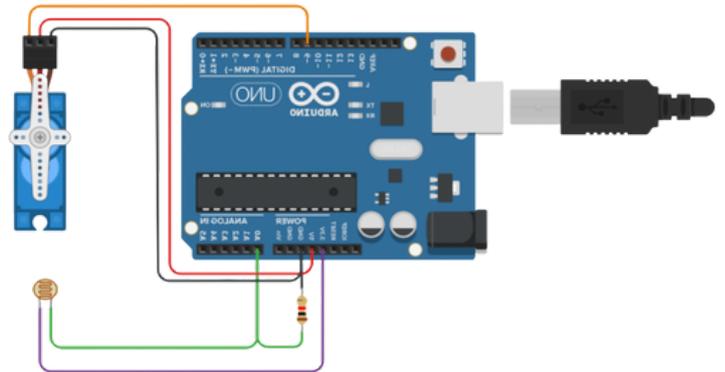


This project tells about automatic shelter which automatically gets on when there is sunlight.

In this project photoresistor sensor is used to detect sunlight and on detecting light motor gets automatically on and shelter comes to you.

Hardware required

- Arduino Uno R3
- Resistor
- Jumper Wires
- Servo Motor
- Photoresistor



Arduino Code

```
#include <Servo.h>
Servo servomotor;
const int photoresistor=A0;
const int motor=9;
int photoresistorValue=0;
int outputValue=0;
float nice=0.09;
float myValue;

void setup(){
  Serial.begin(9600);
  servomotor.attach(motor);
}
oid loop(){
  photoresistorValue=analogRead(photoresisto
r);
```

```
myValue=float(map(photoresistorValue,0,10
0,0,180));
outputValue+=int(myValue-
outputValue)*nice;
Serial.print("sensor = ");
Serial.print(photoresistorValue);
Serial.print("\t output = ");
Serial.println(outputValue);
servomotor.write(outputValue);
delay(10);
if(photoresistorValue>900){
  outputValue=160;
}
if(photoresistorValue>700){
  outputValue=120;
}
}
```



Precautions

1. Connections should be done properly.
2. Arduino is case Sensitive so code accordingly.
3. Give different and appropriate colours to the wires.
4. Use resistors for sensors and LED's.