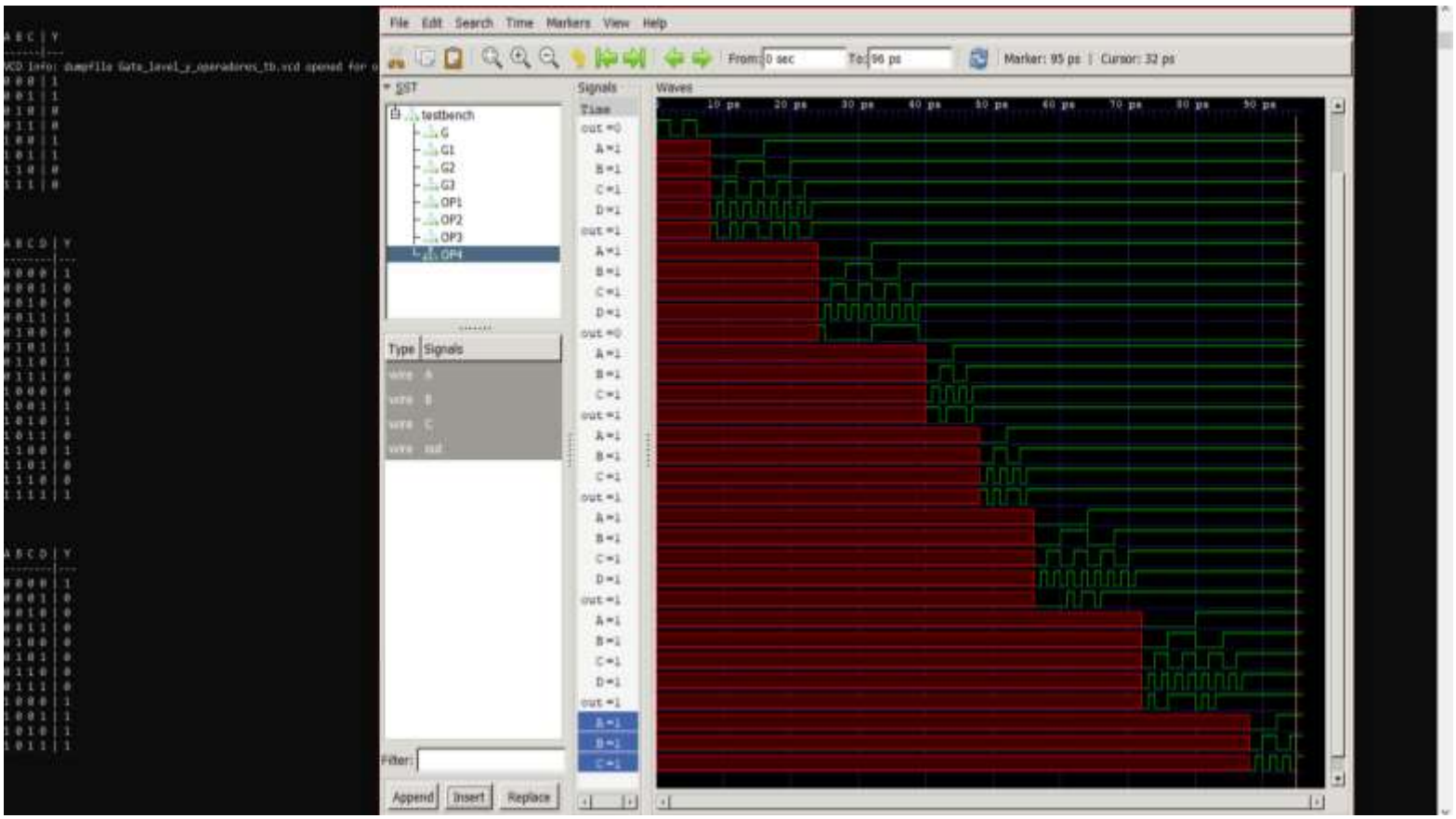
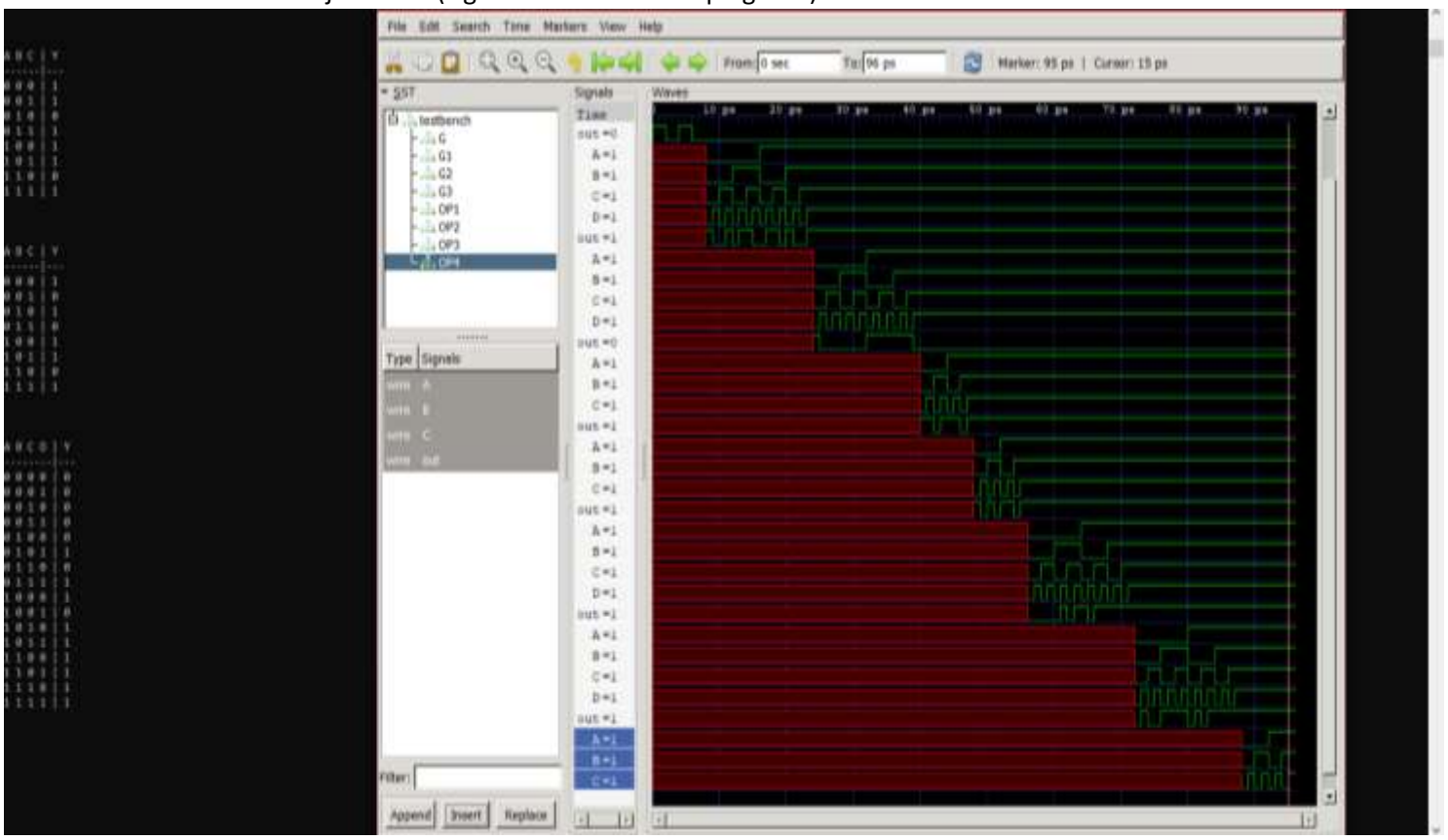
