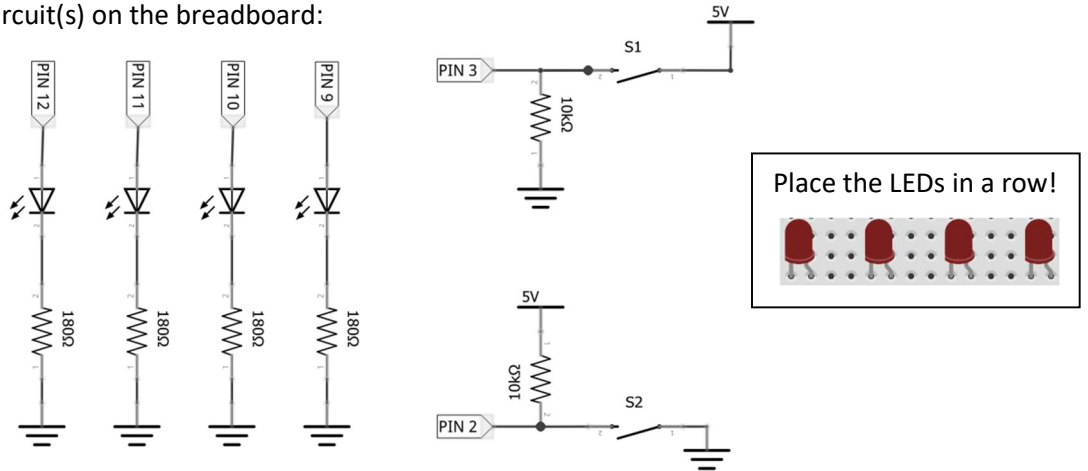


TEJ3M – Basic I/O Assignment

Build the following circuit(s) on the breadboard:



Functionality:

Level 1:

- Button S1 turns on all four LEDs when pressed.

Level 2:

- Button S1 turns on the two left LEDs when pressed.
- Button S2 turns on the two right LEDs when pressed.

Level 3:

- Have only one LED lit at a time
- Either button S1 or S2 causes the LED to move in either direction in some way.

Level 4:

- Button S1 shifts the single active LED to the left (but will not go past left-most LED)
- Button S2 shifts the single active LED to the right (but will not go past right-most LED)
- Only one movement should happen per button press.

Extensions:

- When both buttons are pressed have the LEDs animate in a pattern

TO BE SUBMITTED

Email a copy of your best WORKING code to stephen.emmell@ocdsb.ca. Leave your circuit intact in your bin.

Hints/Tips:

- Build your circuit and test functionality of EACH PART INDIVIDUALLY before proceeding. Do not attempt to build the circuit and Level 4 functionality at one time.
- Save copies of your work at each level so that you can submit your best WORKING code.