

Materials

- Arduino Uno
- MAX7219 8x8 LED Matrix
- Pushbutton

Background & Set-Up:

You will need to install the LEDMatrixDriver (not installed by default) to retrieve the special libraries and function that make it easier to use the MAX7219 8x8 LED Matrix. Read through the example programs and checkout the functions to investigate how they are used and how you can leverage them.

You should set up the pins as shown below:

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

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.