CompE470L Project Proposal

1. **Memorization Game:** either between two or more players. Player x enters 8 value sequence and presses pushbutton to lock in entry, then presses second press button to start new; an array is created with a sequence of different 8 value patterns, maxing out at 10. The next player now tries to enter the value of the sequence displayed on the switches after seeing it flash on the LED’s. A score is displayed under player 1 position. Then, players switch spots and player 1 is given score.

Difficulty: I think easy-medium?

1. **Tic-Tac-Toe:** external LED’s hooked up in tic-tac-toe patterns. Basically 9 sets of 2 LED’s hooked up to external I/O so that players can enter LED matrix values and the corresponding tic-tac-toe value will be lit up. When a player gets three in a row, the board is reset and that player’s score is incremented. Difficulty resides in syncing up player entries and keeping subsequent LED’s lit and detecting three in a row.

Difficulty: Medium

1. **Stoplight:** using external pressure pad sensors or light sensors to detect the presence of a ‘car’, LED’s will light showing stoplight working appropriately. While one is active, the other would be inactive. If both sensors are active at once, one side is given the go-ahead while the other is put on wait for a non-discriminant period of time.

Difficulty: Medium