

Hayden Fuller

IE lab 6

1. Stable flip-flop:

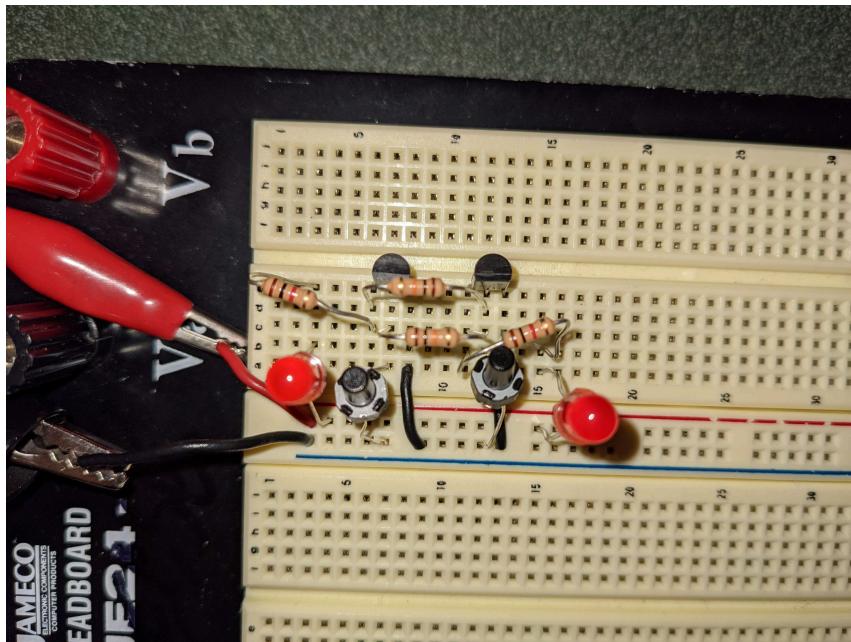
- Choose the collector current, for example, $IC = 10 \text{ mA}$, and determine the values of RC and RB accordingly.

$$IC=10\text{mA}, VCC=10\text{V}$$

$$RC=VCC/IC=10\text{V}/10\text{mA}=1\text{kOhm}$$

$$RB=10RC=10\text{kOhm}$$

- LEDs may be included in the circuit (collector branch) to indicate the logical state of the circuit. How about including an LED in each of the collector branches?



- How about including two push-button switches that allow you to set the flip-flop to its logical "0" and "1" state?

They both work as expected, when pressing the left switch, the right transistor turns on and powers the right LED. When the right switch is pressed the left transistor turns on and powers the left LED.