

Lab #3

30/07/2020

Ejercicio 1

Tabla #1

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

$$Y = m_0 + m_2 + m_4 + m_5 + m_6$$

SOP

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

$$Y = m_1 \cdot m_3 \cdot m_6$$

POS

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

tabla #2

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

$$Y = m_1 + m_6 + m_7$$

SOP

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

POS

$$Y = m_0 \cdot m_2 \cdot m_3 \cdot m_4 \cdot m_5$$

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

Tabla 3

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

SOP

$$Y = m_0 + m_1 + m_2 + m_3 + m_8 + m_{10} + m_{14}$$

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

POS

$$Y = m_4 \cdot m_5 \cdot m_6 \cdot m_7 \cdot m_9 \cdot m_{11} \cdot m_{12} \cdot m_{13} \cdot m_{15}$$

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

Tabla #4

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

SOP

$$Y = m_0 + m_2 + m_3 + m_6 + m_7 + m_8 + m_{10}$$

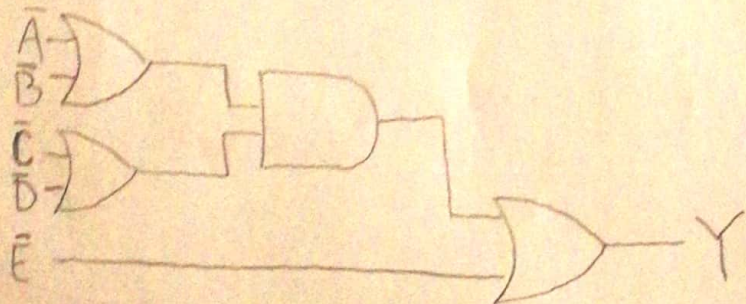
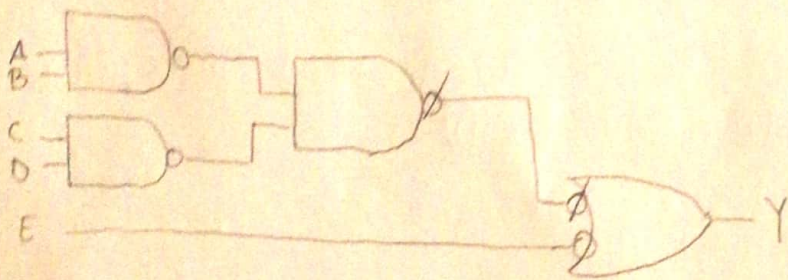
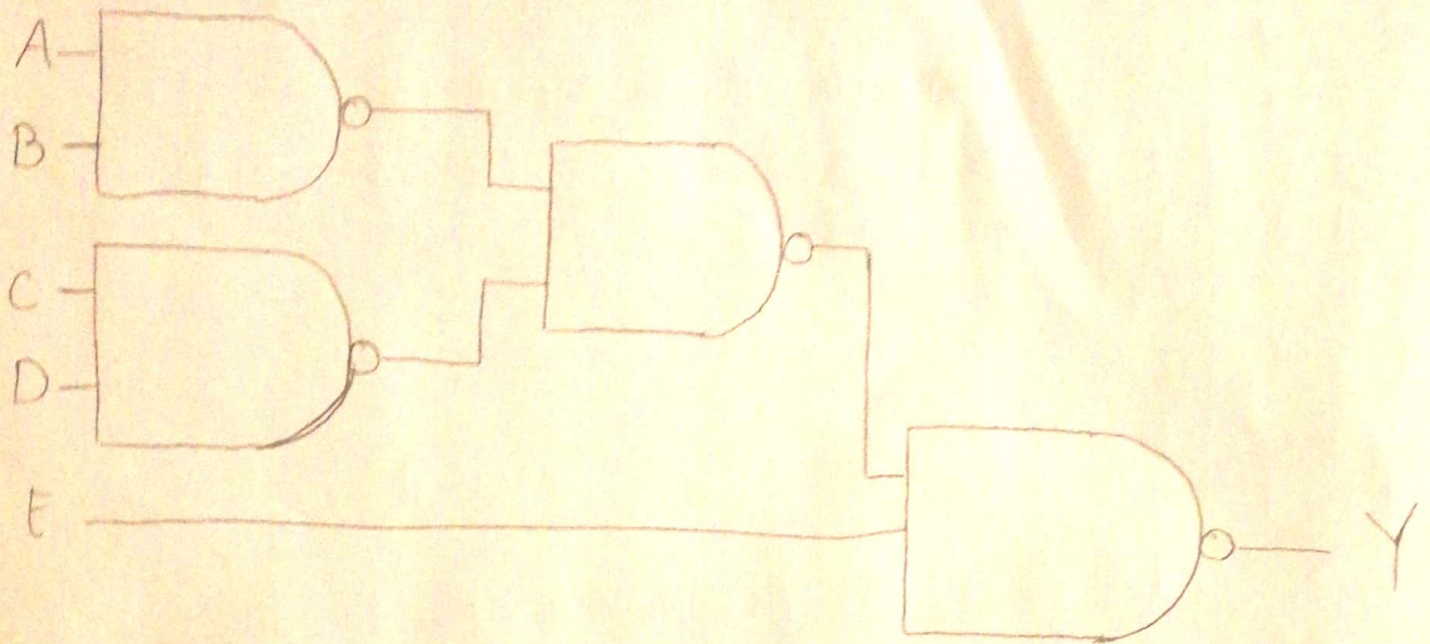
$$Y = \bar{A} \cdot \bar{B} \cdot \bar{C} \cdot \bar{D} + \bar{A} \cdot \bar{B} \cdot C \cdot \bar{D} + \bar{A} \cdot \bar{B} \cdot C \cdot D + \bar{A} \cdot B \cdot C \cdot \bar{D} + \bar{A} \cdot B \cdot C \cdot D + A \cdot \bar{B} \cdot \bar{C} \cdot \bar{D} + A \cdot \bar{B} \cdot C \cdot \bar{D}$$

