



# Anáhuac Mayab

**Universidad Anáhuac Mayab**

**Algoritmos y Programación**

P1A7 Tablas de verdad (Circuito)

**Ingeniería ambiental**

**Estudiante:**

Elias Mirsha Vera León

**Profesor:**

Lizbeth Hernández Olán

3er Semestre

**Fecha de entrega:**

28 de agosto del 2025

1.

1. (p AND q) OR (NOT p)

p	q	p AND q	NOT q	(p AND q) OR (NOT q)
V	V	V	F	V
V	F	F	V	V
F	V	F	F	F
F	F	F	V	V

Simulation

Sync Frame/Ticks

Clock

No clock placed

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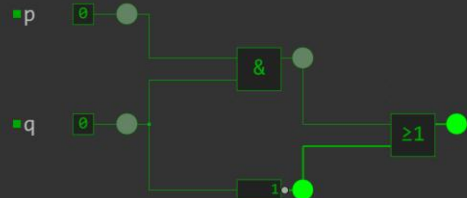
Simulation

Sync Frame/Ticks

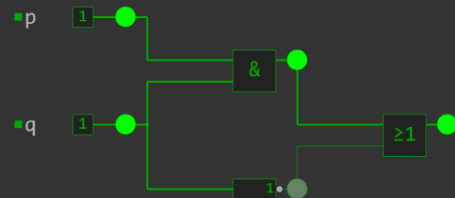
Clock

No clock placed

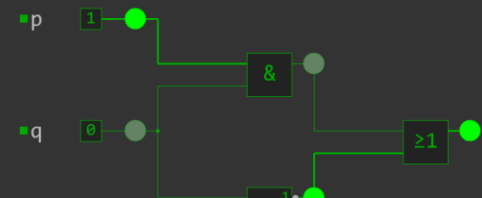
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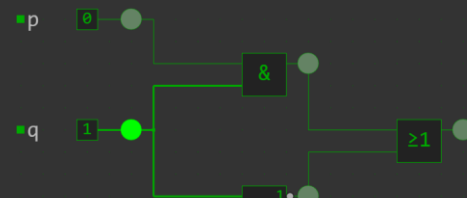
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2.

p	q	p OR q	NOT (p OR q)	NOT (p OR q) AND (p OR q)
V	V	V	F	F
V	F	V	F	F
F	V	V	F	F
F	F	F	V	F

2. NOT (p OR q) AND (p OR q)

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Logic circuit diagram showing the implementation of the expression NOT (p OR q) AND (p OR q). The circuit uses two inputs, p and q, connected to an OR gate (≥1) and a NOT gate (1). The output of the OR gate is connected to the input of the NOT gate. The output of the NOT gate is connected to an AND gate (&). The final output is 0.

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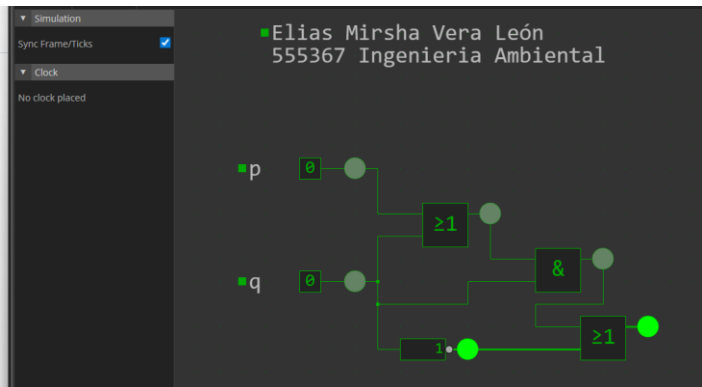
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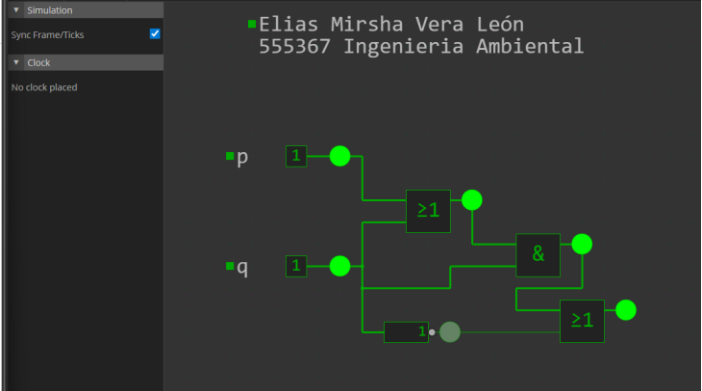
3.  $[(p \text{ OR } q) \text{ AND } q] \text{ OR } (\text{NOT } q)$

p q	p OR q	(p OR q) AND q	NOT q	$[(p \text{ OR } q) \text{ AND } q] \text{ OR } (\text{NOT } q)$
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V F	V	F	V	V
F V	V	V	F	V
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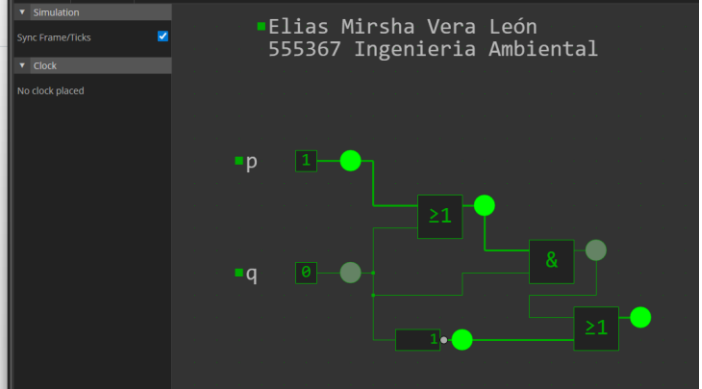
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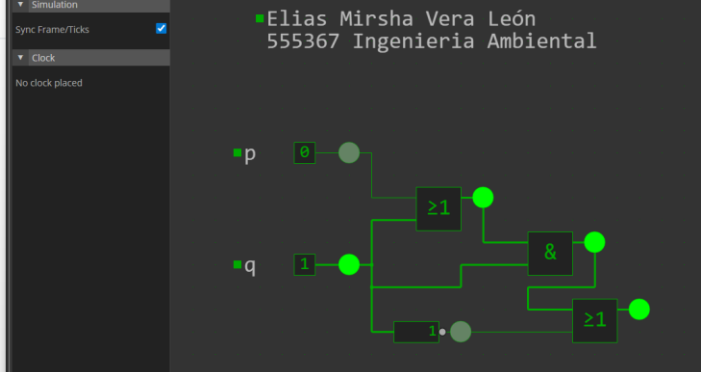
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F F	F	F	V	V



4.

4.  $[(p \vee q) \wedge q] \wedge (\text{NOT } q)$

p q	p $\vee$ q	(p $\vee$ q) $\wedge$ q	NOT q	$[(p \vee q) \wedge q] \wedge (\text{NOT } q)$
V V	V	V	F	F
V F	V	F	V	F
F V	V	V	F	F
F F	F	F	V	F

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