

Laboratorio 4

Ejercicio 1

Tabla 1

$\backslash AB$	00	01	11	10
C	0	1	1	0
0	0	1	0	1
1	0	0	1	1

$AC + AB + \bar{A}C$

Tabla 2

$\backslash AB$	00	01	11	10
C	0	1	0	0
0	1	0	0	1
1	0	0	1	1

B

Tabla 3

$\backslash AB$	00	01	11	10
C	0	1	0	0
0	0	0	1	0
1	1	1	0	0
10	0	1	0	1

$$A\bar{B}\bar{C}\bar{D} + AB\bar{C}\bar{D} + \bar{A}B\bar{C}\bar{D} + \bar{A}\bar{B}C\bar{D} + \bar{A}\bar{B}C\bar{D} + \bar{A}B\bar{C}D + \bar{A}B\bar{C}D + \bar{A}B\bar{C}D + \bar{A}B\bar{C}D$$

Tabla 4

$\backslash AB$	00	01	11	10
C	0	1	1	0
0	x	0	1	1
01	x	x	1	0
11	0	x	1	1
10	x	0	x	x

$$A\bar{B} + AC + A\bar{D}$$

Ejercicio 2

$$1) Y = ABC\bar{D} + A\bar{B}C\bar{D} + (\bar{A} + \bar{B} + \bar{C} + \bar{D})$$

$\backslash AB$	00	01	11	10
C	0	1	1	1
0	1	0	1	1
01	0	0	1	1
11	0	0	0	1
10	0	0	1	1

$$A\bar{B} + \bar{A}\bar{C} + \bar{A}\bar{D} + \bar{B}C\bar{D}$$

A	B	C	D	Y
0	0	0	0	1
0	0	0	1	0
0	0	1	0	0
0	0	1	1	0
0	1	x	x	0
1	0	x	x	1
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	0

1)

A	B	C	D	Y
0	0	0	0	1
0	0	0	1	0
0	0	1	0	0
0	0	1	1	0
0	1	0	0	0
0	1	0	1	0
0	1	1	0	0
0	1	1	1	1
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	1
1	1	1	0	1
1	1	1	1	0

$$2) Y = ABC + \bar{B} \cdot C + BC$$

A	B	C	Y
0	0	0	1
0	0	1	1
0	1	0	0
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	0
1	1	1	1

0	0	0	1
0	1	0	0
1	1	1	1

A	B	C	Y
0	0	x	1
x	1	0	0
x	1	1	1
1	0	x	1

$$C + \bar{B}$$

3) $(A+B+C \cdot D) + AD + B$

A	B	C	D	Y
0	0	0	0	0
0	0	0	1	1
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	1
1	0	0	0	0
1	0	0	1	1
1	0	1	0	0
1	0	1	1	1
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1

A B	00	01	11	10
00	0	1	1	0
01	1	1	1	1
11	0	1	1	1
10	0	1	1	0

$B + CD + AD$

A	B	C	D	Y
0	0	0	0	0
0	0	0	1	1
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	1
1	0	0	0	0
1	0	0	1	1
1	0	1	0	0
1	0	1	1	1
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1

4) $Y = B \cdot C + A \cdot B \cdot \bar{C} + B \cdot \bar{C}$

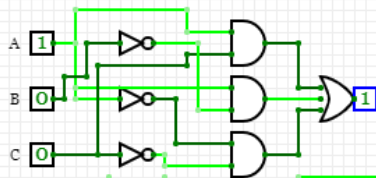
A	B	C	D
0	0	0	1
0	0	1	0
0	1	0	1
0	1	1	1
1	0	0	0
1	0	1	0
1	1	0	1
1	1	1	1