POS

$$Y = m_{11} \cdot m_5 \cdot m_9 \cdot m_{11} \cdot m_{12} \cdot m_{13} \cdot m_{14} \cdot m_{15}$$

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

Ejercicio 04



$$Y = [(A + B) \cdot (C + D)] + E$$

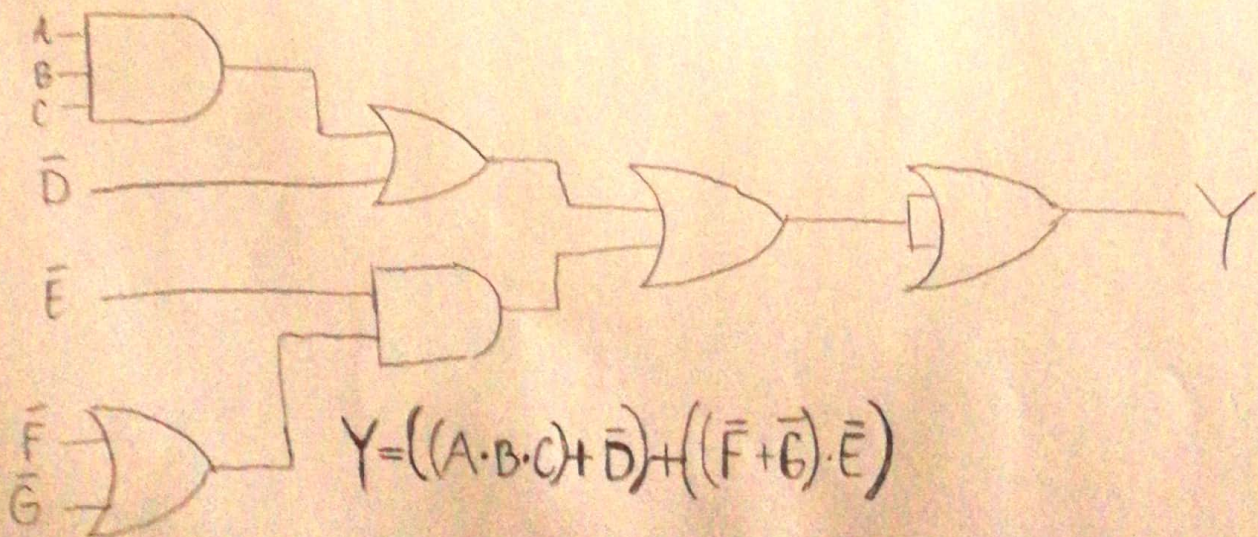
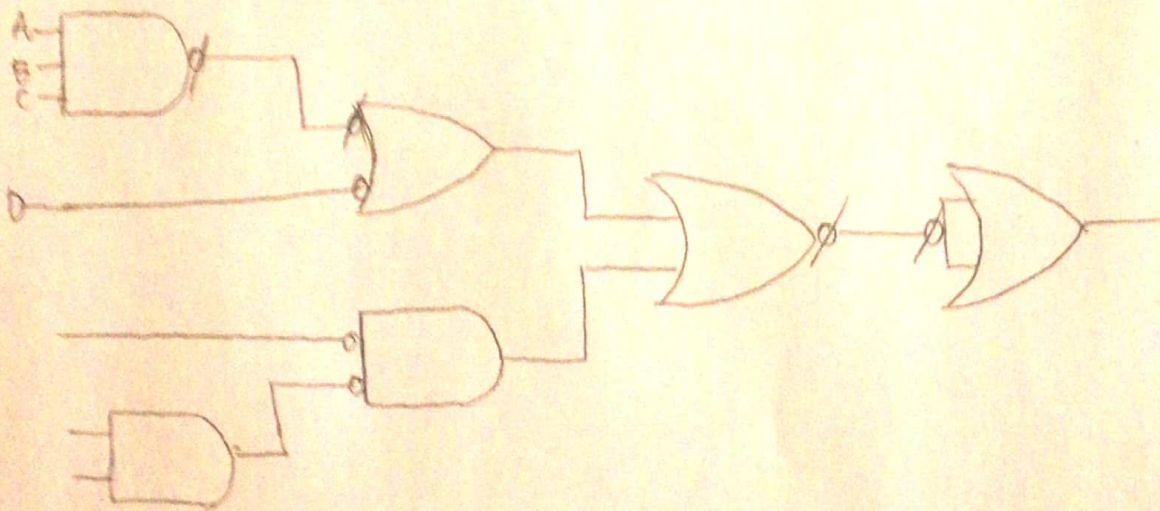
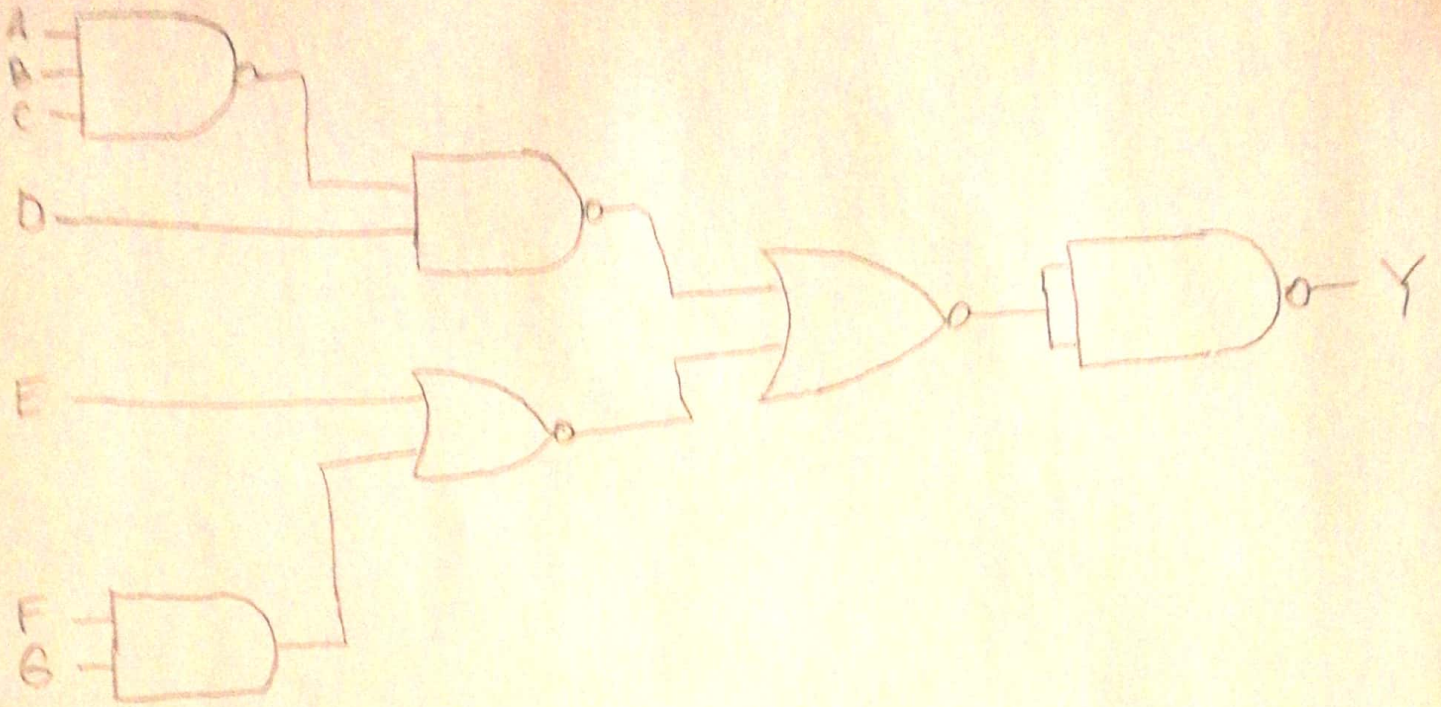


