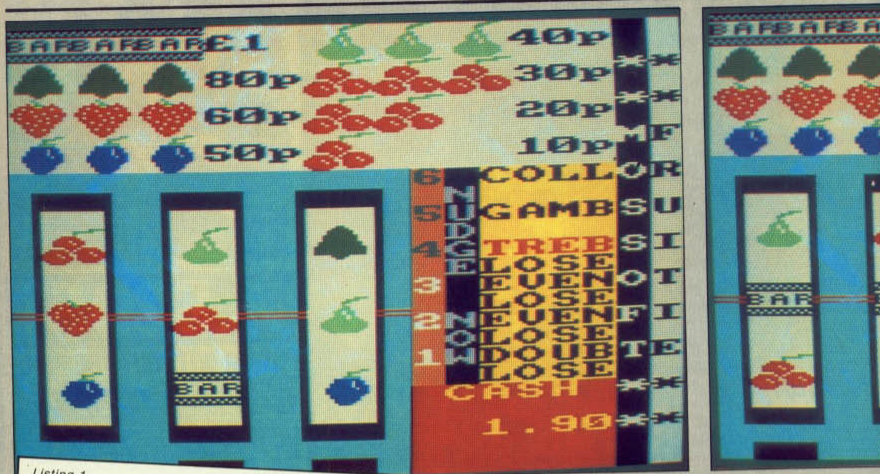
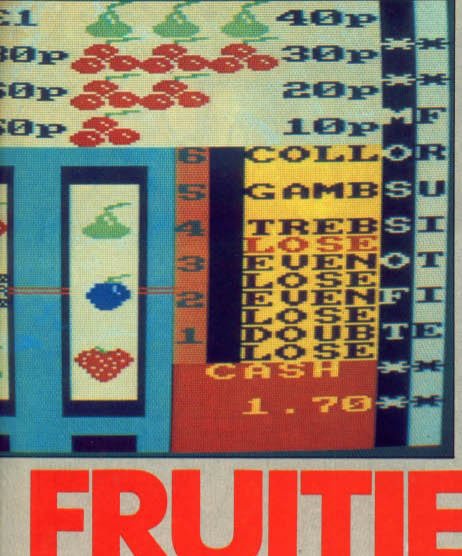
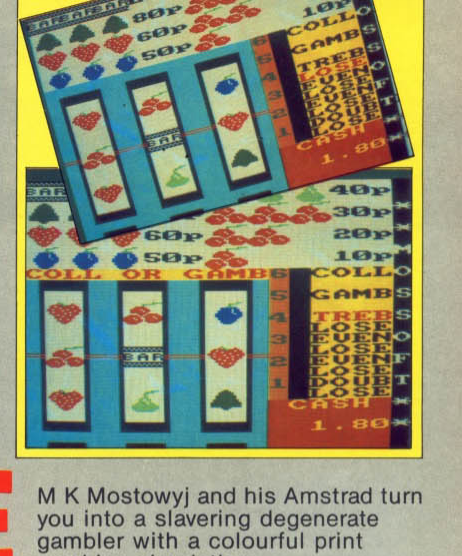


