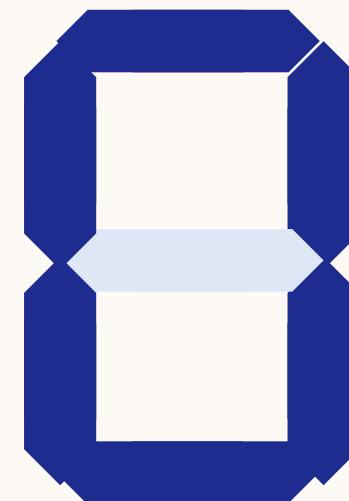


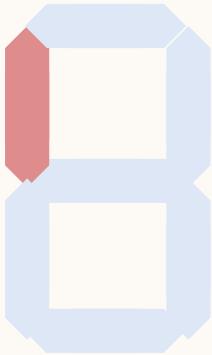
7-SEGMENT HEX DISPLAY

Create a circuit that will take a 4-bit binary input and output the representation in hexadecimal, using a 7-segment display...



8 8 8 8 8 8 8 8

8 8 8 8 8 8 8 8



a = bit 3 (MSB)

b = bit 2

c = bit 1

d = bit 0 (LSB)

0 = off

1 = on

a	b	c	d	top left
0	0	0	0	1
0	0	0	1	0
0	0	1	0	0
0	0	1	1	0
0	1	0	0	1
0	1	0	1	1
0	1	1	0	1
0	1	1	1	0
1	0	0	0	1
1	0	0	1	1
1	0	1	0	1
1	0	1	1	1
1	1	0	0	1
1	1	0	1	0
1	1	1	0	1
1	1	1	1	1

$ab \backslash cd$	00	01	11	10
00	1	0	0	0
01	1	1	0	1
11	1	0	1	1
10	1	1	1	1

$$(\neg c \wedge \neg d) \vee (a \wedge \neg b) \vee (b \wedge \neg d) \vee (a \wedge c) \vee (\neg a \wedge b \wedge \neg c)$$