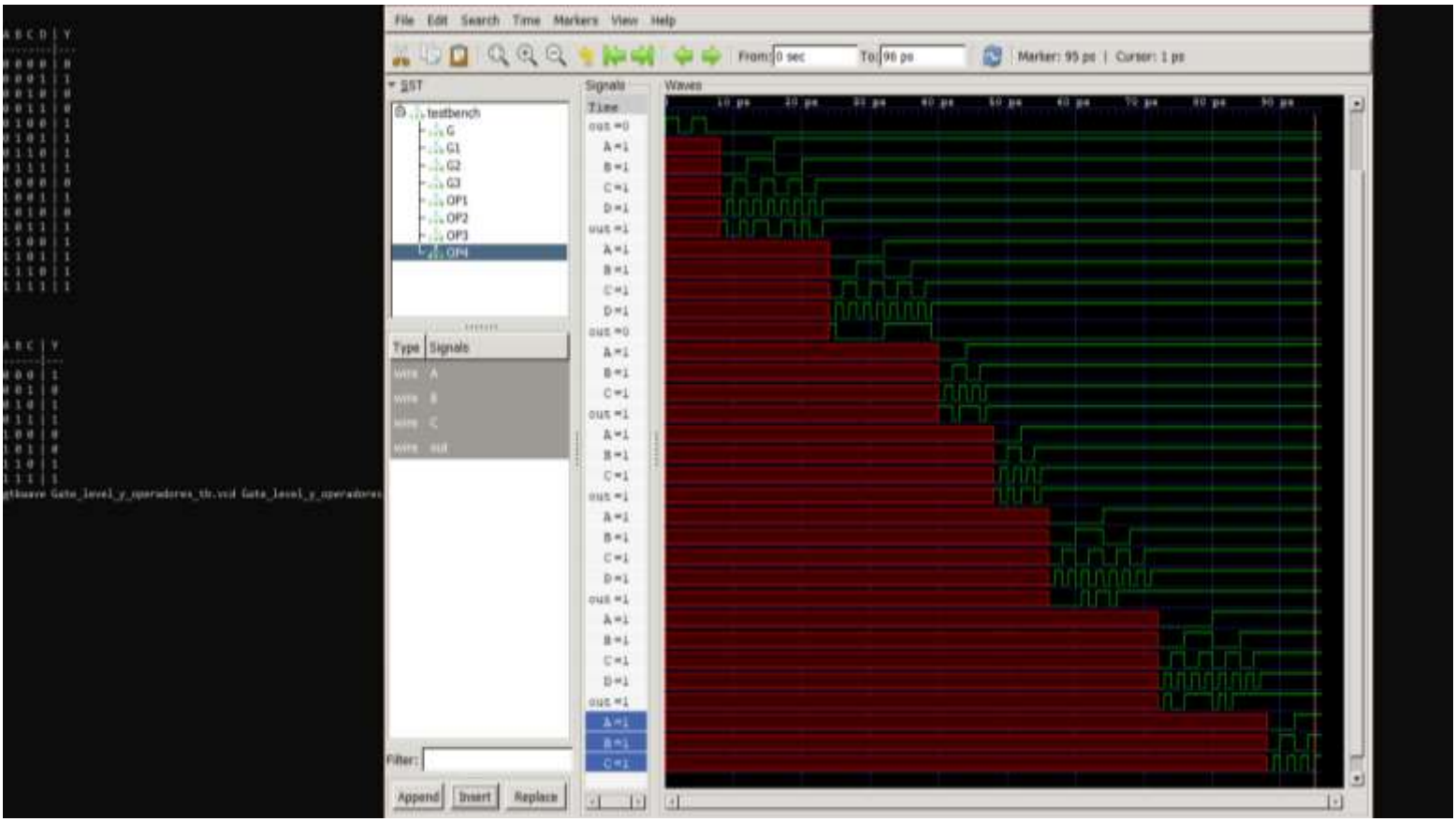
GTKWave del ejercicio 4 (primeras 3 tablas desplegadas)