A B	00	01	11	10
00	1	1	1	0
10	0	1	1	0

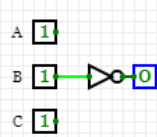
$\bar{A}C + B$

A	B	C	Y
0	0	0	1
0	0	1	0
0	1	0	1
0	1	1	1
1	0	0	0
1	0	1	0
1	1	0	1
1	1	1	1

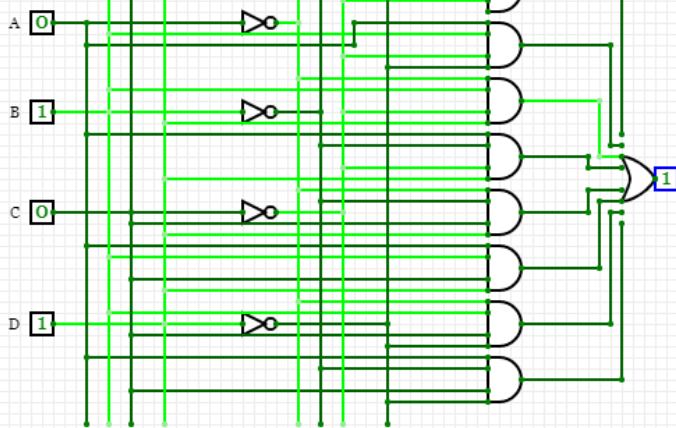
EJERCICIO 1, TABLA 1



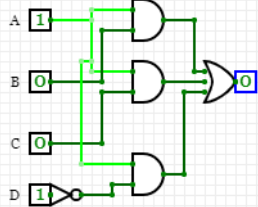
EJERCICIO 1, TABLA 2



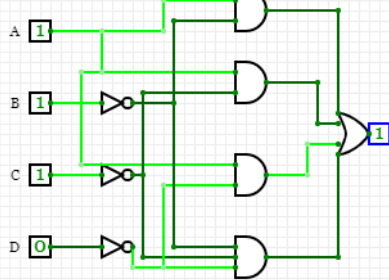
EJERCICIO 1T3



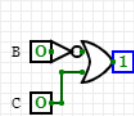
EJERCICIO 1 T4



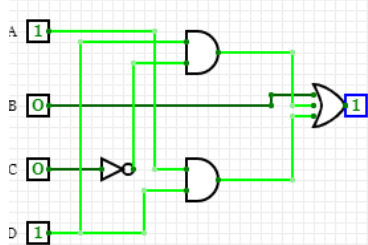
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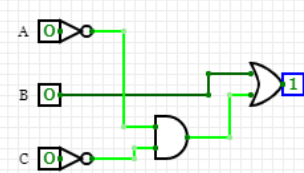
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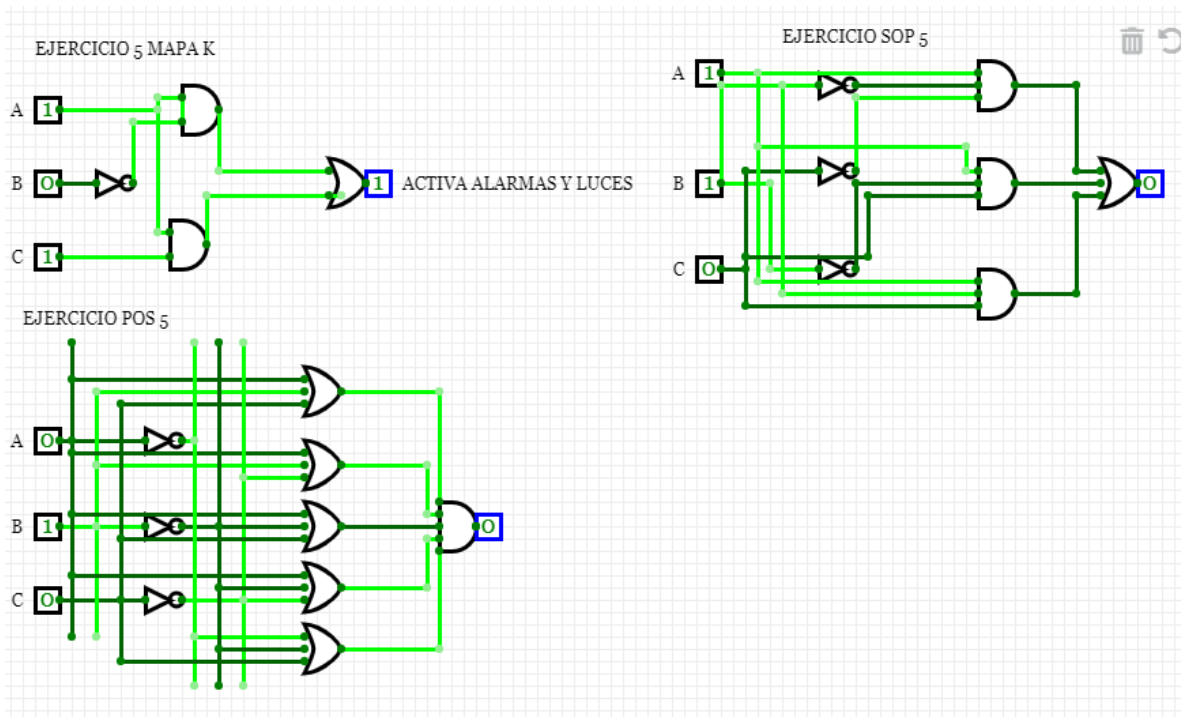


