# **8bit-counter documentation**

This is a 8bit binary counter system to visualize the count from 0 to 255.

## **Components list:**

Arduino Uno R3, 8 red leds, potentiometer, push button, breadboard and wires.

## Setting up and usage:

Connect the components as mentioned in circuit diagram.

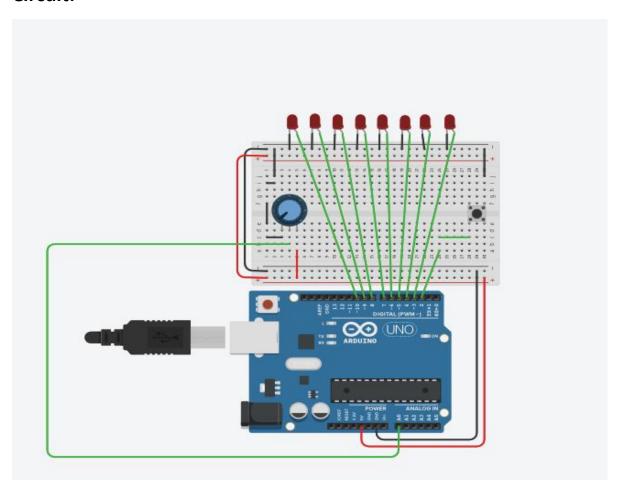
Flash 8bit-counter.ino (present in the same folder of this document) using Arduino ide.

After the flash is complete leds blink and start counting from 0 to 255.

Pressing push button resets the counter to 0 and starts from initial state giving indication.

Rotating potentiometer clock wise will increase the speed of counter and decreases the speed of counter by rotating it anti clock wise.

#### **Circuit:**



### **Connection:**

Counting starts from right to left ie: led connected to pin D3 is the one corresponding to decimal 1.

Leds are connected from pin D3 to D10.

Push button is connected to one of the interrupt programmable pin D2.

Potentiometer is connected to analog pin A0.

# Wire configuration:

Red wires: +5v

Black wires: ground

Green wires: control / input