Ignacio Palos Reynoso

Propedéutico : Tarea 1

Ejercicios P.26

- Convertir de base 2 a base 10

$(10001110)_2$ = 128 + 8 + 4 + 2 = **142**

$(01011100)_2$ = 64 + 16 + 8 + 4 = **92**

- Convertir de base 10 a base 2

$(254)_{10}$ = 128 + 64 + 32 + 16 + 8 + 4 + 2 = $(1111110)_2$

$(341)_{10}$ = 256 + 64 + 16 + 4 + 1 = $(101010101)_2$

- Convertir de binario a hexadecimal

$(1001\ 0111\ 1001\ 1101)_2 = (9000)_{16} + (700)_{16} + (90)_{16} + (D)_{16} = (979D)_{16}$

$(1110\ 0110\ 1010\ 0001)_2 = (E6A1)_{16}$

- Convertir de hexadecimal a binario

$0xAF35 = (1010\ 1111\ 0011\ 0101)_2$

$(48D2)_{16} = (0100\ 1000\ 1101\ 0010)_2$

- Realice 2 corrimientos a la izquierda de $(1001\ 0111\ 1001\ 1101)_2$ y una rotación a la derecha de $(1110\ 0110\ 1010\ 0001)_2$ y realice la operación lógica AND

A = $(0101\ 1110\ 0111\ 0100)_2$

B = $(1111\ 0011\ 0101\ 0000)_2$

A AND B = $(0101\ 0010\ 0101\ 0000)_2$

Decodificador BCD

$a = BD + CD + \overline{\overline{BD}} + A$

$b = \overline{\overline{CD}} + \overline{B} + CD + A$

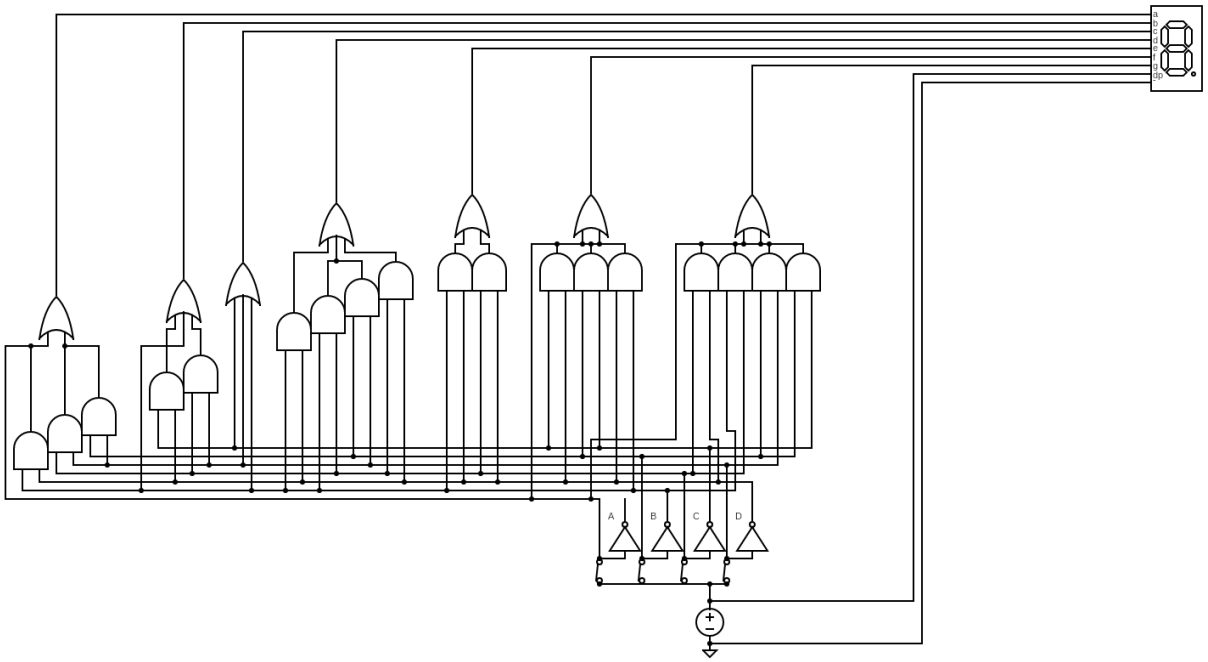
$c = \overline{C} + D + B$

$d = \overline{\overline{BD}} + \overline{B}C + \overline{C}BD + C\overline{D}$

$$e = \overline{\overline{BD} + C\overline{D} + A\overline{D}}$$

$$f = \overline{\overline{CD} + B\overline{C} + B\overline{D} + A}$$

$$g = C\overline{D} + \overline{B}C + B\overline{D} + B\overline{C} + A$$



Ejercicio P.106

Completar la tabla siguiente

Q(t-1)	Q(t)	J	K	S	R	D	T
0	0	0	X	0	X	0	0
0	1	1	X	1	0	1	1
1	0	X	1	0	1	0	1
1	1	X	0	X	0	1	0