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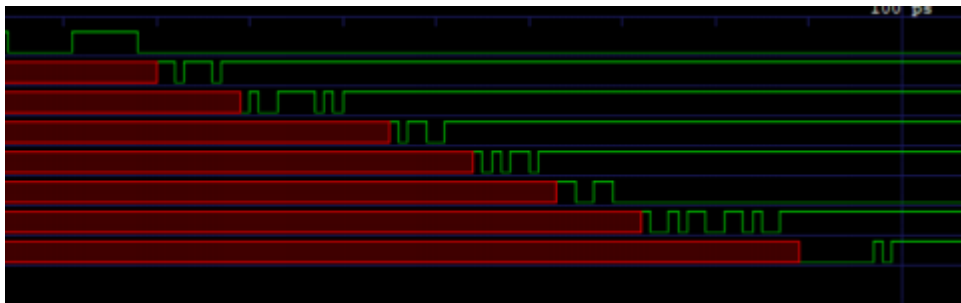


EJERCICIO 2 T4

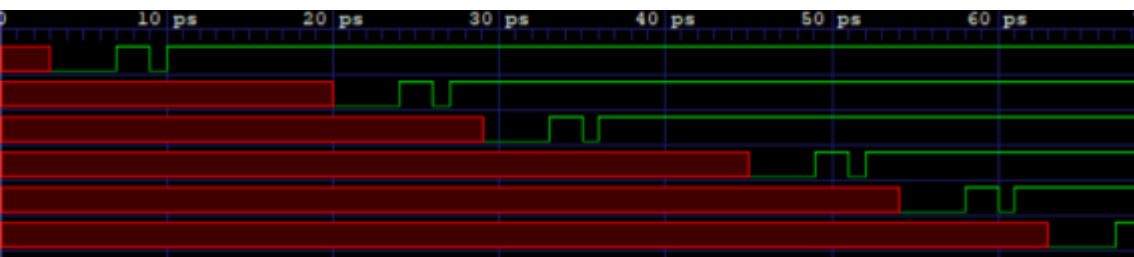




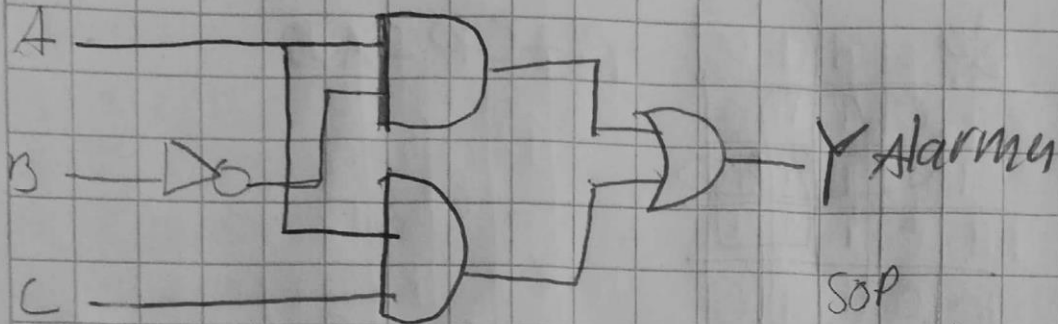
EJERCICIO 4



EJERCICIO 5



Ejercicio 5



$$(A \cdot B') + (A \cdot C) = Y$$

$$(A \cdot B' \cdot C') + (A \cdot B' \cdot C) + (A \cdot B \cdot C)$$

POS

$$(A + B)(A + B + C)(A + B + C')(A + B' + C)(A + B' + C')$$

A	B	C	Y
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	1
1	0	1	1
1	1	0	0
1	1	1	1

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