TABLA 1 SOP

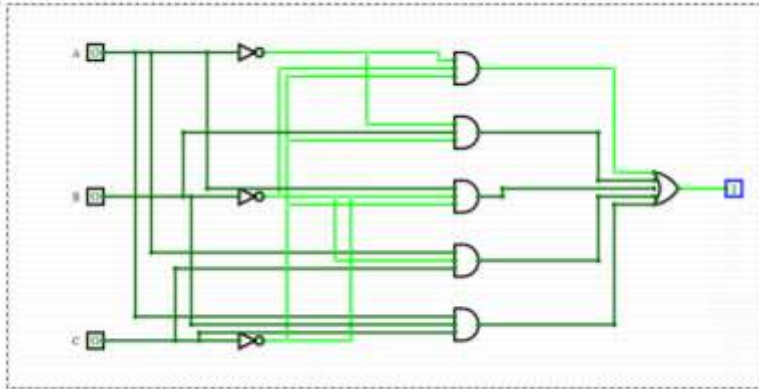
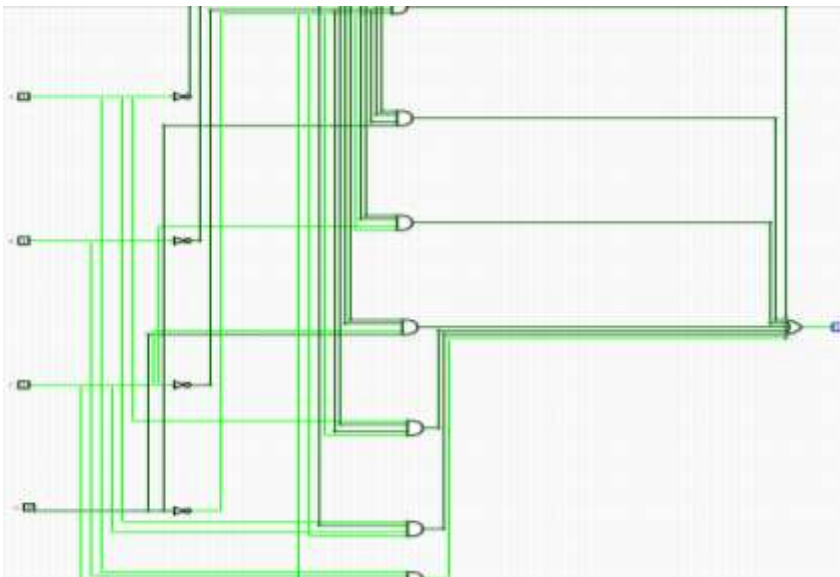
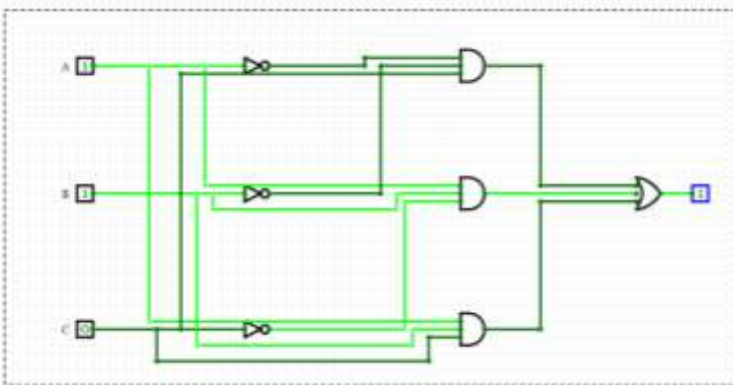


