

# Light-Activated Street Lamp

This project turns a street lamp ON when it's dark and OFF when it's bright using an LDR sensor.

Components:

- Arduino UNO
- LDR
- Resistors
- Relay module
- Lamp/Bulb

Code will be uploaded using Arduino IDE.

Connections:

- LDR connected to analog pin A0 with resistor
- Relay connected to digital pin D8

Thank you!

## Arduino Code:

```
int ldrPin = A0;
int relayPin = 8;

void setup() {
  pinMode(relayPin, OUTPUT);
  Serial.begin(9600);
}

void loop() {
  int ldrStatus = analogRead(ldrPin);
  Serial.println(ldrStatus);

  if (ldrStatus < 300) {
    digitalWrite(relayPin, HIGH); // Turn ON light
```

```
} else {  
    digitalWrite(relayPin, LOW);    // Turn OFF light  
}  
delay(500);  
}
```