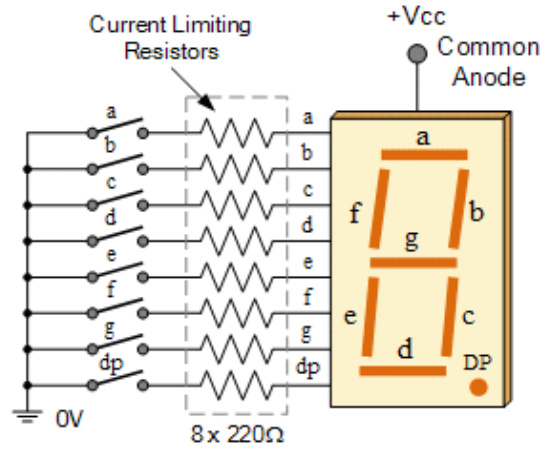


# Decoder BCD

B3 B2 B1 B0	A B C D E F G
0000	0000001
0001	1001111
0010	0010010
0011	0000110
0100	1001100
0101	0100100
0110	0100000
0111	0001111
1000	0000000
1001	0000100



## Expresión Booleana

$$A = B_0 + B_2 + B_1B_3 + B_1'B_3'$$

$$B = B_1' + B_2'B_3' + B_2B_3$$

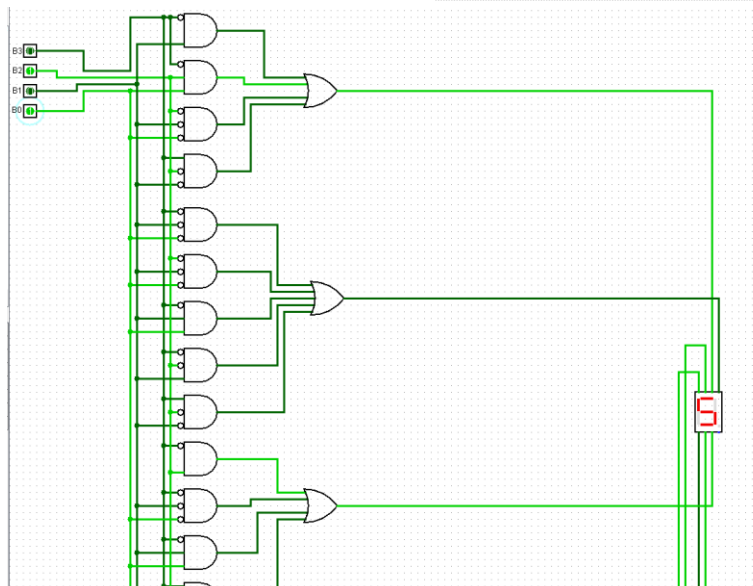
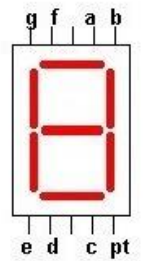
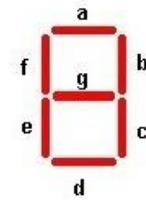
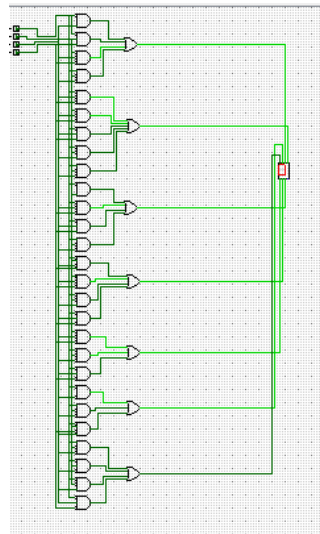
$$C = B_1 + B_2' + B_3$$

$$D = B_1'B_3' + B_2B_3' + B_1B_2'B_3 + B_1'B_2 + B_0$$

$$E = B_1'B_3' + B_2B_3'$$

$$F = B_0 + B_2'B_3' + B_1B_2' + B_1B_3'$$

$$G = B_0 + B_1B_2' + B_1'B_2 + B_2B_3'$$



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Controlador

	Q3	Q2	Q1	Q0		Q3	Q2	Q1	Q0		J3	K3	J2	K2	J1	K1	J0	K0
0	0	0	0	0		1	1	1	0		1	X	1	X	1	X	0	X
7	0	1	1	1		1	1	1	0		1	X	X	0	X	0	X	1
8	1	0	0	0		X	X	X	X		X	X	X	X	X	X	X	X
9	1	0	0	1		X	X	X	X		X	X	X	X	X	X	X	X
10	1	0	1	0		X	X	X	X		X	X	X	X	X	X	X	X
11	1	0	1	1		0	1	1	1		X	1	1	X	X	0	X	0
12	1	1	0	0		X	X	X	X		X	X	X	X	X	X	X	X
13	1	1	0	1		1	0	1	1		X	0	X	1	1	X	X	0
14	1	1	1	0		1	1	0	1		X	0	X	0	X	1	1	X
15	1	1	1	1		X	X	X	X		X	X	X	X	X	X	X	X