TABLA 2 SOP



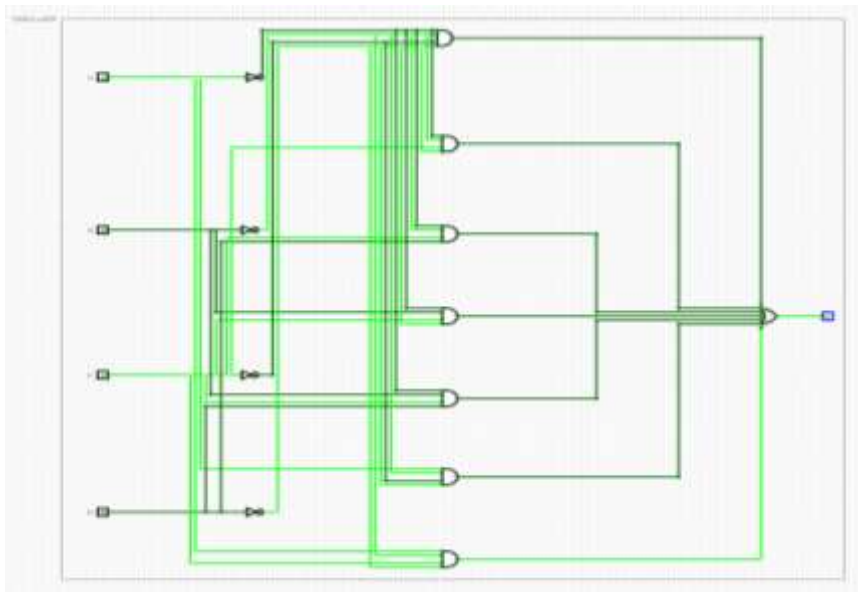


TABLA 1 POS

