

**CODE**

```
int LightSensorVal = 0;
```

```
int PIRSensorVal = 0;
```

```
int RelayOutputVal = 0;
```

```
void setup()
```

 $\{$ 

```
pinMode(A0, INPUT);
```

```
pinMode(2, INPUT);
```

```
pinMode(8, OUTPUT);
```

```
Serial.begin(9600);
```

```
}
```

```
void loop()
```

```
{
```

```
    LightSensorVal = analogRead(A0);
```

```
    PIRSensorVal = digitalRead(2);
```

```
    RelayOutputVal = 8;
```

```
    if (LightSensorVal < 600) {
```

```
        if (PIRSensorVal == HIGH) {
```

```
            digitalWrite(8, HIGH);
```

```
            delay(5000);
```

```
        } else {
```

```
            digitalWrite(8, LOW);
```

```
            delay(1000);
```

```
        }
```

```
    } else {
```

```
        digitalWrite(8, LOW);
```

```
        Serial.println(LightSensorVal);
```

```
        delay(300);
```

```
    }
```

```
}
```