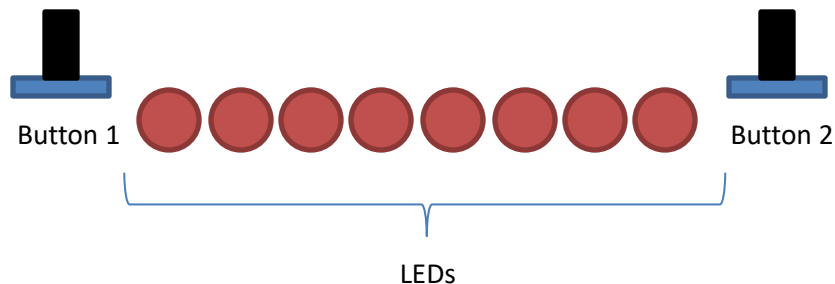# ME 220 LAB 3

Game of LEDs

You need 8 LED's and 2 switches/buttons that are properly interfaced to Pi Pico (i.e., USE resistors for each component).

At the end you will have something as follows:

Player X will use Button X. Game rules are defined below:

Rules:

In this game, it is about *sort of* shooting the other side. When a player pushes the button, LED's will start to move (i.e., get lit) towards the other player. If the other player is able to press the button before the LED's reach the other player's end and meet somewhere they will cancel each other. In this case, no one gets any points. If LED's shot from one end reaches the other end before the other player shoots LED's on his/her end (i.e. press the button), shooter gets 1 point. If a player shoots before an already in progress shot is finalized (double firing), the opponent will get 2 points and the game restarts.

Through serial monitor proper user feedback should be given for:

a- Score changes
b- Clashing shots cancelling each other – unprotected player warning
c- Penalty due to double firing

When a player reaches 5 points, that player is declared as winner and game ends and goes back to the main selection menu.