

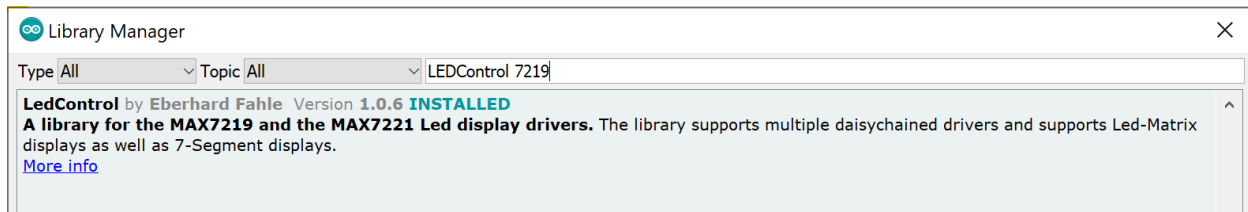
Materials

- Arduino Uno
- MAX7219 8x8 LED Matrix
- Pushbutton

Background & Set-Up:

You will need to install the LEDControl (not installed by default) to retrieve the special library functions that make it easier to use the MAX7219 8x8 LED Matrix.

Tools -> Manage Libraries (or "Ctrl-Shift-L")



You should set up the pins as shown below:

- Vcc - 5V
- GND - GND
- MOSI - DIN - pin 11
- SCK - pin 13
- CS - pin 9

For more info about the LEDControl Library:

<https://playground.arduino.cc/Main/LedControl/>

I provided example code to show how the LedControl Library functions work. Go to the github -> Starter Code -> LCD8x8Matrix. Investigate how the program is working to implement your animations. The LEDControl functions write arrays of bits to each individual LED on the 8x8 LED Matrix.

Goal:

We want to write a program for the Arduino that can control animations on the 8x8 LED matrix. You should have 3 different animations each with at least 5 different stills. Be creative and have fun with it. You can add a pushbutton to toggle through the different animations. Try enabling it as a hardware interrupt.