int potpin = A0; // Analog input pin that the potentiometer is attached to

int ledpin = 9; // Analog output pin that the LED is attached to

int potvalue = 0; // value read from the pot

int ledint = 0; // value output to the PWM (analog out)

void setup() {

// initialize serial communications at 9600 bps:

Serial.begin(9600);

}

void loop() {

// read the analog in value:

potvalue = analogRead(potpin);

ledint=map(potvalue, 0, 1023, 0, 255);

analogWrite(ledpin, ledint);// we are giving potentiometer values to led

// print the results to the serial monitor:

Serial.print("pot values = ");

Serial.print(potvalue);

Serial.print("\t intensity values = ");

Serial.println(ledint);

delay(2);

}