Listing 1.

```
10 MEMORY 29223
20 CLS:PRINT"PLEASE WAIT,   LOADING BYTES!"
30 LOAD""
40 LOAD""
50 RANDOMIZE TIME
60 ON ERROR GOTO 1600
70 ENV 1,1,15,1,14,-1,5,5,0,1
80 DIM G$(3):G$(1)="TREB":G$(2)="LOSE":G$(3)="EVEN":G$(4)=G$(2):G$(5)=G$(3):G$(6
)=G$(2):G$(7)="DOUB":G$(8)=G$(2)
90 r1$="PLEASE":G$=""
100 r2$="CPSLRECSPA"
110 r3$="SLPELSPCSNE"
120 T$=CHR$(209)+CHR$(143)+CHR$(143)+CHR$(211)+CHR$(209)+CHR$(143)+CHR$(143)+CHR
$(211)+CHR$(209)+CHR$(143)+CHR$(143)+CHR$(211)
130 R1=1:R2=1:FLAG=0:V%=1:W%=0
140 GOSUB 990
150 '*** MAIN LOOP ***'
160 POP#0:P1=1:P2=1:P3=1
170 IF SC<40 THEN GOTO 1510
180 FOR V=1 TO 3:PEN#V:3:PAPER#V,15:CLS#V:NEXT
190 IF HH=1 THEN GOSUB 790:GOTO 220
200 WHILE INKEY$<>"":WEND
210 WHILE INKEY(47)=-1:WEND
220 SC=SC-10:LOCATE#1,1:3:PRINT#6,USING"###.##";SC/100
230 IF F1=1 THEN A=(INT(RND#10)+5) ELSE A=0
240 IF F2=1 THEN B=(INT(RND#10)+10) ELSE B=0
250 IF F3=1 THEN C=(INT(RND#10)+20) ELSE C=0
260 GOSUB 900
270 HH=0
280 IF RND>0.7 AND POP=0 THEN GOSUB 620
290 IF RND<0.3 THEN HH=1:SOUND 1,30,0,0,1
300 GOTO 160
310 '*** PAYOUT ***'
320 LOCATE 1,1
330 POP=INT(R1#/R1#,R1=1.1)+MID#(R2#,R2=1.1)+MID#(R3#,R3=1.1)
340 IF POP="EEE" THEN S=80:GOTO 430
350 IF POP="CCC" THEN S=30:GOTO 430
360 IF POP="AAA" THEN S=100:GOTO 430
370 IF POP="SSS" THEN S=60:GOTO 430
380 IF POP="LLL" THEN S=50:GOTO 430
390 IF POP="PPP" THEN S=40:GOTO 430
400 IF LEFT$(POP,2)="CC" THEN S=20:GOTO 430
410 IF LEFT$(POP,1)="C" THEN S=10:GOTO 430
420 RETURN
430 LOCATE#4,1:1:PEN#4,7:PRINT#4,"6 5 4 3 2 1 ";:CLS#5
440 LOCATE 1,9:PEN 3:PAPER 1:PRINT"COLL OR GAMB";
450 WHILE INKEY$="":WEND
460 IF INKEY(52)=-1 THEN LOCATE 1,9:PAPER 2:PRINT"                ";:GOTO 490
470 IF INKEY(62)=-1 THEN LOCATE 1,9:PAPER 2:PRINT"                ";:GOTO 530
480 GOTO 450
490 WHILE INKEY(18)<>-1:WEND
500 WHILE INKEY(18)=-1
510 V%=V%+1:MOD(3):W%=W%+1) MOD(8)
520 LOCATE#7,1,V%+1:PEN#7,15:PRINT#7,G#(W%+1)
530 SOUND 1,1234+(V%#10),2
550 WEND
560 IF W%+1=2 OR W%+1=6 OR W%+1=8 OR W%+1=8 THEN S=0
570 IF W%+1=7 THEN S=S#2
580 IF W%+1=1 THEN S=S#3
590 SC=SC+S
600 POP=1:LOCATE#1,1:3:PRINT#6,USING"###.##";SC/100:RETURN
610 '*** NUDGE ***'
620 POP=0:NU=INT(RND#6)+1
630 FOR V=1 TO NU:LOCATE#4,1,13-(V#2):PRINT#4,USING"#";V;:NEXT PEN#4,7
640 PRINT#5," NUDGE NOW!
650 WHILE NU>0 AND POP=0
660 WHILE INKEY$<>"":WEND
670 IF INKEY(64)=-1 THEN A=1 B=0 C=0:GOTO 710
680 IF INKEY(65)=-1 THEN A=0 B=1 C=0 GOTO 710
690 IF INKEY(57)=-1 THEN A=0 B=0 C=1 GOTO 710
700 GOTO 660
710 SOUND 1,30,5 GOSUB 900
720 IF NU>0 THEN LOCATE#4,1,13-(NU#2):PRINT#4,USING"#";NU;
730 NU=NU-1
740 WEND
750 LOCATE#4,1:1 PEN#4,7 PRINT#4,"6 5 4 3 2 1 ";
760 CLS#5
770 RETURN
780 '*** HOLD ***'
790 FOR V=1 TO 3:PEN#V,3:PAPER#V,15:CLS#V:NEXT
800 LOCATE 1,9:PEN 3:PAPER 1:PRINT"   HOLD   ";
810 F1=1:F2=1:F3=1
820 WHILE INKEY$<>"":WEND
