//www.elegoo.com

//2016.12.9

int lightPin = 0;

int latchPin = 11;

int clockPin = 9;

int dataPin = 12;

int leds = 0;

void setup()

{

pinMode(latchPin, OUTPUT);

pinMode(dataPin, OUTPUT);

pinMode(clockPin, OUTPUT);

}

void updateShiftRegister()

{

digitalWrite(latchPin, LOW);

shiftOut(dataPin, clockPin, LSBFIRST, leds);

digitalWrite(latchPin, HIGH);

}

void loop()

{

int reading = analogRead(lightPin);

int numLEDSLit = reading / 57; //1023 / 9 / 2

if (numLEDSLit > 8) numLEDSLit = 8;

leds = 0; // no LEDs lit to start

for (int i = 0; i < numLEDSLit; i++)

{

leds = leds + (1 << i); // sets the i'th bit

}

updateShiftRegister();

}