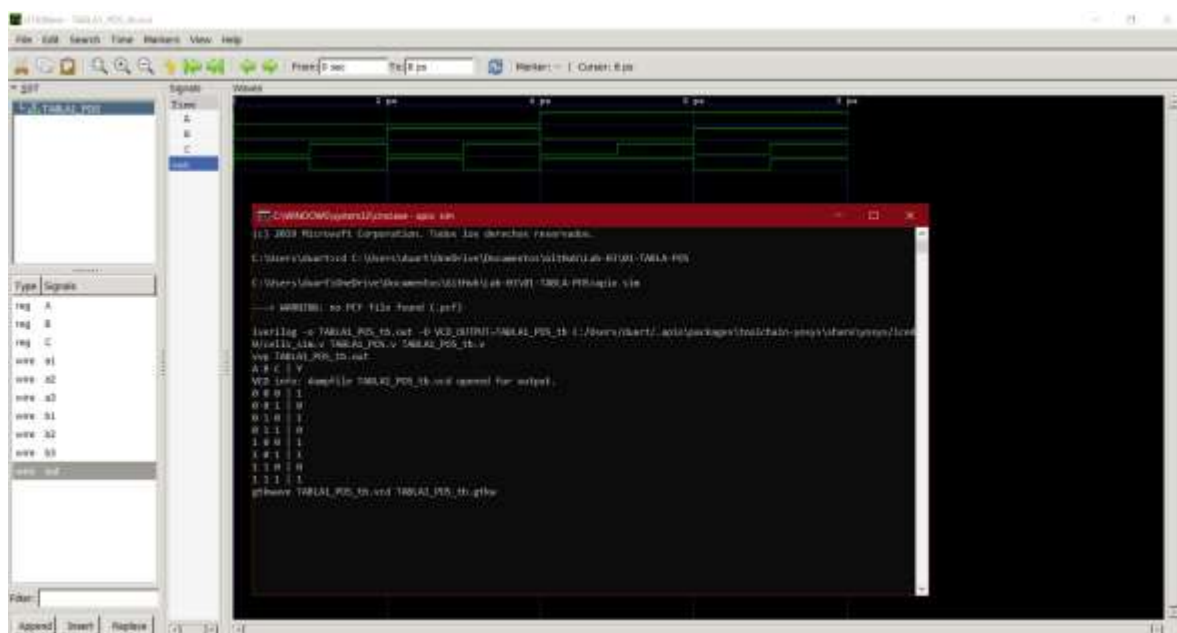


TABLA 1 SOP

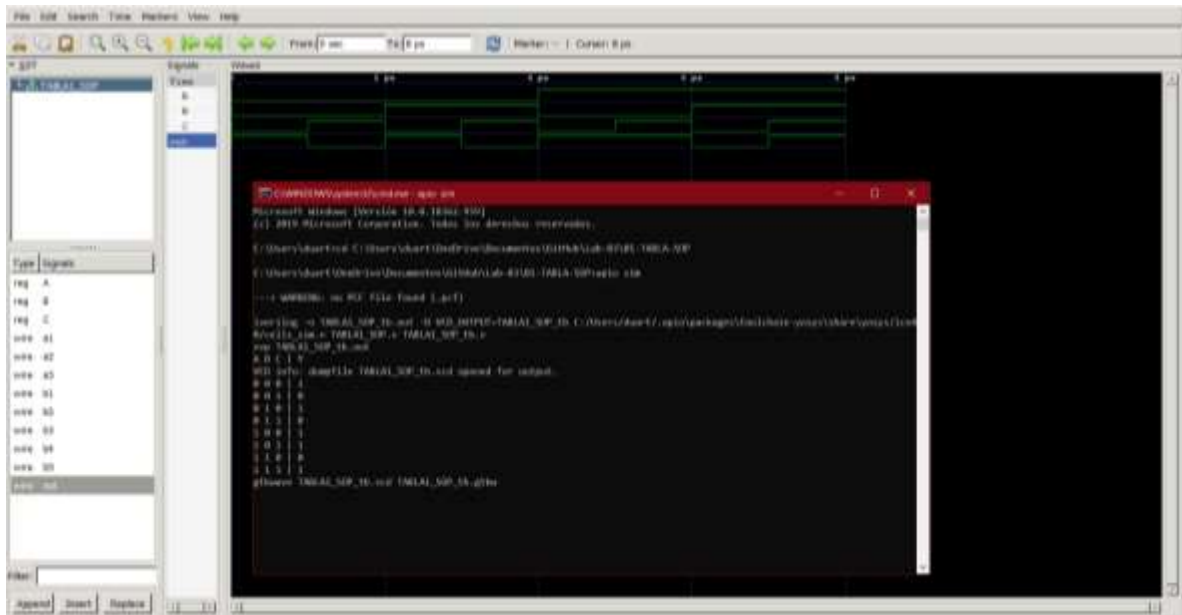


TABLA 2 POS

