laberinto.
T,N,A,\$	Variables temporales.

Estructura del programa

<i>Líneas</i>	<i>Función/Actividad</i>
10-110	Bucle principal
120-410	Dibujo de la vista en 3-D
420-620	Escapaste del laberinto
630-890	Inicialización
900-1050	Define el laberinto
1060-1120	Dibujo del laberinto



```

368:DRAW 639,368:DRAW 639,80:DRAW 1,80:D
RAW 1,368:RETURN
140 IF XDIR<>0 THEN 170
150 IF M(X+YDIR,Y+YDIR)<>32 THEN MOVE 1,
368:DRAW 160,298:DRAW 160,149:DRAW 1,80
ELSE MOVE 1,298:DRAW 160,298:DRAW 160,14
9:DRAW 1,149
160 IF M(X+(YDIR*-1),Y+YDIR)<>32 THEN MO
VE 640,368:DRAW 480,298:DRAW 480,149:DRA
W 640,80 ELSE MOVE 640,298:DRAW 480,298:
DRAW 480,149:DRAW 640,149
170 IF YDIR<>0 THEN 200
180 IF M(X+XDIR,Y+(XDIR*-1))<>32 THEN MO
VE 1,368:DRAW 160,298:DRAW 160,149:DRAW
1,80 ELSE MOVE 1,298:DRAW 160,298:DRAW 1
60,149:DRAW 1,149
190 IF M(X+XDIR,Y+XDIR)<>32 THEN MOVE 64
0,368:DRAW 480,298:DRAW 480,149:DRAW 640
,80 ELSE MOVE 640,298:DRAW 480,298:DRAW
480,149:DRAW 640,149
200 IF M(X+XDIR+XDIR,Y+YDIR+YDIR)<>32 TH
EN MOVE 160,298:DRAW 480,298:MOVE 160,14
9:DRAW 480,149:RETURN
210 IF XDIR<>0 THEN 240
220 IF M(X+YDIR,Y+YDIR+YDIR)<>32 THEN MO
VE 160,298:DRAW 240,260:DRAW 240,186:DRA
W 160,149 ELSE MOVE 160,260:DRAW 80,0:D
RAW 0,-74:DRAW 80,0
230 IF M(X+(YDIR*-1),Y+YDIR+YDIR)<>32 TH
EN MOVE 480,298:DRAW 400,260:DRAW 400,18
6:DRAW 480,149 ELSE MOVE 480,260:DRAW 80
,0:DRAW 0,-74:DRAW 80,0
240 IF YDIR<>0 THEN 270
250 IF M(X+XDIR+XDIR,Y+(XDIR*-1))<>32 TH
EN MOVE 160,298:DRAW 240,260:DRAW 240,18
6:DRAW 160,149 ELSE MOVE 160,260:DRAW 8
0,0:DRAW 0,-74:DRAW 80,0
260 IF M(X+XDIR+XDIR,Y+XDIR)<>32 THEN MO
VE 480,298:DRAW 400,260:DRAW 400,186:DRA
W 480,149 ELSE MOVE 480,260:DRAW 80,0:D
RAW 0,-74:DRAW 80,0
270 IF M(X+XDIR+XDIR+XDIR,Y+YDIR+YDIR+YD
IR)<>32 THEN MOVE 240,260:DRAW 400,260:M
OVE 240,186:DRAW 400,186:RETURN
280 IF XDIR<>0 THEN 310

```

```

290 IF M(X+YDIR,Y+YDIR+YDIR+YDIR)<>32 TH
EN MOVE 240,260:DRAW 288,238:DRAW 288,20
7:DRAW 240,186 ELSE MOVE 240,238:DRAWR 4
8,0:DRAWR 0,-31:DRAWR-48,0
300 IF M(X+(YDIR*-1),Y+YDIR+YDIR+YDIR)<>
32 THEN MOVE 400,260:DRAW 352,238:DRAW 3
52,207:DRAW 400,186 ELSE MOVE 400,238:DR
AWR-48,0:DRAWR 0,-31:DRAWR 48,0
310 IF YDIR<>0 THEN 340
320 IF M(X+XDIR+XDIR+XDIR,Y+(XDIR*-1))<>
32 THEN MOVE 240,260:DRAW 288,238:DRAW 2
88,207:DRAW 240,186 ELSE MOVE 240,238:DR
AWR 48,0:DRAWR 0,-31:DRAWR-48,0
330 IF M(X+XDIR+XDIR+XDIR,Y+XDIR)<>32 TH
EN MOVE 400,260:DRAW 352,238:DRAW 352,20
7:DRAW 400,186 ELSE MOVE 400,238:DRAWR-4
8,0:DRAWR 0,-31:DRAWR 48,0
340 IF M(X+XDIR+XDIR+XDIR+XDIR,Y+YDIR+YD
IR+YDIR+YDIR)<>32 THEN MOVE 288,238:DRAW
352,238:MOVE 288,207:DRAW 352,207:RETUR
N
350 IF XDIR<>0 THEN 380
360 IF M(X+YDIR,Y+YDIR+YDIR+YDIR+YDIR)<>
32 THEN MOVE 288,237:DRAW 320,227:DRAW 3
20,221:DRAW 288,208 ELSE MOVE 288,227:DR
AWR 32,0:DRAWR 0,-6:DRAWR-32,0
370 IF M(X+(YDIR*-1),Y+YDIR+YDIR+YDIR+YD
IR)<>32 THEN MOVE 352,237:DRAW 320,227:D
RAW 320,221:DRAW 352,208 ELSE MOVE 352,2
27:DRAWR-32,0:DRAWR 0,-6:DRAWR 32,0
380 IF YDIR<>0 THEN 410
390 IF M(X+XDIR+XDIR+XDIR+XDIR,Y+(XDIR*-
1))<>32 THEN MOVE 288,237:DRAW 320,227:D
RAW 320,221:DRAW 288,208 ELSE MOVE 288,2
27:DRAWR 32,0:DRAWR 0,-6:DRAWR-32,0
400 IF M(X+XDIR+XDIR+XDIR+XDIR,Y+XDIR)<>
32 THEN MOVE 352,237:DRAW 320,227:DRAW 3
20,221:DRAW 352,208 ELSE MOVE 352,227:DR
AWR-32,0:DRAWR 0,-6:DRAWR 32,0
410 RETURN
420 FOR T=1 TO 24
430 LOCATE 1,1
440 PRINT CHR$(11)
450 INK 1,T
460 NEXT T