GTKWave del ejercicio 4 (siguientes 3 tablas desplegadas)



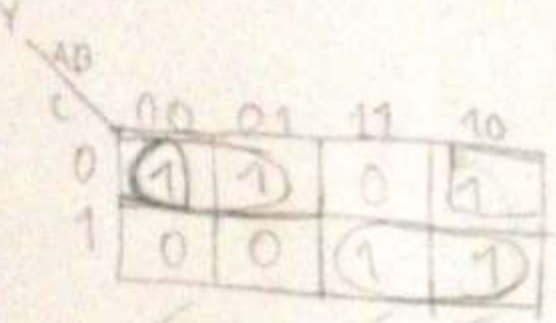
GTKWave del ejercicio 4 (ultimas 2 tablas desplegadas)



Lab #4

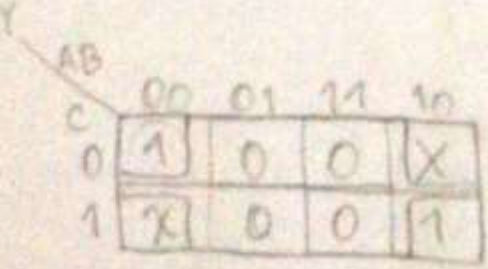
Ejercicio 1

tabla 01



$Y = AC + \bar{A}\bar{C} + B\bar{C}$

tabla 02



$Y = \bar{B}$

tabla 03

CD \ AB	00	01	11	10
00	1	0	1	0
01	0	1	0	1
11	1	0	1	0
10	0	1	0	1

$Y = \bar{A}\bar{B}\bar{C}\bar{D} + \bar{A}\bar{B}CD + \bar{A}B\bar{C}\bar{D} + \bar{A}BCD + AB\bar{C}\bar{D} + ABCD + A\bar{B}\bar{C}D + A\bar{B}C\bar{D}$

tabla 4

Y: CD \ AB	00	01	11	10
00	X	0	1	1
01	X	X	1	0
11	0	X	1	1
10	X	0	X	X

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

Ejercicio 02

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

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

Y	AB: 00	01	11	10
CD: 00	1	0	1	1
01	0	0	1	1
11	0	0	0	1
10	0	0	1	1

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

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

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

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

Y: C \ AB	00	01	11	10
0	1	0	0	1
1	1	1	1	1

$Y = C + \bar{B}$

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

3) $Y = (\overline{A + B + C \cdot D}) + A \cdot D + B)$

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

Y: CD \ AB	00	01	11	10
00	0	1	1	0
01	1	1	1	1
11	0	1	1	1
10	0	1	1	0

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

$Y = B + \bar{C}D + AD$

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

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

Y \ AB / C	00	01	11	10
0	1	1	1	0
1	0	1	1	0

$Y = B + \bar{A}\bar{C}$

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

Ejercicio 05

S	M	W	A
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	1
1	0	1	0
1	1	0	1
1	1	1	1

SOP

$$Y = S \cdot \bar{M} \cdot \bar{W} + S \cdot M \cdot \bar{W} + SMW$$

POS

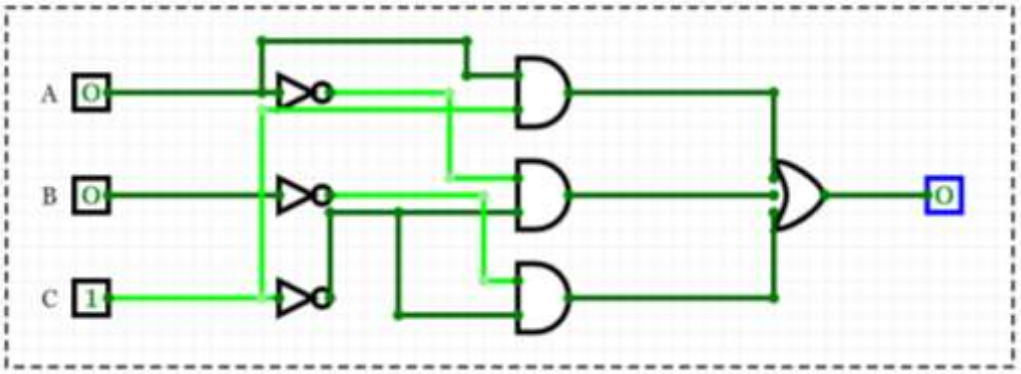
$$Y = (S+M+W) \cdot (S+M+\bar{W})(S+\bar{M}+W)(S+\bar{M}+\bar{W})(\bar{S}+M+\bar{W})$$