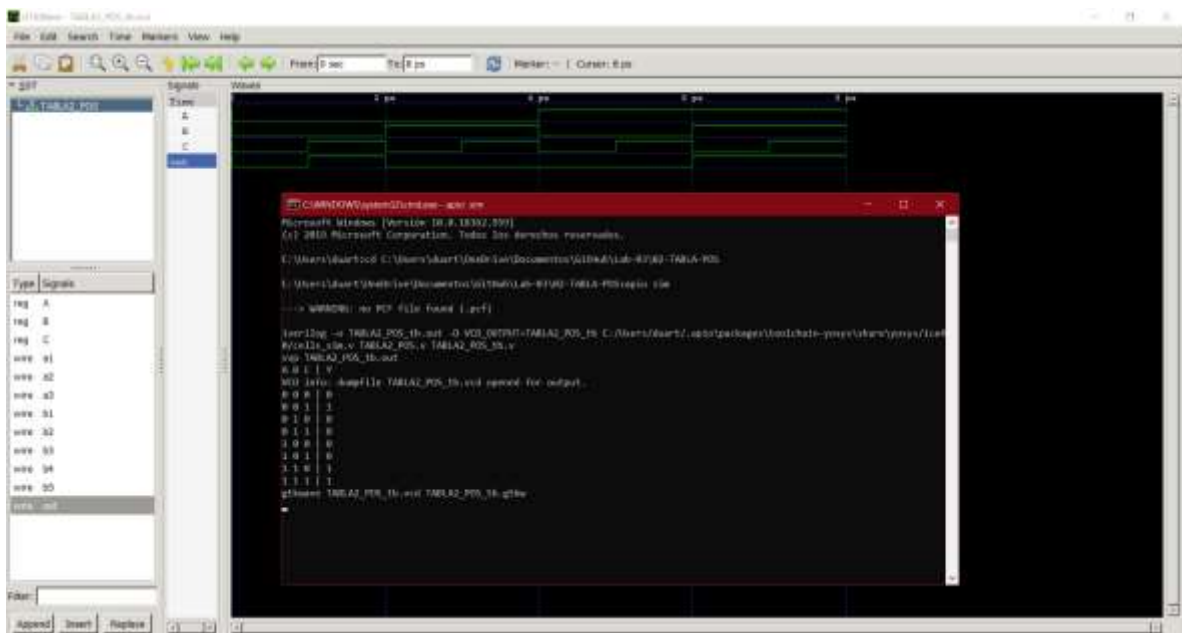


TABLA 2 SOP

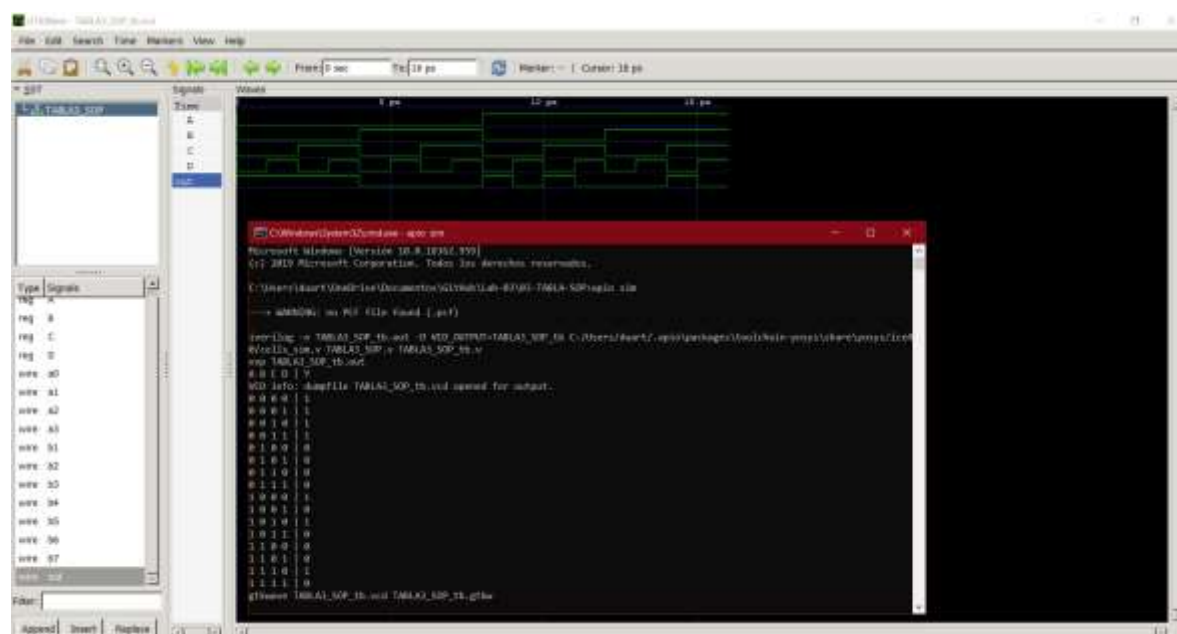