J3= 1

K3= Q2N

J2= 1

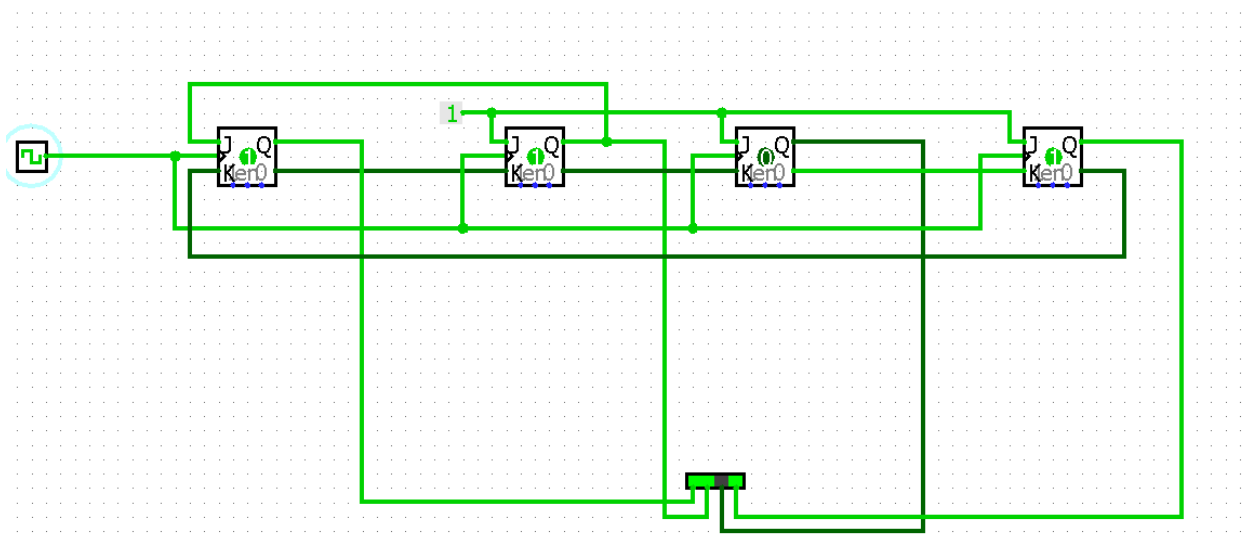
K2= Q1N

J1=1

K1=Q0N

J0=Q1

K0=Q3N



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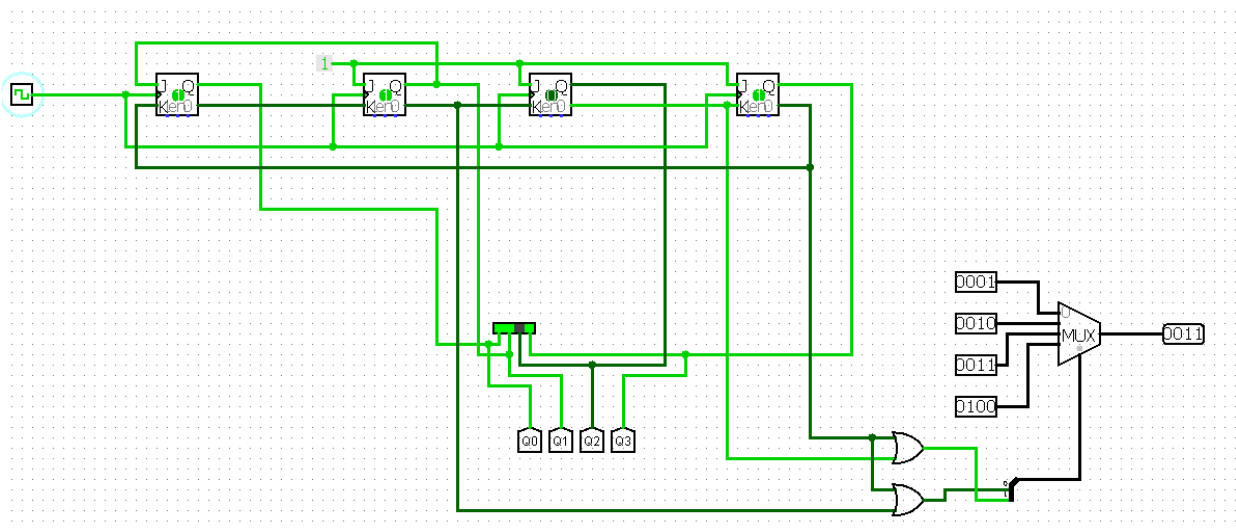
PRÁCTICA 4

### Mux Para pasar digitos

	Q3	Q2	Q1	Q0		A	B
7	0	1	1	1		1	1
11	1	0	1	1		1	0
13	1	1	0	1		0	1
14	1	1	1	0		0	0

$A = Q_3N \text{ OR } Q_2N$

$B = Q_3N \text{ OR } Q_1N$



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PRÁCTICA 4

### Diseño Final

