# ELC 2137 Lab: Transistor Logic Gates

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## Summary

Type the summary of your experiment and results here. Lab two required students to build an "Or Gate", Not Gate, Nor Gate, Unknown Gate on a circuit board with a partner. While building and test out each circuit students has to understand and demonstrate their knowledge of current paths and label each resistor, LED, switch is ON or OFF. Students gained knowledge in both constructing circuits, describe how logic gates are based on switches, and the behavior of transistors.

### Q&A

Answer questions posed in the lab assignment here.

1. What logic operation does it implement?

#### Results

In this section, put your simulation waveforms, results tables, pictures of hardware, and any other required items.

## Circuit Demonstration Page

Student names: Maya Maytin Xingpang Vi

#### **Instructor Initials**

Pushbutton "Or Gate"

1992

Transistor Not gate

100)

Transistor Nor gate



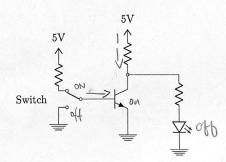
Transistor unknown gate

# BD

#### Diagrams

On each of the circuits below, draw the current paths and note whether each switch, transistor, and LED is ON or OFF.

Inverter:



8

# $\mathbf{Code}$

Include all of the code you wrote or modified here.