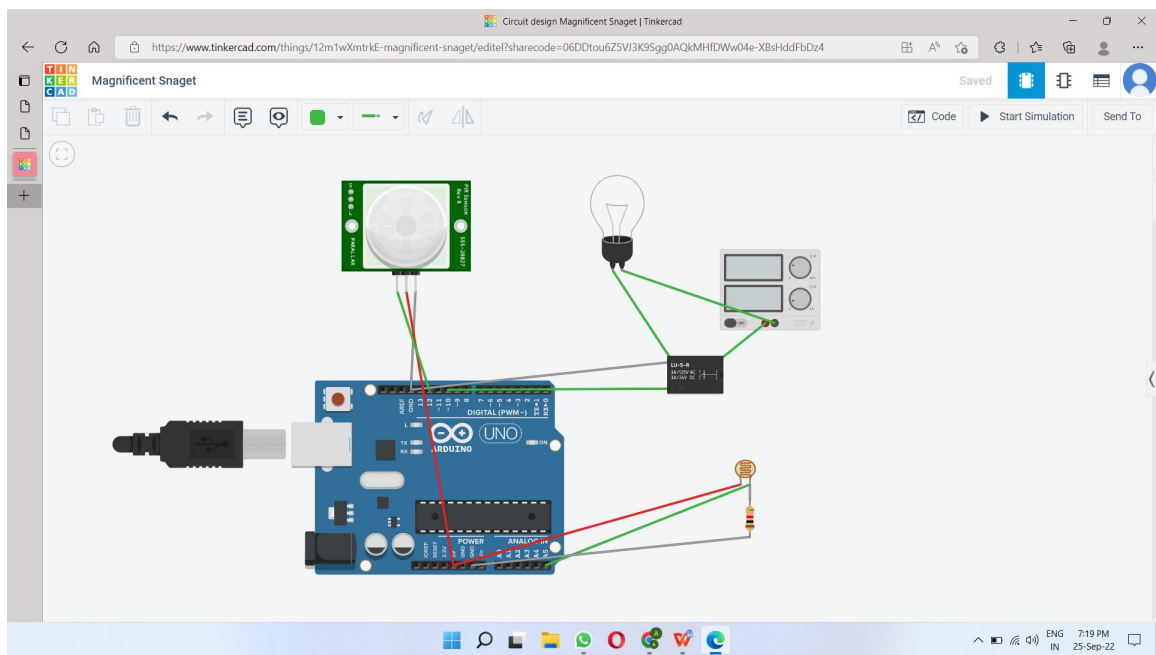


# **SMART HOME APPLIANCE FOR AUTOMATIC LIGHT CONTROL**

## **COMPONENTS:**

1. Ardiuno uno R3
2. Light Bulb
3. Power Supply
4. Relay SPDT
5. Photoresistor
6. PIR Sensor

## **CIRCUIT DIAGRAM:**



In this project, we will see the Automatic Room Lights using Arduino and PIR Sensor, where the lights in the room will automatically turn ON and OFF by detecting the presence of a human.

Such Automatic Room Lights can be implemented in your garages, staircases, bathrooms, etc. where we do not need continuous light but only when we are present.

Also, with the help of an automatic room light control system, you need not worry about electricity as the lights get automatically off when there is no person.

## **PROGRAM:**

```
float x,y ;

void setup ()

{

    pinMode( 8, INPUT);

    pinMode( 5, OUTPUT);

    pinMode( A5, INPUT);

    Serial.begin(9600);

}

void loop ()

{

    x= digitalRead(8);

    y= analogRead(A5);

    Serial.println(x);

    Serial.println(y);

    if ( (x>0) && (y<550))

    {

        digitalWrite(5, HIGH);
```

```
delay (5000);
```

```
}
```

```
else
```

```
digitalWrite(5, 0);
```

```
}
```