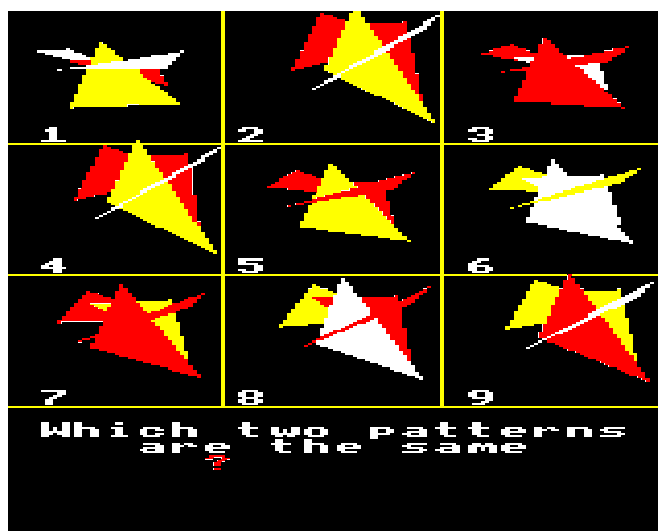


PATTERN PAIRS



If you have tried Odd One Out in this book, then you will find this following puzzle a little more difficult.

There are nine patterns displayed on the screen, in a range of colours, and you have only a few seconds to compare them and nominate the pair, you believe, are a match.

How to play

Identify your pair, note the numbers alongside and key in your answer. You don't have to key in your answer in strict chronological order. Just punch in your numbers and wait. Correct responses will be rewarded with a pleasant little high pitched tune, but wrong answers will

be faced with a low pitched little dirge.

To continue, press Y for Yes and to stop, press N for No, remembering to press RETURN after your response.

A score sheet will appear at the end showing your tries, results, time and average time.

Programming hints

Each of the patterns is slightly different except for the matching pair. This is done by adding a mixture of H1, H2 and H3 to the corners of the triangles in procedure PROC_PATTERN and H1, H2 and H3 will be different for each pattern except the two that are the same.

If you wish to increase the number of patterns which are the same, then a W3 should be assigned. W3 should be a random number between 1 and 9 inclusive and you should check that it is not equal to W1 or W2. Then change W\$ and W1\$ and assign four more values, say, W2\$, W3\$, W4\$ and W5\$ with the string of W1, W2 and W3 arranged in all possible different ways.

Then check for PT to be equal to W1, W2 or W3 in line 720 in procedure PROC_PATTERN to see whether the pattern to be drawn is one of the three identical ones.

Change the input lines 440 to 510 to allow a third number to be keyed in and then check for the six possible values W\$, W1\$ to W5\$.

```

10  REM  PATTERN  PAIRS
20  REM  COPYRIGHT  (C)  G.  LUDINSKI  1983
30  DIM  X(4,3),Y(4,3),C(4)
40  MODE 5
50  NU=0:CR=0
60  TIME=0
70  CLS

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80  NU=NU+1
90  PT=0:PC=0
100 REM
110 REM  DRAW  FRAMEWORK
120 REM
130 GCOL0,2:COLOUR3
140 MOVE426,255:DRAW426,1023
150 MOVE852,255:DRAW852,1023
160 MOVE0,255:DRAW1279,255
170 MOVE0,510:DRAW1279,510
180 MOVE0,765:DRAW1279,765
190 REM
200 REM  GENERATE  SHAPES
210 REM
220 W1=RND(9)
230 W2=RND(9):IF W2=W1 THEN 230
240 W$=STR$(W1)+STR$(W2)
250 W1$=STR$(W2)+STR$(W1)
260 FORI=1TO4
270   C(I)=INT(RND(1)*3+1)
280   FORJ=1TO3
290     X(I,J)=INT(RND(1)*320+30)
300     Y(I,J)=INT(RND(1)*160+30)
310   NEXTJ
320 NEXTI
330 REM
340 REM  DRAW  PATTERNS
350 REM
360 FORJ=765TO255STEP-255
370   FORI=0TO852STEP426
380     PROC_PATTERN(I,J)
390   NEXTI
400 NEXTJ
410 REM
420 REM  QUESTION
430 REM
440 PRINTTAB(1,25)"Which two patterns
are the same":COLOUR1:PRINTTAB(6,27)
"?":VDU19,1,1;0;19,2,3;0;19,3,7;0;
450 I$="":I=0:IC=0
460 I1$=INKEY$(0):IF I1$="" OR I1$<"1"
OR I1$>"9" THEN 460
470 PRINTI1$;:IF IC=0 THEN PRINT" and
";
480 IF IC=0 THEN IC=IC+1:I$=I$+I1$:GOT
O460
490 I$=I$+I1$
500
510 IF I$=W$ OR I$=W1$ THEN COLOUR2:PR
INT'" Yes, you're right!":SOUND1,-15,10
1,30:CR=CR+1:GOTO530
520 PRINT:PRINT"No, ";LEFT$(W$,1);" an
d ";RIGHT$(W$,1);" are the same":SOUND1,
-15,73,10:SOUND1,-15,69,5
530 PRINT:PRINT"Do you want more (Y/N)
";
540 INPUT R$
550 IF R$ <> "N" THEN GOTO 70
560 REM
570 REM  SCORE  SHEET
580 REM
590 CLS
600 PRINT:PRINT"          Pattern Pairs"
610 FORI=1TO9:PRINT:NEXTI
620 PRINT:PRINT"Problems completed = "
;NU
630 TM=INT(TIME/100)
640 PRINT:PRINT"Problems correct = ";C
R
650 PRINT:PRINT"Time taken = ";TM:PRIN

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T "secs"
660 IF CR<>0 THEN PRINT "Time/problem
= ";INT(TM/CR); " secs"
670 GOTO 800
680 :
690 DEFPROC_PATTERN(XD,YD)
700 PT=PT+1
710 PRINTTAB(( (20*XD)/1279)+1,31-(32*Y
D)/1023);PT
720 IF PT=VAL(RIGHT$(W$,1)) OR PT=VAL(
LEFT$(W$,1)) THEN H1=80:H2=80:H3=80:GOTO
740
730 PC=PC+1:H1=PC*10:H2=PC*10:H3=PC*10
740 FORL=1TO4
742 CL=RND(3):IF PT=VAL(RIGHT$(W$,1)
) OR PT=VAL(LEFT$(W$,1)) THEN CL=C(L)
750 GCOL0,CL
760 MOVE (X(L,1)+XD+H1),(Y(L,1)+YD+H
1)
770 MOVE (X(L,2)+XD+H2),(Y(L,2)+YD+H
1)
780 PLOT 85,(X(L,3)+XD+H3),(Y(L,3)+Y
D-INT(H1/2))
790 NEXTL
800 ENDPROC
810 REM END

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