Lab 1

In this lab you will learn how to use the breadboard to implement a simple circuit and test it.

Implement a circuit that turns on a light bulb. The inputs are coming from 3 positional switches. Flipping any switch will result in turning the light bulb ON (OFF) if it was OFF (ON) disregarding the positions of the other 2 switches.

Preparatory work

Write the Boolean expression F(X,Y,Z) that implements the above circuits in terms of the three input variables.

Write the truth table for this function.

In the lab

Implement the function on the breadboard, test it, show it to the TA.