Overview:
I want to create a snack game on a LED matrix display. The user will have to use a Wii Nun chuck controller to control where the snack goes in different directions. The goal of the game is to eat as much lights at different locations without running into itself. The snack will grow as more snacks are eaten on the LED board.

Peripheral:
1) 8x8 RGB LED Matrix or 16x16 RGB LED Matrix
2) Wii Nun chuck

Serial Interface Protocols: UART / I2C

Responsibility List: Solo Project

Software:
Use the STM to control and initialize the LED, controller and the game. Nun chuck will be programmed to control the snack and to start the game on the LED matrix. The snacks will appear one at a time and will be placed in a location the snack is not taking up on the matrix. The snake will also be represented in the LED. Interrupts will be needed to indicate the end of game win or lose and to change the lights on the LED. Interrupt will also trigger when a snack is eaten to make the snack bigger as well.

Website: ucsbece153bsnakegame.weebly.com