830 IF INKEY(64)=-1 THEN F1=-F1 PRINT#1,CHR$(24);CLS#1
840 IF INKEY(65)=-1 THEN F2=-F2:PRINT#2,CHR$(24);CLS#2
850 IF INKEY(57)=-1 THEN F3=-F3 PRINT#3,CHR$(24);CLS#3
860 IF INKEY(47)=-1 THEN LOCATE 1,9:PAPER 2:PRINT"                ";:RETURN
870 WHILE INKEY$="":WEND
880 GOTO 830
890 '*** SPIN REELS ***'
900 R1=R1+A:I=MOD(10)
910 R2=R2+B:I=MOD(10)
920 R3=R3+C:I=MOD(10)
930 CALL &9C52,A#8,B#8,C#8
940 GOSUB 320
950 RETURN
960 '*** RESET GAMBLE ***'
970 PEN#7,1:PAPER#7,1:PRINT#7,"TREBLOSEEVENLOSEEVENLOSEDOUBLOSE";:LOCATE#7,1
,1:PEN#7,3 PRINT#7,"TREB";
980 RETURN
990 '*** PRINT SCREEN ***'
1000 FOR v=0 TO 15 INK v,0:NEXT:BORDER 0
1010 MODE 0
1020 WINDOW#1,1,4,11,22
1030 WINDOW#2,5,9,11,22
1040 WINDOW#3,9,12,11,22
1050 WINDOW#4,1,1,2,9:PAPER#4,2:PEN#4,5:CLS#4
1060 WINDOW#5,1,10,1,8:PAPER#5,4:CLS#5
1070 WINDOW#6,19,19,1,25:PAPER#6,5:PEN#6,4:CLS#6
1080 WINDOW#7,20,20,1,25:PAPER#7,4:PEN#7,5:CLS#7
1090 PRINT#6," *** M O S S O F T *** "
1100 PRINT#6," * * * P U I T T E * * * "
1110 FOR v=1 TO 3
1120 PEN#v,3:PAPER#v,2
1130 FOR w=1 TO 12
1140 PRINT#v,CHR$(209);" ";CHR$(211);
1150 NEXT:NEXT
1160 LOCATE#4,1:2 PRINT#4,t$;
1170 LOCATE#6,1:3 PRINT#6,t$;
1180 MODE 0:142 DRAW 382,0:3 MOVE 0,146 DRAW 382,0
1190 IF FLAG=1 THEN CALL &9C52,1,1,1:FLAG=1 ELSE CALL &9C52,0,0,0:R1=R1+1 R2=R2+
1 R3=R3+1
1200 CALL &B84E
1210 SC=200
1220 WINDOW#1,2,3,25,25
1230 WINDOW#2,6,7,25,25
1240 WINDOW#3,10,11,25,25
1250 WINDOW#4,13,13,9,20:PAPER#4,11 PEN#4,7
1260 WINDOW#5,14,14,9,20:PEN#5,14:PAPER#5,5 CLS#5
1270 WINDOW#6,18,18,21,25:PEN#6,1:PAPER#6,3:CLS#6
1280 WINDOW#7,15,18,9,20:PAPER#7,1:PEN#7,3:CLS#6
1290 WINDOW#8,15,15,18,13:20 GOSUB 970
1300 PRINT#4,"6 5 4 3 2 1 ";
1310 PRINT#6," CASH  LOCATE#6,1,3:PRINT#6,USING"###.##";SC/100;
1320 RESTORE 1340:CLS
1330 FOR v=1 TO 21
1340 READ t,s
1350 CALL &9C6A,t,s+64
1360 NEXT
1370 ORIGIN 0,0,500,502,350,348:CLG 4
1380 ORIGIN 0,0,0,640,400,0
1390 PLOT 194,390,5:FOR n=1 TO 4:
1400 FOR v=1 TO 3:READ n$:MOVER -96,-32:PRINT n$;:NEXT
1410 PLOT 482,390:PRINT"WIN!"
1420 FOR v=1 TO 3:READ n$:MOVER -96,-32:PRINT n$;:NEXT
1430 RETURN
1440 FOR v=0 TO 13:READ a:INK V,a:NEXT:INK 14,0,20:INK 15,3 BORDER 10
1450 RETURN
1460 DATA &c000,30256,&c008,30256,&c010,30256,&c0a0,30760,&c0a8,30769,&c0b0,3076
0,&c0c0,29232,&c0cc,29232,&c0d4,29232
1470 DATA &c1e0,29744,&c1e8,29744,&c1f0,29744,&c824,30000,&c82c,30000,&c834,3000
0,&c83c,30000
1480 DATA &c8c0,29232,&c8cc,29232,&c8d4,29232
1490 DATA 0,9,24,20,5,26,0,2,13,10,12,14,16,18,22
1500 CALL &BC82 CALL &B84E MODE 1
1510 LOCATE 7,5 PRINT"YOU'VE LOST ALL YOUR MONEY!!!"
1520 PEN 2:LOCATE 13,9:PRINT"PRESS ANY KEY TO"
1530 PEN 2:LOCATE 16,11 PRINT"TRY AGAIN."
1540 WHILE INKEY$<>"":WEND
1570 CALL &BB18
1580 GOTO 140
1590 '*** ERROR TRAP **'
1600 CALL &BC82 CALL &B84E MODE 1 PRINT"ERROR ";ERR;" IN LINE ";ERL:END
```