Y

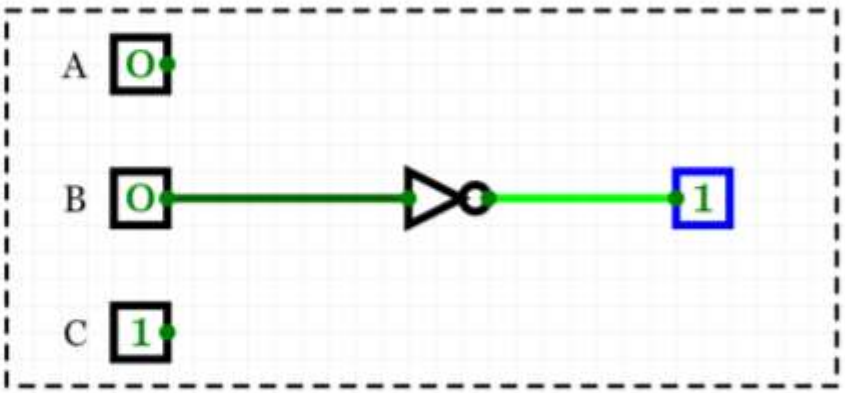
W \ SM	00	01	11	10
0	0	0	1	1
1	0	0	1	0

$$Y = S\bar{W} + SM$$

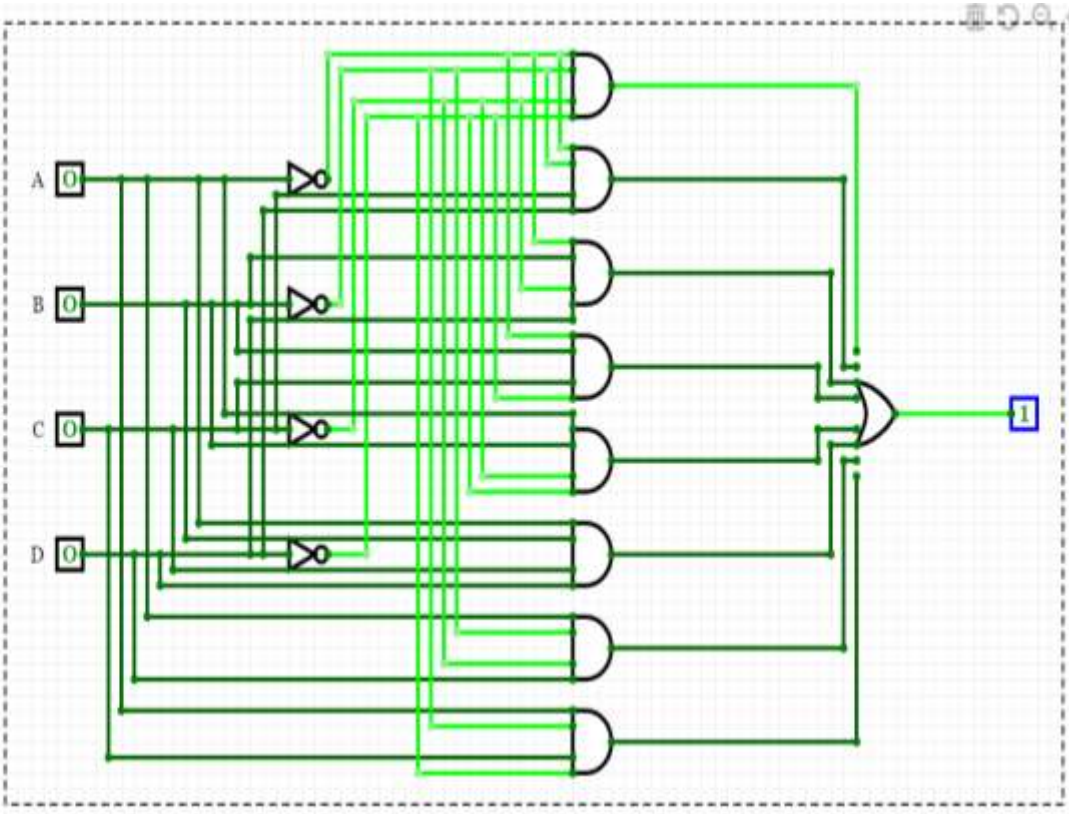
Circuito 1 del ejercicio 1



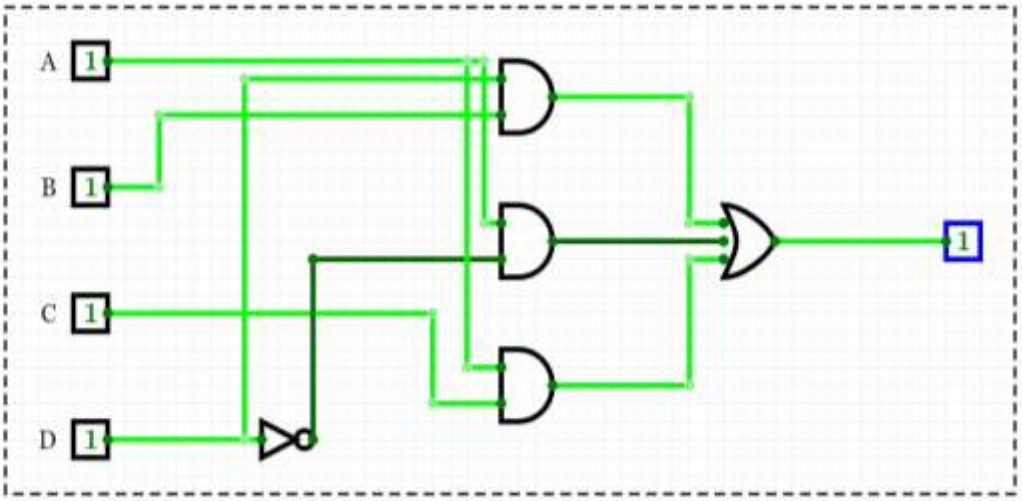
