

ELC 2137 Lab 2: Transistor Logic Gates

Jake Simmons and Haonan Jin

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Summary

The purpose of this lab was to build and explore the behaviors of logic gates. We first built an OR Gate, second a Not Gate and third a Nor Gate. The last logic gate was a combination of two Not Gates and a single Nor Gate.

Q&A

1. What logic operation does the Final gate implement?
 - (a) The logic operation that the Final gate implements is an And Gate.

Results

A	B	Led
0	0	0
0	1	0
1	0	0
1	1	1

Code

Circuit Demonstration Page

Student names: Jahe Simmons Hannan Jin

Instructor Initials

Pushbutton "Or Gate"

BJ

Transistor Not gate

BJ

Transistor Nor gate

BJ

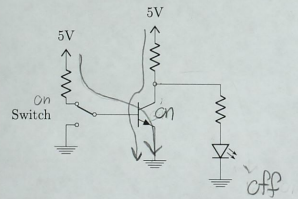
Transistor unknown gate

BJ

Diagrams

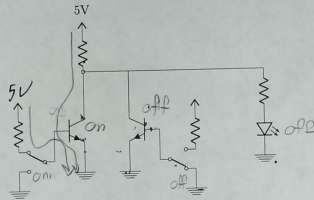
On each of the circuits below, draw the current paths and note whether each switch, transistor, and LED is ON or OFF.

Inverter:

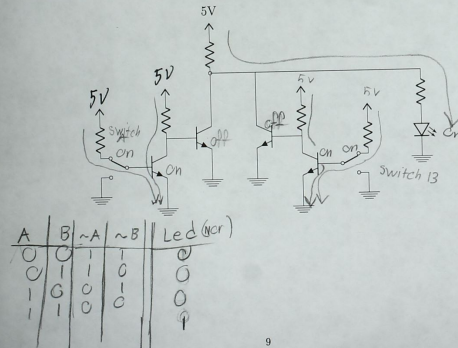


8

NOR:



Final gate:



9

Figure 1: Schematics and drawing of current path for each logic gate