

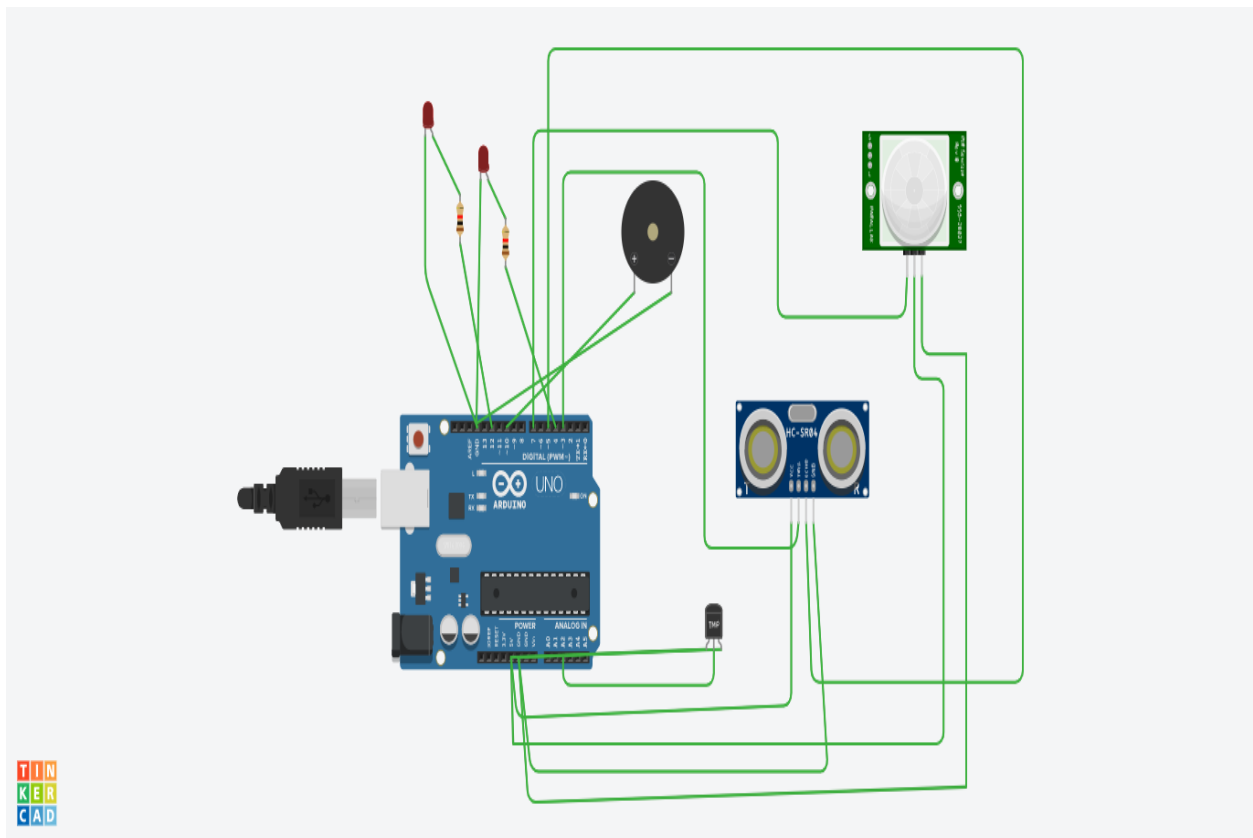
ASSIGNMENT 1

NAME: JEEVANA A L

ROLL NUMBER: 110719106009

OBJECTIVE:

To build a small home in tinkercad using at least 2 sensors ,LED, buzzer in a circuit and to stimulate in a single code.



CODE:

```
int trig=3;  
int echo=5;  
void setup()  
{
```

```
pinMode(trig,OUTPUT);
pinMode(echo,INPUT);
pinMode(7,INPUT);
Serial.begin(9600);
pinMode(10,OUTPUT);
pinMode(4,OUTPUT);
pinMode(12,OUTPUT);
}
void loop()
{
  double a=analogRead(A2);
  Serial.print("adc value:");
  Serial.println(a);
  double v=a/1024;
  double tvolt=v*5;
  Serial.print("temp volt:");
  double o=tvolt-0.5;
  double t=o*100;
  Serial.print("temp is:");
  Serial.println(t);
  digitalWrite(trig,LOW);
  digitalWrite(trig,HIGH);
  delayMicroseconds(10);
```

```
digitalWrite(trig,LOW);
float dur=pulseIn(echo,HIGH);
float dist=(dur*0.0343)/5;
Serial.println("distance:");
Serial.println(dist);
int m=digitalRead(7);
Serial.print("motion detected : ");
Serial.println(m);
if(t>=60)
{
Serial.println("high temperature");
digitalWrite(10,HIGH);
}
Else
{
Serial.println("low temperature");
digitalWrite(10,LOW);
}
if(dist<=20)
{
Serial.println("door open");
digitalWrite(4,HIGH);
}
```

Else

{

Serial.println("door close");

digitalWrite(4,LOW);

}

if(m==1)

{

Serial.println("on the light");

digitalWrite(12,HIGH);

delay(50);

}

Else

{

Serial.println("off the light");

digitalWrite(12,LOW);

}

delay(50);

}