Circuito 2 del ejercicio 1



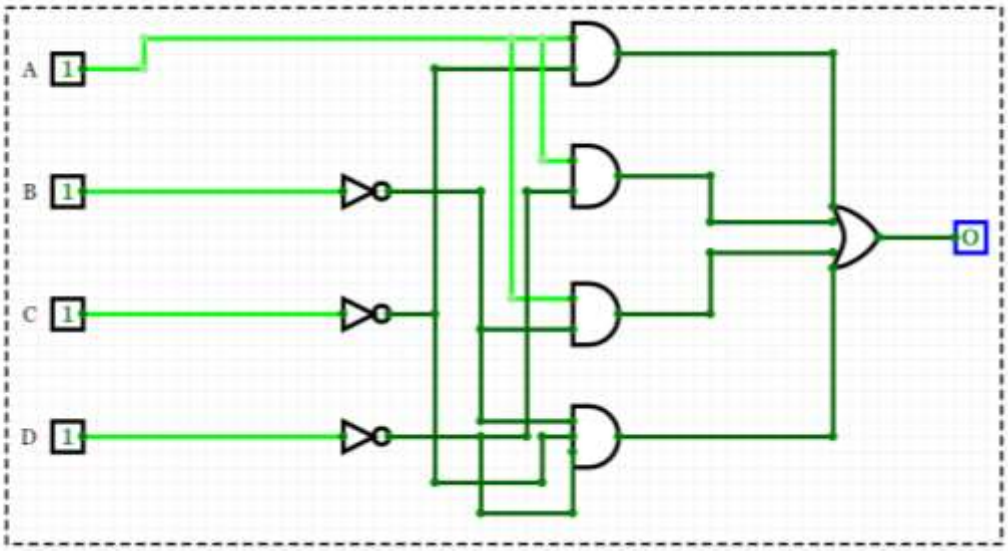
Circuito 3 del ejercicio 1



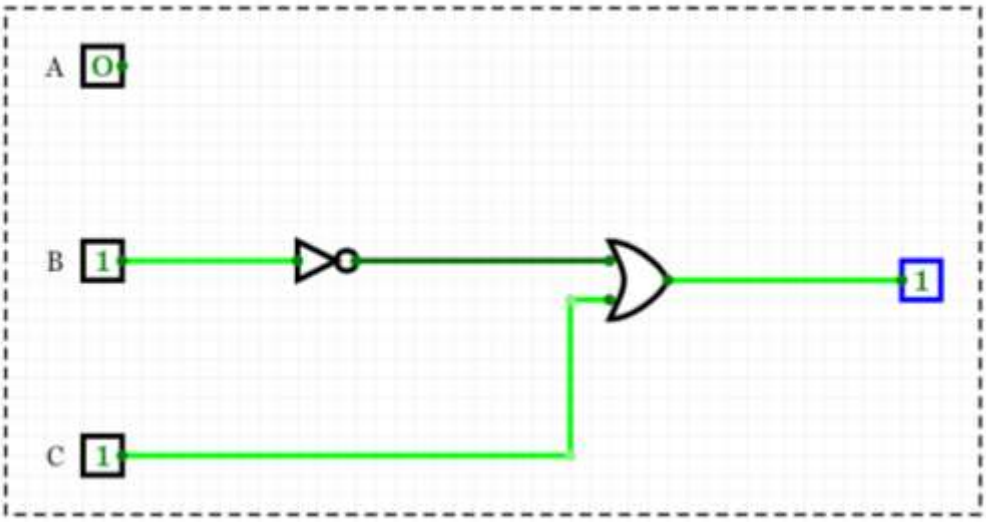
Circuito 4 ejercicio 1



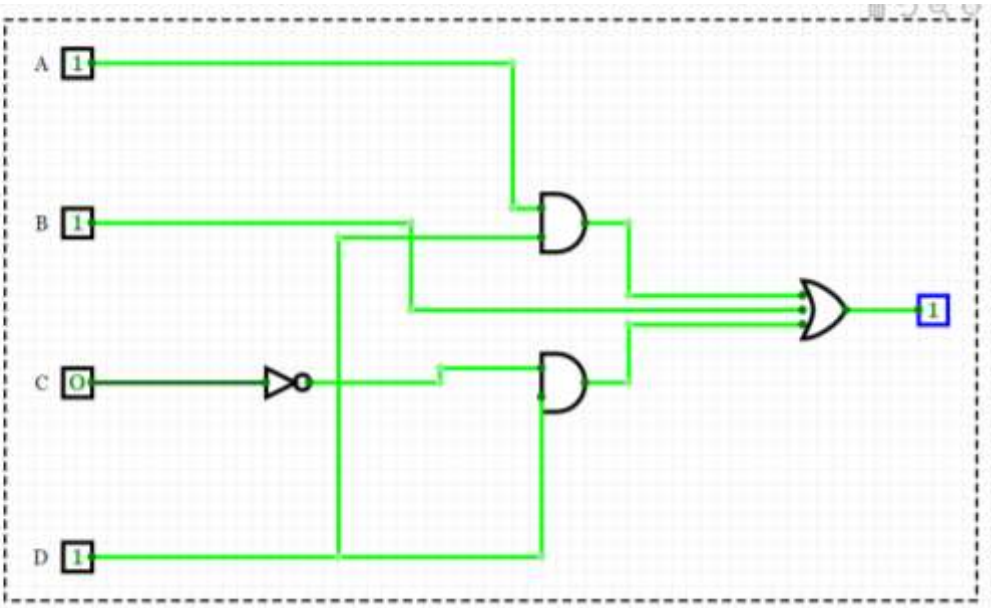
