Assignment -1
HOME AUTOMATION

Assignment Date	15 Septeember-2022
Student Name	S.VARALAKSHMI
Student Roll Number	510119106011
Maximum Marks	2 Marks

Question-1:

ASSIGNMENT:Make a smart home with 2-3 sensors,LED,Buzzer, In single code and connections.

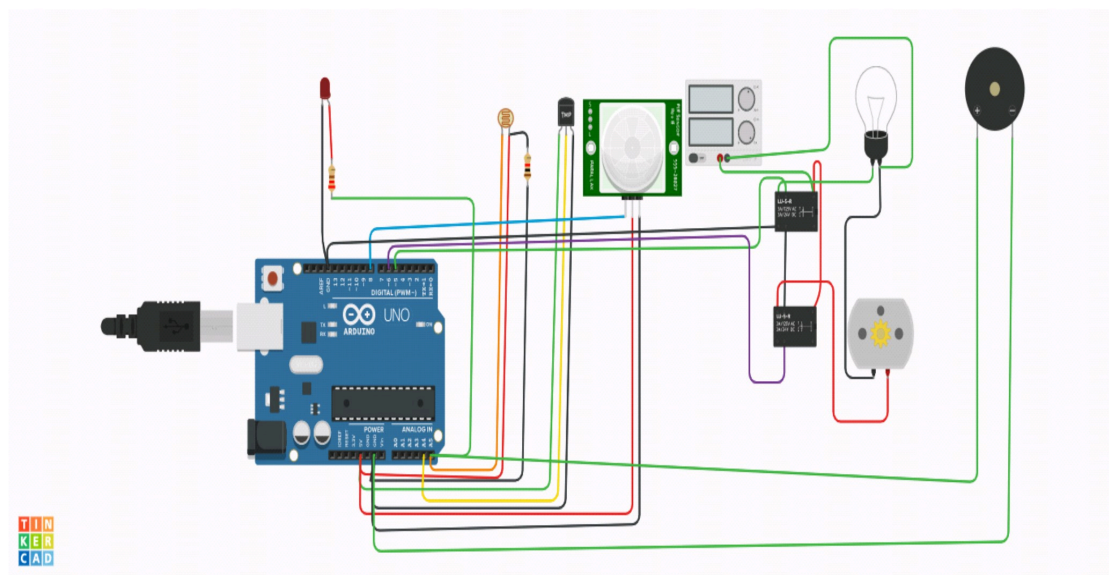**CODE:**

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

void setup()
{
  pinMode(8, INPUT);

  pinMode(5, OUTPUT);

  pinMode(6, OUTPUT);

  pinMode(A5, INPUT);

  pinMode(A4, INPUT);

  pinMode(12, OUTPUT);

  pinMode(13, OUTPUT);

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);

  }

  {

    tone(12,30);

    delay(1000);

  }

  {

    digitalWrite(13,HIGH);

    Serial.println("LED ON");

  }

}
```

CIRCUIT:

REFERENCE:

https://www.tinkercad.com/things/6oJSrB48O98-varalakshmisomasundaram/editel