

Assignment-4

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Aim	Develop a Smart Light System (Light that automatically switched on in evening and gets off in morning) using open source Hardware platform like Arduino and some sensors (Light dependent resistor) and actuator (An LED)

Output

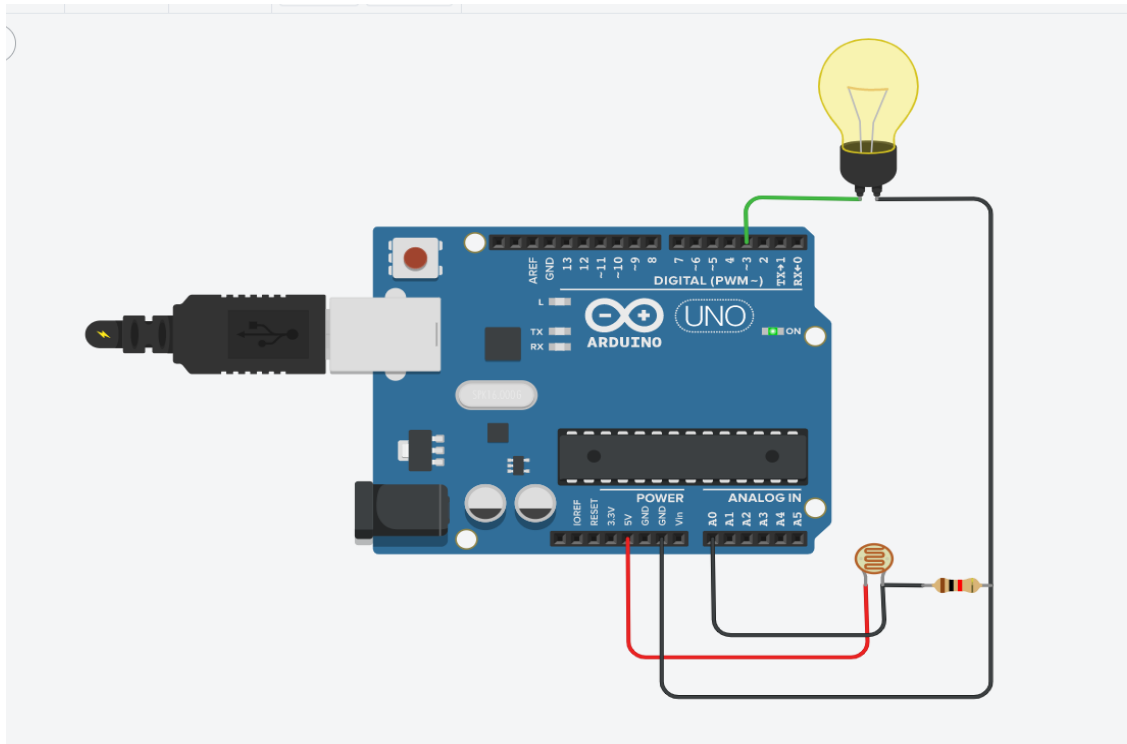


Fig-1 : Bulb will glow in absence of light

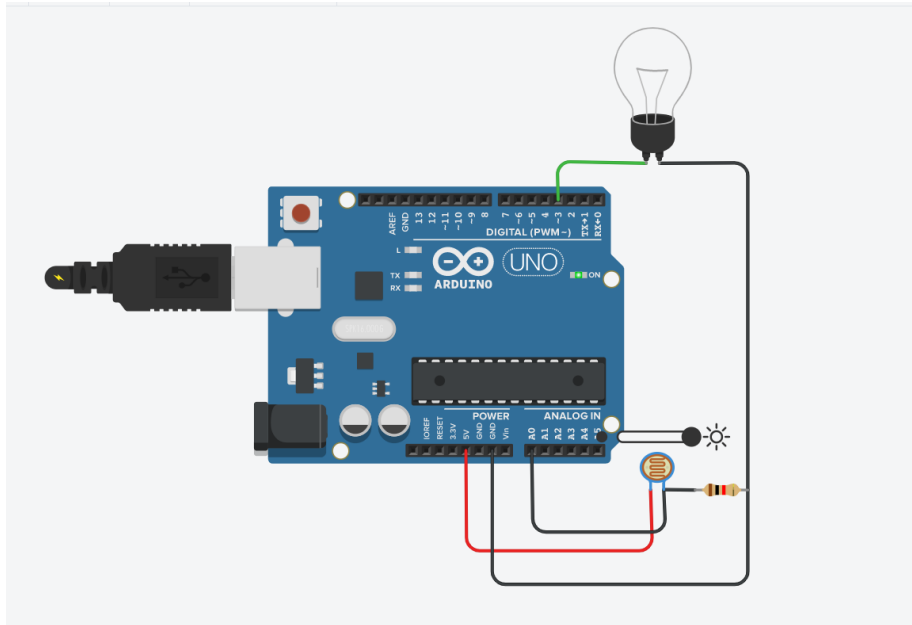


Fig-2 : Bulb will be in off state in presence of light

Code

```
#include<SoftwareSerial.h>
int sensorPin=A0;
int sensorValue = 0;
int led = 3;
void setup()
{
  pinMode(led, OUTPUT);
  //Serial.begin(9600);
  // put your setup code here, to run once:
}
void loop() {
  sensorValue = analogRead(sensorPin);
  //Serial.println(sensorValue);
  if(sensorValue < 100)
  {

    digitalWrite(led,HIGH);
  }
  digitalWrite(led,LOW);
}
```