Circuito 1 del ejercicio 2



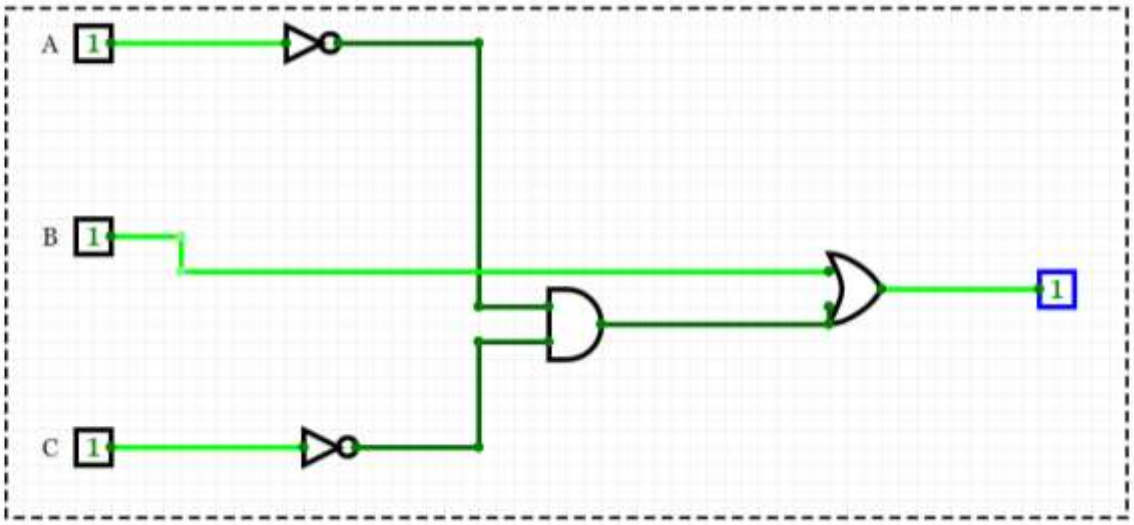
Circuitos 2 ejercicio 2



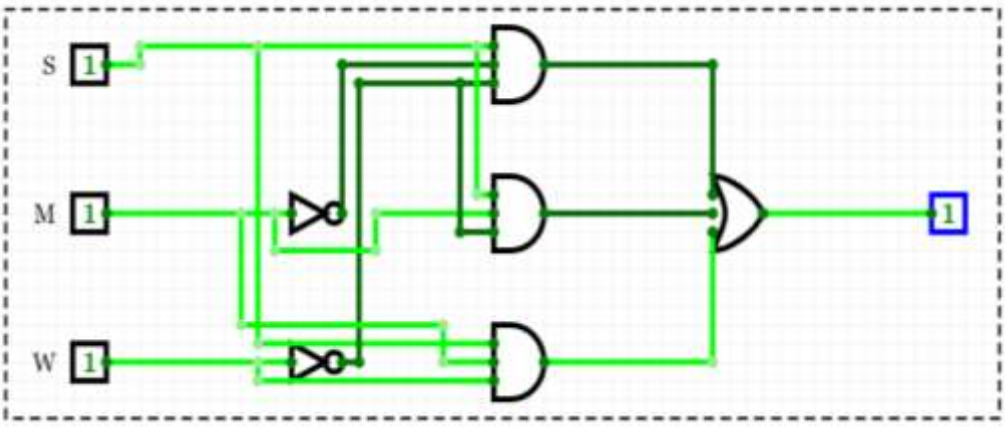
Circuito 3 ejercicio 2



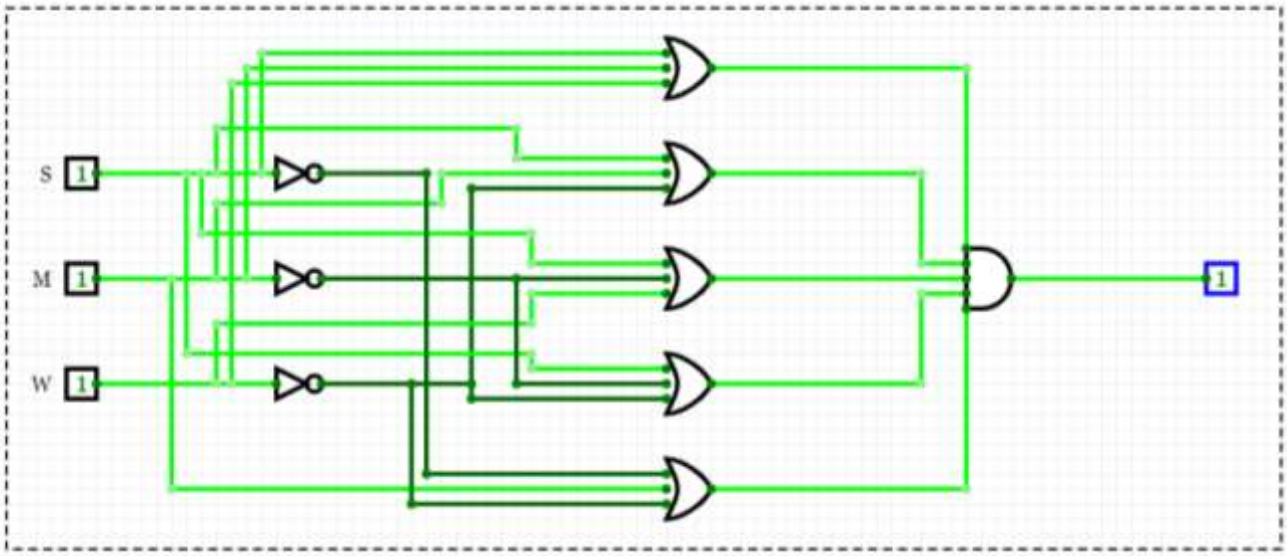
