



Source code:

```
int bulb = 13;  
int bulb2 = 12;  
int inputPir = 2;  
int val = 0;  
int photosensor;  
int sensorLDR = A0;
```

```
void setup() {  
  pinMode(bulb, OUTPUT);  
  pinMode(bulb2, OUTPUT);  
  pinMode(inputPir, INPUT);  
  pinMode(sensorLDR, INPUT);  
  Serial.begin(9600);  
}
```

```
void loop(){  
  val = digitalRead(inputPir);  
  photosensor = analogRead(sensorLDR);
```

```
  //1st Bulb  
  if (photosensor<300)
```

```
{
    if (val == HIGH) {
        digitalWrite(bulb, HIGH);
        Serial.println(photosensor);
        delay(100);
    }

    else
    {
        digitalWrite(bulb, LOW);
        delay(300);
    }
}
```

//2nd bulb

```
else if(photosensor>300 && photosensor<600)
{
    if (val == HIGH) {
        digitalWrite(bulb2, HIGH);
        Serial.println(photosensor);
        delay(100);
    }

    else
    {
        digitalWrite(bulb2, LOW);
        delay(300);
    }
}
```

```
//1st bulb off
else{ digitalWrite(bulb,LOW);
Serial.println(photosensor);
delay(500);
}
```

```
}
```

