void setup()

{ Serial.begin(9600);

pinMode(9,OUTPUT);

}

void loop()

{ int analog=analogRead(A2);

int brightness=map(analog, 0, 1023, 0, 255);

analogWrite(9, brightness);

Serial.print("analog:");

Serial.print(analog);

Serial.print(", Brightness:");

Serial.print(brightness);

delay(100);

}