Circuito 4 del ejercicio 2



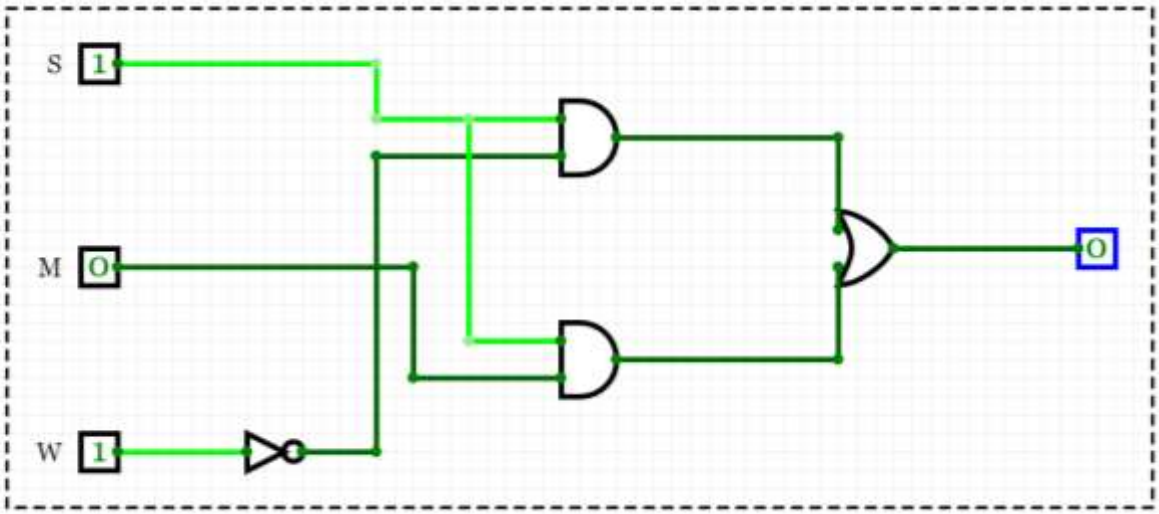
Circuito SOP del ejercicio 5



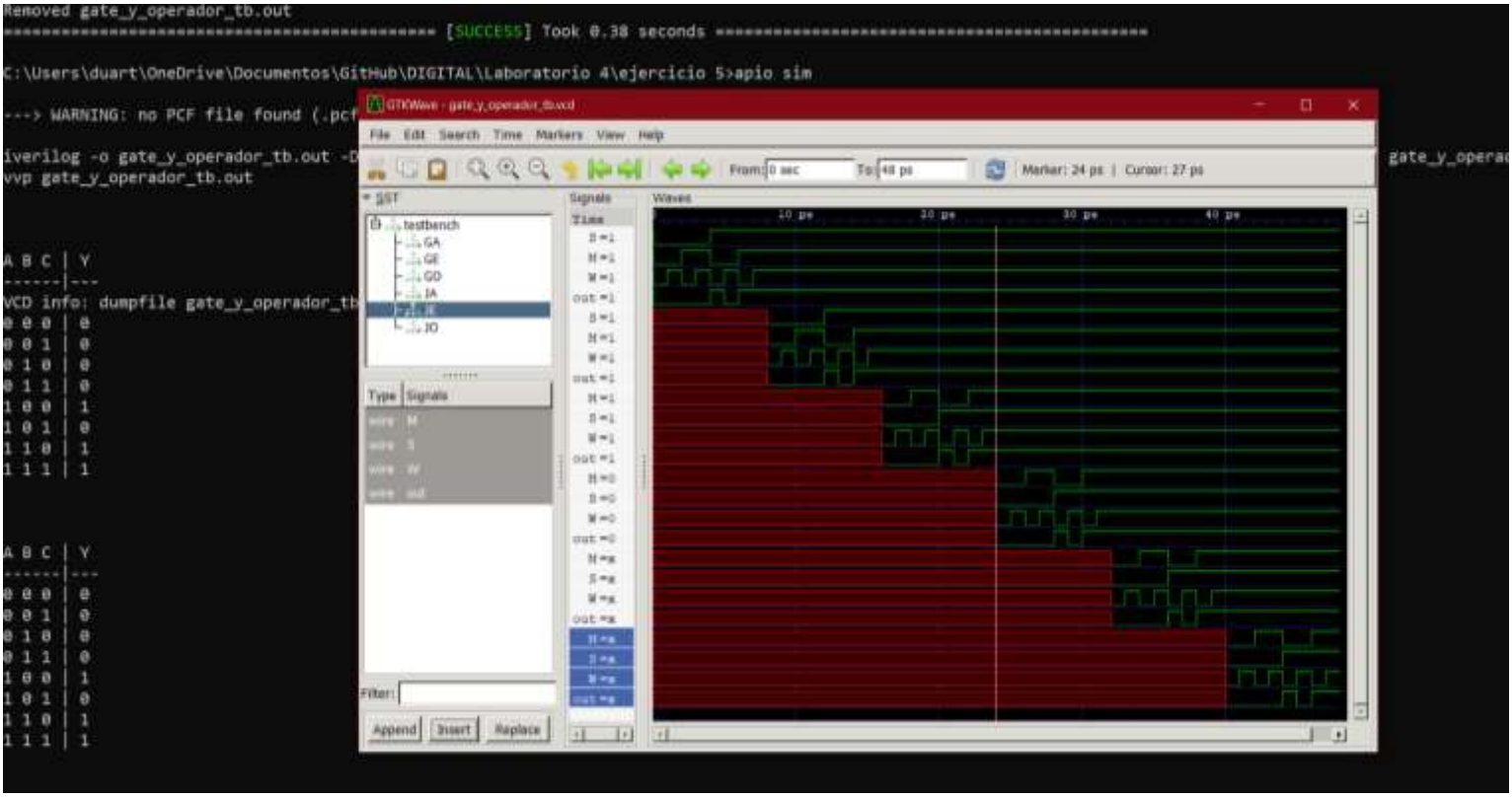
Circuito POS del ejercicio 5



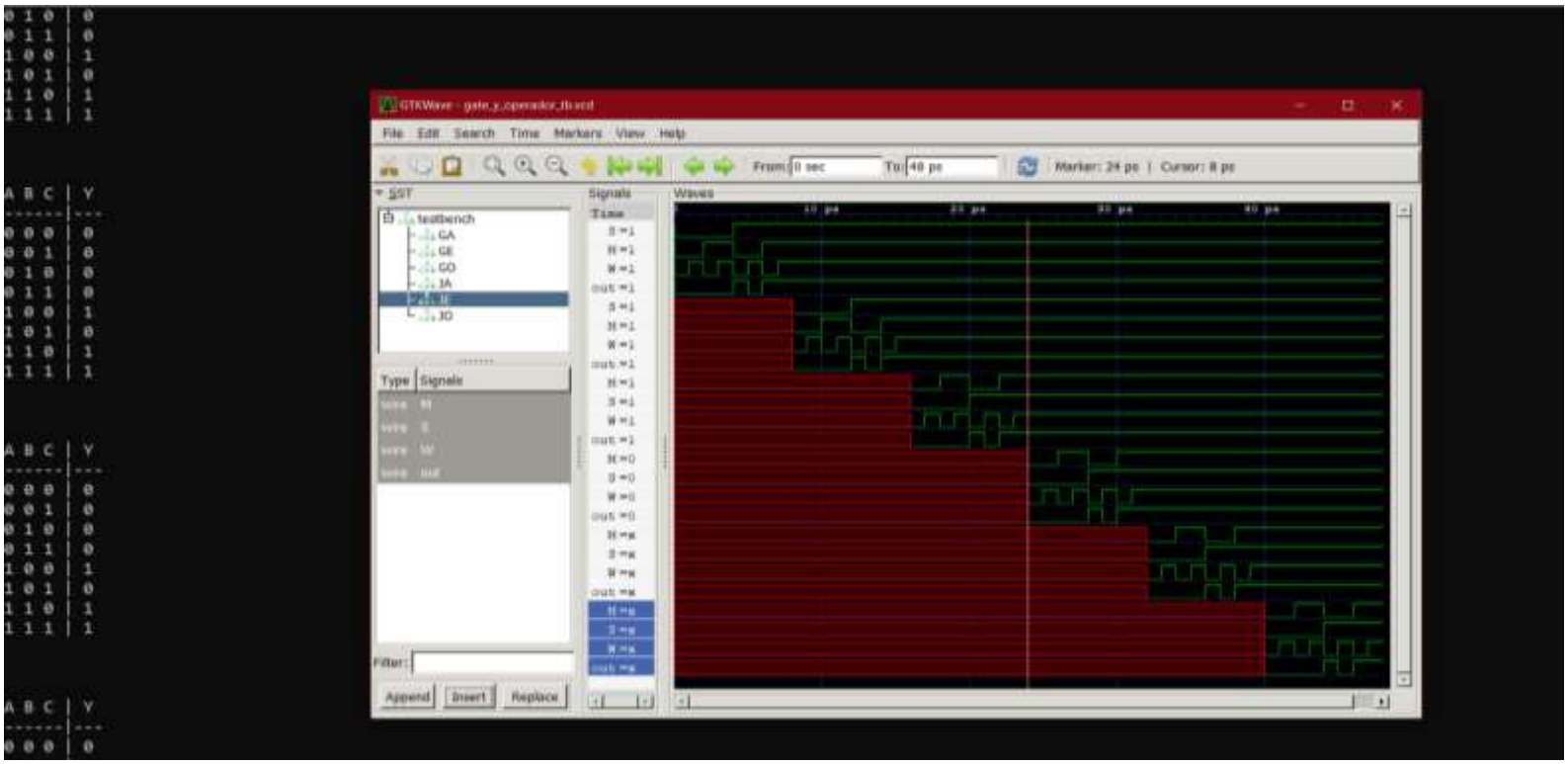
Circuito reducido del ejercicio 5



GTKWave ejercicio 5 primeras dos tablas desplegadas.



GTKWave ejercicio 5 siguientes dos tablas desplegadas.



GTKWave ejercicio 5 últimas dos tablas desplegadas