ROBODIFY

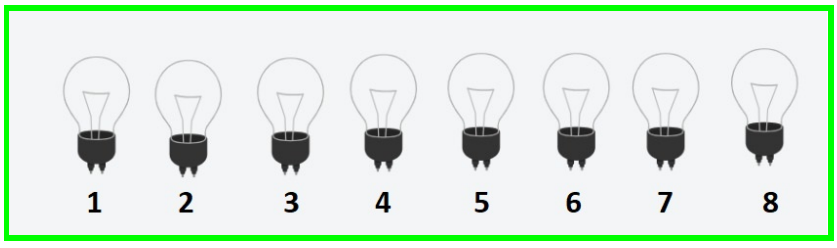
- Gateway to industry 4.0

A power – packed robotics event to simulate your inner challenger.

- ❖ This will be a 4 hours dynamic competition using circuits.
- ❖ All the simulations are to be made on Tinkercad.com
- ❖ The competition will be **from 12PM on Mar 6, 2022**.
- ❖ After completion of your solution, send the link of your solution to the link provided below **that problem**.
- ❖ **Only one submission is allowed.**

Problem Statement for GRAND FINALE

Problem statement 1:



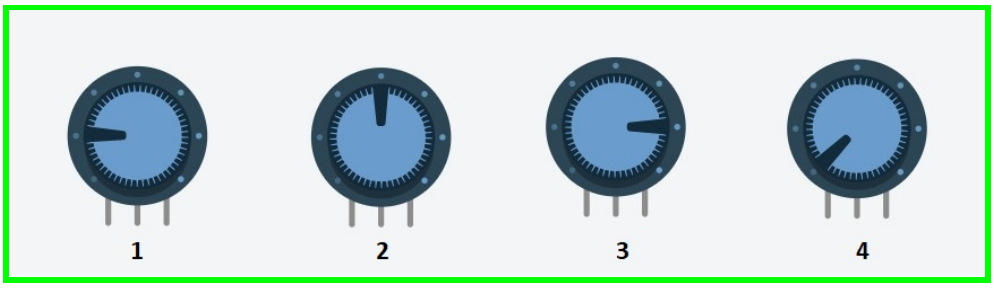
Components required: 3 push button and 8 led(or bulb)

Part1: Mark one push button as left and other as right. Initially the first and last LED will glow. Design an algorithm such that when we press the left push button, the glowing left side LED will fade and its right adjacent LED will glow. Similar process has to be done for the right side.

Part2: Set the LEDs back to their initial position. Design the algorithm such that when you press the third push button, LEDs will start glowing towards mid-point and upon reaching mid-point they will move back to their initial position. (for better visualization : two balls coming towards each other and then after collision moving away).

Link for submission of problem statement 1:
https://forms.gle/nkYg2FSgNRMjhaKG6

Problem statement 2:



You have to design a safe which will have the following specifications:

Initially, you have to set the 4 potentiometers in the positions and each position will represent a specific value as given in the table below. All the 4 values will make up a password and then you have to set it as a password using the password set button.
Next you have to change the angle of potentiometers and set it to a value of your choice and press the password recheck button. If the new value does not match the previous password then make the RGB glow red and a buzzer should start making a buzzing sound.
You have to keep rotating the potentiometer and keep checking the password, when the new value matches the password a servo should rotate 180 degrees and the RGB will glow green and you will be able to open your safe.
You can consider the value of potentiometer same within the range of +/- 15 degrees of a set angle

Link for submission of problem statement 2:
https://forms.gle/qPL1GgVuJAVGWSCA8

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