#define ledPin 6

#define sensorPin A0

void setup() {

Serial.begin(9600);

pinMode(ledPin, OUTPUT);

digitalWrite(ledPin, LOW);

}

void loop() {

Serial.print("Analog output: ");

Serial.println(readSensor());

delay(500);

}

// This function returns the analog data to calling function

int readSensor() {

int sensorValue = analogRead(sensorPin); // Read the analog value from sensor

int outputValue = map(sensorValue, 0, 1023, 255, 0); // map the 10-bit data to 8-bit data

analogWrite(ledPin, outputValue); // generate PWM signal

return outputValue; // Return analog moisture value

}