```

```

470 FOR T=1 TO 10
480 FOR N=500 TO 700 STEP 10
490 SOUND 129,T,10,15
500 NEXT N:NEXT T
510 MODE 0
520 LOCATE 4,10:PEN 7:PRINT"NECESITASTE"
530 LOCATE 4,12:PEN 4:PRINT MOV;"_MOVIMI
ENTOS"
540 PEN 1
550 FOR T=1 TO 3000:NEXT T:GOTO 640
560 CLS:PRINT"_[C].....CONTINUA
R"
570 PRINT"_[P].....PARAR"
580 A$=INKEY$:IF A$=""THEN 580
590 IF A$="C"OR A$="c"THEN GOSUB 120:GOT
O 30
600 IF A$="P"OR A$="p"THEN RUN
610 GOTO 580

```

El jugador escapa del laberinto

```

620 :
630 DIM M(32,24)
640 MOV=0
650 X=16
660 Y=23
670 XDIR=0
680 YDIR=-1
690 MODE 1
700 INK 0,0
710 INK 1,24
720 BORDER 0
730 PRINT"_DEFINIR_LABERINTO?_(S/N)"
740 A$=INKEY$:IF A$<>"N"AND A$<>"S"AND A
$<>"s"AND A$<>"n"THEN 740
750 IF A$="N"OR A$="n"THEN 30
760 CLS
770 FOR T=1 TO 24
780 FOR N=1 TO 32
790 M(N,T)=233
800 NEXT N
810 NEXT T
820 M(16,23)=32

```

```

830 M(16,2)=32
840 A=16
850 FOR T=2 TO 31:M(T,1)=154:M(T,24)=154
: NEXT T
860 FOR T=2 TO 23:M(1,T)=149:M(32,T)=149
: NEXT T
870 M(1,1)=194:M(32,1)=195:M(1,24)=193:M
(32,24)=192
880 B=23
890 GOSUB 1060
900 LOCATE A,B
910 FOR I=1 TO 50:NEXT
920 PRINT "*"
930 LOCATE A,B
940 PRINT CHR$(M(A,B))
950 A=A+(INKEY(8)>-1)-(INKEY(1)>-1)
960 IF A>31 THEN A=31
970 IF A<2 THEN A=2
980 B=B+(INKEY(0)>-1)-(INKEY(2)>-1)
990 IF B>23 THEN B=23
1000 IF B<2 THEN B=2
1010 IF INKEY(9)>-1 THEN IF M(A,B)=233 T
HEN M(A,B)=32 ELSE M(A,B)=233
1020 IF INKEY(67)>-1 THEN FOR T=0 TO 24:
INK 1,T:SOUND 2,T*2,10,15:NEXT T:RETURN
1030 SOUND 1,1,1,15
1040 GOTO 900

```

Inicialización

```

1050 :
1060 FOR T=1 TO 24
1070 FOR N=1 TO 32
1080 LOCATE N,T
1090 PRINT CHR$(M(N,T))
1100 NEXT N
1110 NEXT T
1120 RETURN

```

Tablas de comprobación

10 = 331	390 = 9487	770 = 922
20 = 0	400 = 9188	780 = 924
30 = 138	410 = 201	790 = 1284
40 = 3485	420 = 922	800 = 395
50 = 3737	430 = 243	810 = 401
60 = 3729	440 = 566	820 = 728
70 = 3486	450 = 446	830 = 696
80 = 17309	460 = 401	840 = 486
90 = 1412	470 = 908	850 = 3370
100 = 230	480 = 1604	860 = 3360
110 = 0	490 = 790	870 = 3477
120 = 138	500 = 797	880 = 494
130 = 5064	510 = 187	890 = 229
140 = 1304	520 = 1623	900 = 626
150 = 6410	530 = 2162	910 = 1210
160 = 7825	540 = 202	920 = 301
170 = 1335	550 = 1817	930 = 626
180 = 6995	560 = 2016	940 = 1286
190 = 7236	570 = 1757	950 = 3027
200 = 6666	580 = 1757	960 = 1397
210 = 1374	590 = 2510	970 = 1320
220 = 7779	600 = 2144	980 = 3022
230 = 8376	610 = 260	990 = 1383
240 = 1150	620 = 0	1000 = 1322
250 = 8363	630 = 628	1010 = 5337
260 = 7786	640 = 636	1020 = 4219
270 = 8057	650 = 509	1030 = 421
280 = 1189	660 = 517	1040 = 325
290 = 8617	670 = 705	1050 = 0
300 = 9114	680 = 952	1060 = 922
310 = 1220	690 = 188	1070 = 924
320 = 9200	700 = 234	1080 = 657
330 = 8523	710 = 270	1090 = 1317
340 = 9384	720 = 144	1100 = 395
350 = 1259	730 = 1892	1110 = 401
360 = 8905	740 = 4734	1120 = 201
370 = 9780	750 = 1998	
380 = 1290	760 = 138	TOTAL = 291134