



IMPLEMENTATION OF BOOLEAN LOGIC IN ARDUINO

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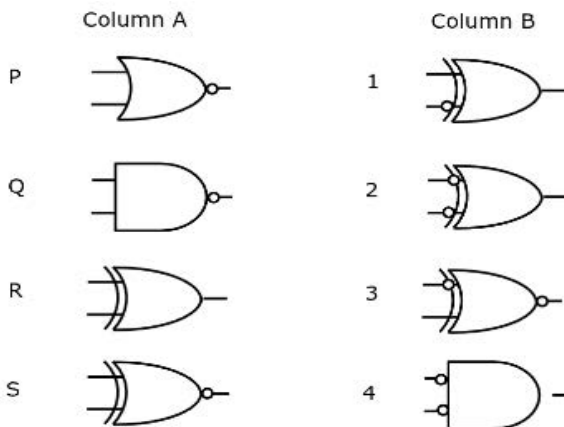
COMETFWC025

ASSIGNMENT

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Abstract

Q(11)2010 GATE: Match The Logic Gates in Column A with their Equivalent Column B



4. Place Arduino on breadboard (optional).

5. Connect digital input pins (2, 3, 4) to switches or

jumper wires.

Pull-down resistors (10kΩ to GND) recommended on

inputs to prevent floating values.

Built-in LED on Pin 13 used to show output F

3. Implementation

1 Components

Components	Values	Quantity
Arduino		1
JumperWires	M-F	5
Breadboard		1
USB-C cable		1

2 Setup

1. Connect the Arduino to the laptop using the USB cable.
2. Open the Arduino IDE on your system.
3. Go to Tools > Board and select Arduino Uno or Nano based on your board.
4. Go to Tools > Port and select the correct COM port for your connected board.

2.1 Steps for implementation

1. Open Arduino IDE and create a new sketch (program).
2. Paste the C language code into the sketch

3. Upload the code to the Arduino board using the Upload button in the IDE

Column Matching

Column A	Column B	Logic Type Description
P	2	NOR Gate (OR + NOT)
Q	4	OR Gate
R	3	Inputs Inverted then AND (→ NOR)
S	1	NAND Gate (AND + NOT)