TABLA 3 SOP

TABLA 4 POS

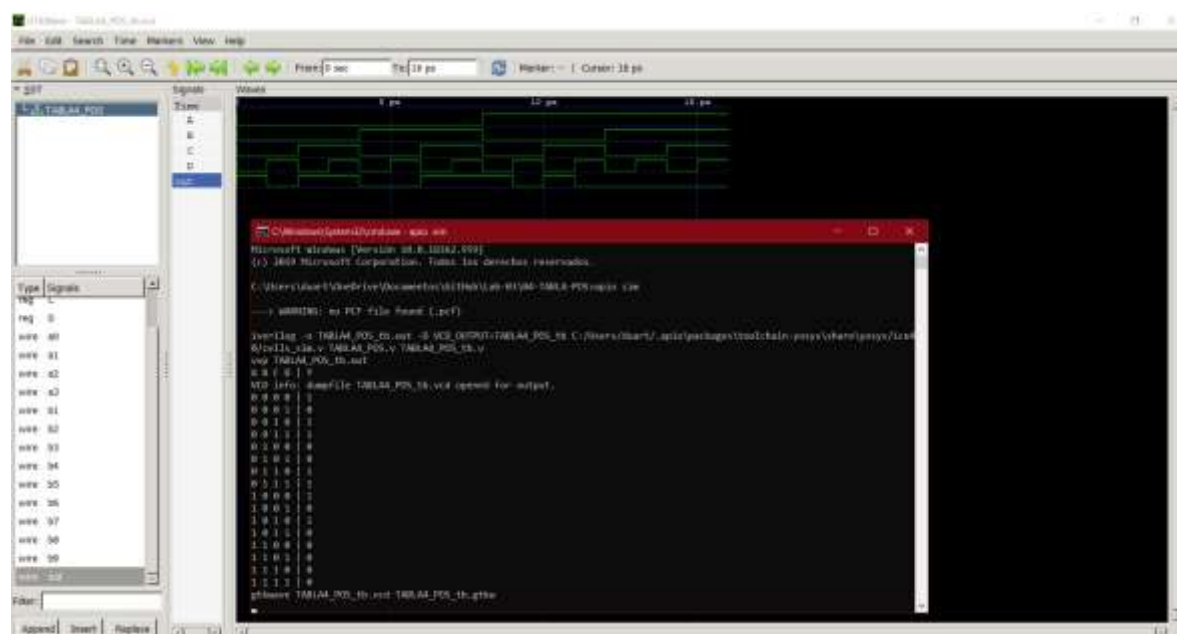


TABLA 4 SOP