FRUITIE

M K Mostowyj and his Amstrad turn you into a slavering degenerate gambler with a colourful print machine simulation.

Table 1.

Keys	Use
1:2:3	These are used to control holds and nudges for the three reels. When used for holds the keys work on a toggle on/off basis, so if you accidentally hold the wrong reel, press the same key and it will be released.
Space	This starts the reels spinning — assuming you still have money.
C:G	Used to choose either Collect or Gamble when you have a winning line.
Large Enter	If gamble is chosen this key is used to stop the flashing symbols on either Even, Doub, Treb or Lose. Your winnings are then adjusted accordingly.

FRUITIE IS A simulation of a penny arcade fruit machine. It includes all the usual features such as hold, nudge, gamble etc. The program is in two parts. Listing 1 is the Basic program that controls the above features plus pay-outs etc. Listing 2 is slightly over 2K in length but in fact pokes over 10K of data into memory. This data includes 9.9K for the reel graphics — 3.3K for each reel — and 353 bytes of machine code that are used to spin the reels and print the payout lines at the top of the screen.

Although listing 2 is discarded once it has poked the relevant data, it would be wise to save it on a separate tape in case of any mistakes you may make when entering the data lines. To get the program running is very simple, first of all enter listing 1 and save it to tape.

Do not run it at this stage as the machine code calls within it may cause the computer to crash. Secondly, enter listing 2 and, after saving it on a separate tape in case of mistakes, run it. If all is well, after a short delay the reel symbols should start appearing one by one in the top left corner of the screen.

After 39 of these have appeared and have been poked into memory, the data for the machine code is poked in, the screen will then clear and the save message will appear. The two sections of memory that are about to be saved should be saved directly after listing 1, so make sure the tape is wound to the correct position before inserting it and proceeding to save the bytes.

Once this is completed reset the computer, rewind the tape and run it. If all is well listing 1 should auto load the other two parts.

