const int LDRPin = A0; // LDR connected to analog pin A0

const int LEDPin = 9; // LED connected to digital pin 9

void setup() {

pinMode(LEDPin, OUTPUT); // Set the LED pin as an output

Serial.begin(9600); // Initialize serial communication

}

void loop() {

int LDRValue = analogRead(LDRPin); // Read the LDR value

Serial.println(LDRValue); // Print the LDR value to the Serial Monitor

delay(100); // Small delay for stability

if (LDRValue < 300) { // If the LDR value is below the threshold

digitalWrite(LEDPin, HIGH); // Turn on the LED

} else {

digitalWrite(LEDPin, LOW); // Turn off the LED

}

}