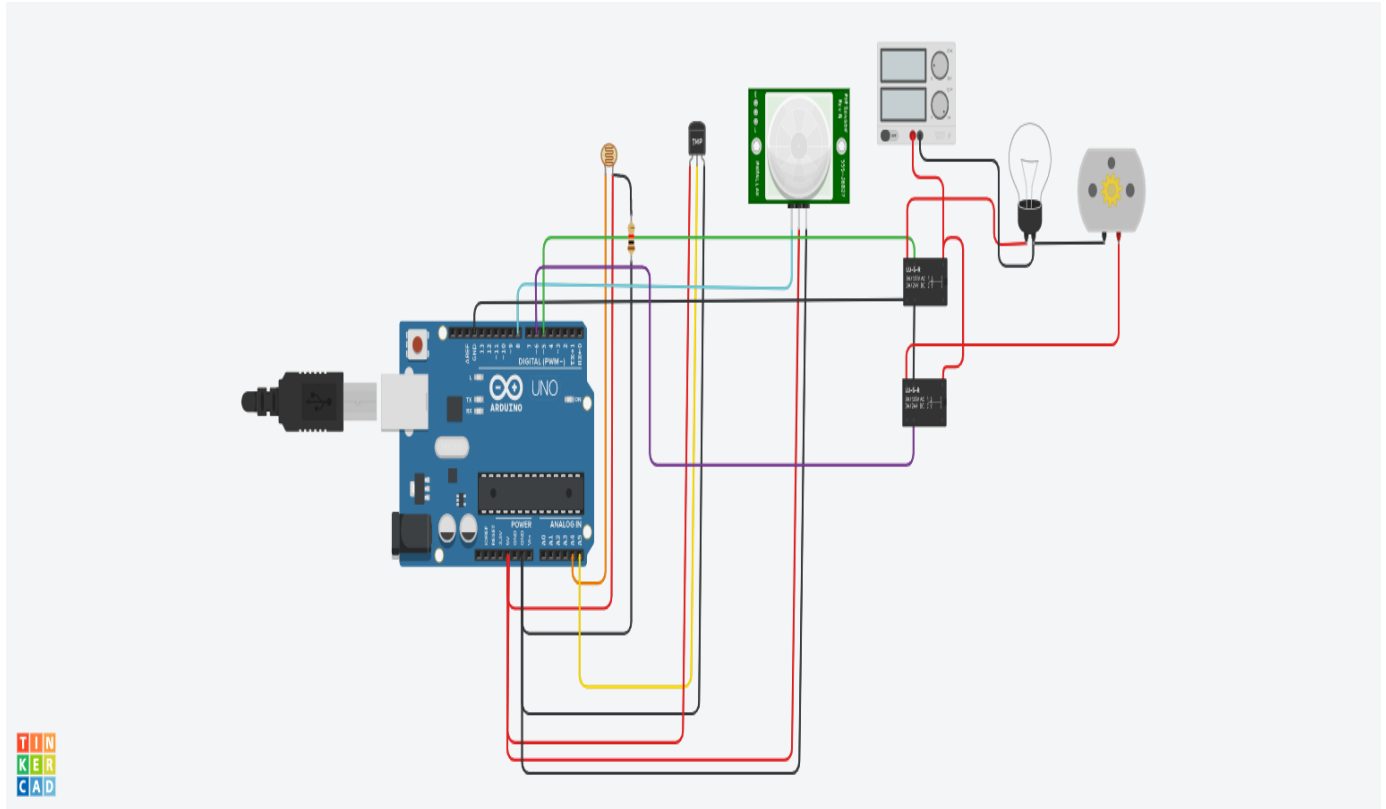


SMART HOME USING ARDUINO

ASSIGNMENT-1



Components Used:

Name	Quantity	Component
U1	1	Arduino Uno R3
R1	1	Photoresistor
R2	1	1 kΩ Resistor
U2	1	Temperature Sensor
PIR1	1	[TMP36]
P1	1	-29.745529855244513 , -145.09340101135643 , -224.4119033849807 PIR Sensor
K1, K2	2	5 , 5 Power Supply
L1	1	Relay SPDT
MFAN	1	Light bulb
	1	DC Motor

CODE:

```
float x,y,z,temp;
```

```
void setup()
```

```
{
```

```
  pinMode(8, INPUT);
```

```
  pinMode(5, OUTPUT);
```

```
  pinMode(6, OUTPUT);
```

```
  pinMode(A5, INPUT);
```

```
  pinMode(A4, INPUT);
```

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

```
}
```

```
void loop()
```

```
{
```

```
  x= digitalRead(8);
```

```
  y= analogRead(A5);
```

```
  z= analogRead(A4);
```

```
  Serial.println(x);
```

```
  Serial.println(y);
```

```
  Serial.println(z);
```

```
  temp = (double)z / 1024;
```

```
  temp = temp * 5;
```

```
  temp = temp - 0.5;
```

```
temp = temp * 100;
if ( (x>0) )
{
    if ((y<550)&&(temp>30))
    {
        digitalWrite(5, HIGH);
        digitalWrite(6, HIGH);
    }
    else if((y<550)&&(temp<30))
    {
        digitalWrite(5, HIGH);
        digitalWrite(6, LOW);
    }
    else if((y>550)&&(temp>30))
    {
        digitalWrite(5, LOW);
        digitalWrite(6, HIGH);
    }
    else if((y>550)&&(temp<30))
    {
        digitalWrite(5, LOW);
        digitalWrite(6, LOW);
    }
}
```

else

{

digitalWrite(5, LOW);

digitalWrite(6, LOW);

}

}