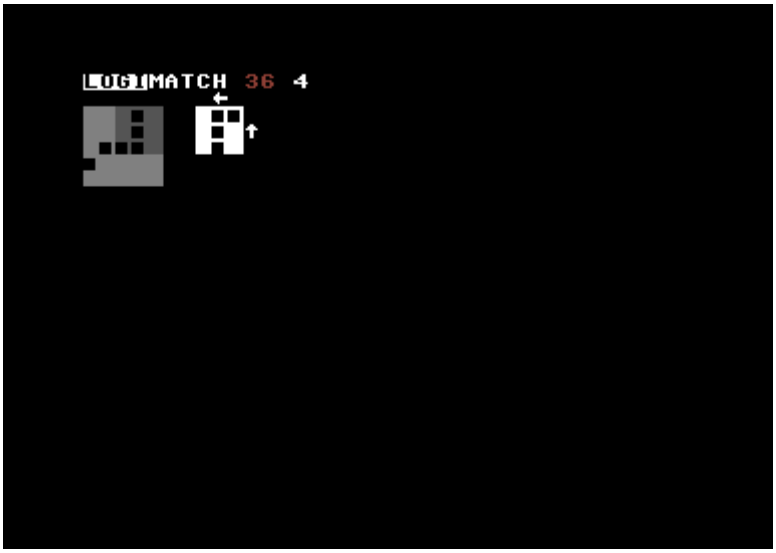
LogiMatch

A game for the Commodore C64.

DESCRIPTION



LogiMatch is a puzzle finder game against the clock. You have one minute to find as many matching QR-Code like shapes as possible. But be aware, the shapes can be mirrored vertically or horizontally or even both. (If a shape is mirrored this is indicated by an arrow to the left or an arrow upwards.)

HOW TO PLAY

Use the cursor keys to move the selecting colour frame. Push enter if you think that you found the match. That's it!

EMULATOR USAGE

Run the program with vice's x64.exe. (You may use drag and drop.)

VARIABLES AND DATA STRUCTURES

Variable	Meaning
s	Screen base memory address
c	Colour base memory address
v()	Vertical move difference (depending on cursor keys)
h()	Horizontal move difference (depending on cursor keys)
t	Colour base memory address for solution field
u	Colour base memory address for play field
z	40 (screen width; just used to save one bye somewhere else)
x, y	Position of player
a, b	Position of randomly chosen solution
h, v	Split horizontally / vertically (1..no, -1..yes)
l	Level reached
p$	String to position the output of points and level
i, j	Used to iterate “rectangles”
w	2 (for minor speedup)
f	5 (for minor speedup)

CODE

```
0?"{white}{clear} {reverse on}logi{reverse off}match":pO53280,0:pO53281,0:s=1064:c=55336:dIv(s):dIh(s):v(145)=-1
1v(17)=1:h(157)=-1:h(29)=1:t=s+9:u=s+2:z=40:w=2:l=0:ti$="235957":p$="{home}{right}{right}{right}{right}{right}{right}{right}{right}{right}{right}{red}"
2x=0:y=0:a=int(rN(0)*3):b=int(rN(0)*3):h=int(rN(0)*1.8)*2-1:v=int(rN(0)*1.8)*2-1
3f=5:fOi=1tof:fOj=1tof:pOs+i*z+j,int(rN(.)+.5)*80+80:nE:nE:l=l+1:pO1073,31-(v>0)
4fOi=-1to1:fOj=-1to1:pOs+9+(i+2)*z+j,pE(s+w+(w+a+i*h)*z+b+j*v):nE:nE
5fOi=1tof:fOj=1tof:pOc+i*z+j,12+(aB(i-w-y)<waNaB(j-w-x)<w):nE:nE:pO1155,31+h
6gEd$:?p$;rI(ti$,2)"{white}"l:on-(mid$(ti$,4,1)="1")gO9:on-(d$="")gO6:on-(d$<>"{return}")gO8
7fOi=-1to1:fOj=-1to1:on-(pE(t+(i*h+2)*z+j*v)<>pE(u+x+(2+i+y)*40+j))gO6:nE:nE:gO2
8x=x+h(aS(d$)):y=y+v(aS(d$)):x=x-int(x/3):y=y-int(y/3):gO5:rem1-liner compo pls!
9?"{down}{down}{down}{down}{down}{down}{down}time up!{return}{return}you reached level";l:input"{return}try again";x$:ifx$="y"thenrun
```

CODE DESCRIPTION

- Line 0 clears the screen and shows the name of the game. It initializes many values.
- Line 1 and 2 also initialize many values. The coordinates of the solution are calculated and if the solution shall be mirrored (vertically (v) or horizontally (h)) or not.
- Line 3 fills the field with random shapes. Either empty or square (80 or 160). V-information (array left) is shown.
- Line 4 copies the solution.
- Line 5 sets the color frame, so you can see where you currently are. H-information (arrow up) is shown.
- Line 6 ready the users input (direction) and also checks the time.
- Line 7 checks if the solution is correct. If yes, you reach the next level.

- Line 8 moves the position of the selection.
- Line 9: Game over! Wanna try again?

LINE LENGTHS