Listing 2.

```
10 SYMBOL AFTER 224:DIM a(8):FOR u=1 TO 8
20 READ a$:a(u)=VAL("&"+a$):NEXT
30 SYMBOL 32,a(1),a(2),a(3),a(4),a(5),a(6),a(7),a(8):PAPER 4
40 de=25232:MODE 0:WINDOW#0,1,2,1,4:PRINT CHR$(22);CHR$(1):PAPER 4
50 FOR u=1 TO 39:READ a:ON a GOSUB 120,140,160,180,200,220:NEXT
60 MODE 1:PEN 1
70 FOR a=40000 TO 40352:READ b$:POKE a,VAL("&"+b$):NEXT
80 SAVE "CODE":b=25232:9984:SAVE "!CODE1":b,40000,353
90 END
100 a=&C000:x=2:FOR a=1 TO 4:FOR b=1 TO 8:FOR c=1 TO 6
110 POKE de,PEEK(a+2)*z+PEEK(a):de=de+1:NEXT:z=z+2048:NEXT:z=x+80:x=z:NEXT:RETURN
120 CLS:PEN 9:LOCATE 1,2:PRINT CHR$(226);CHR$(227);CHR$(228);CHR$(229);
130 GOSUB 100:RETURN
140 CLS:PEN 3:LOCATE 1,2:PRINT CHR$(230);CHR$(231);CHR$(232);CHR$(233):LOCATE 2
,2:PEN 12:PRINT CHR$(234);
150 GOSUB 100:RETURN
160 CLS:PEN 5:LOCATE 1,2:PRINT CHR$(235);CHR$(236);CHR$(237);CHR$(238);
170 GOSUB 100:RETURN
180 CLS:PEN 3:LOCATE 1,2:PRINT CHR$(239);CHR$(240);CHR$(241);CHR$(242);:PEN 12:L
OCATE 1,2:PRINT CHR$(224);CHR$(225);
190 GOSUB 100:RETURN
200 CLS:PEN 6:LOCATE 1,2:PRINT CHR$(244);CHR$(245);CHR$(246);CHR$(247);:PEN 12:L
OCATE 2,2:PRINT CHR$(248);
210 GOSUB 100:RETURN
220 CLS:PEN 13:LOCATE 1,2:PRINT CHR$(249);CHR$(250);CHR$(251);CHR$(252);:PEN 12:
LOCATE 2,2:PRINT CHR$(253);
230 GOSUB 100:RETURN
240 DATA 02,01,01,00,00,00,00,00,00,00,00,00,00,00,00,00
250 DATA 01,03,07,07,0F,0F,0F,1F,0F,00,C0,E0,E0,F8,F8,F0,F8,FC,FC,FC,FC,C0,00,00
260 DATA F8,FC,FC,FC,FC,C0,00,00,00,00,00,00,07,0F,1E,1F,1F,1F,00,00,00,00,00,00
270 DATA 03,3D,7E,FE,FB,FF,7E,3C,BC,7E,F7,7B,7F,7E,3C,00,0F,F8,80,00,00,00,00,00
280 DATA FF,55,AA,FF,00,E1,92,E3,FF,55,AA,FF,00,8E,49,CE,92,E2,00,FF,55,AA,FF,00
290 DATA 49,49,00,FF,55,AA,FF,00,00,04,1E,3F,3D,0F,7E,2F,00,10,78,EC,FC,BE,F6,DC
300 DATA 3F,1B,0E,0F,05,07,03,01,7C,D6,F0,F8,A0,E0,C0,80,04,02,03,00,00,00,00,01
310 DATA 00,00,00,00,03,03,07,07,00,00,00,00,F0,D0,D0,DC,0F,0F,07,07,03,03,01,00
320 DATA EC,FC,FC,F6,F0,F8,E0,C0,0C,70,40,F0,00,00,00,00,00,00,01,03,03,07,07,0F
330 DATA 00,00,00,00,C0,C0,60,60,03,07,0F,1F,1F,1F,0F,07,A0,B0,F8,FC,FC,FC,F8,F0
340 DATA 1C,70,C0,00,00,00,00,00,00
350 DATA 2:4.5:6.3:2.1:6.5:4.2:4.5:3.6:4.2:1.3:5.4:6.2:3.6:4.1:3.2:6.4.5:1.6
360 DATA 5:4.1:3.2
370 DATA 00,00,00,00,00,00,30,79,24,C3,30,96,34,C3,30,93,44,C3,D0,7E,00,32,44,9C
,D0,7E,02,32,42,9C,D0,CE
380 DATA 04,32,40,9C,3A,40,9C,FE,00,20,40,3C,32,40,3C,06,60,C5,01,00,00,2A,4E,9C
,ED,5E,48,9C,C1,01,00,00,09
390 DATA 46,9C,E1,01,00,00,09,30,04,01,50,C0,09,22,48,9C,C1,10,DE,21,24,C3,22,48
,9C,20,46,9C,11,20,00,AF
400 DATA ED,52,3E,7F,BC,20,09,3E,30,ED,20,04,11,00,0A,19,22,46,9C,3A,42,9C,FE,00
,28,48,3D,32,42,9C,06,00
410 DATA C5,01,00,00,2A,4A,9C,ED,5B,4C,9C,D5,ED,B0,22,4A,9C,E1,01,00,00,09,30,04
,01,50,C0,09,22,4C,9C,C1
420 DATA 10,DE,21,24,C3,22,4C,9C,3A,4A,9C,11,20,03,A7,ED,52,3E,7F,BC,20,09,3E,30
,E0,20,04,11,00,0A,19,22
430 DATA 4A,9C,3A,44,9C,FE,00,20,11,3D,42,9C,FE,00,C2,64,9C,3A,40,9C,FE,00,C2,64
,9C,C9,3E,32,44,9C,06,60
440 DATA C5,01,00,00,2A,4E,9C,ED,5B,50,9C,D5,ED,B0,22,4E,9C,E1,01,00,00,09,30,04
,01,50,C0,09,22,50,9C,C1
450 DATA 10,DE,21,44,C3,22,50,9C,3A,4E,9C,11,20,03,A7,ED,52,3E,8C,BC,20,09,3E,30
,E0,20,04,11,00,00,19,22
460 DATA 4E,9C,C3,64,9C,C9,F0,72,A4,C2,DD,5E,00,DD,66,01,22,66,9C,DD,6E,02,22
,68,9C,06,10,C5,01
470 DATA 00,00,2A,66,9C,ED,5B,68,9C,D5,ED,B0,22,66,9C,E1,01,00,00,09,30,04,01,50
,C0,09,22,68,9C,C1,10,DE,C9
```