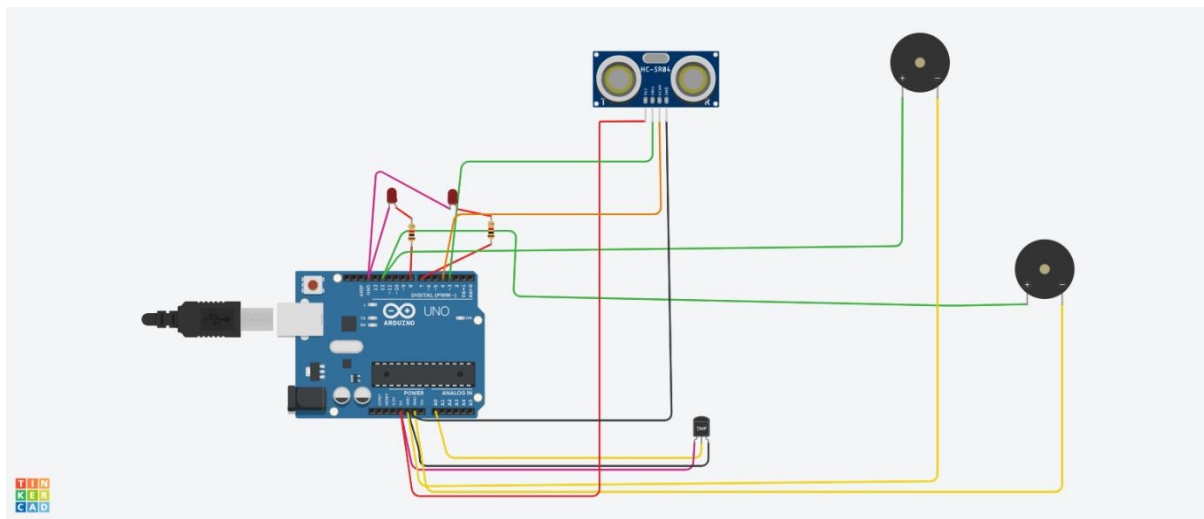


## ASSIGNMENT -1

ASSIGNMENT DATE	10 SEPTEMBER 2022
STUDENT NAME	MURALIDHARAN G
STUDENT ROLL NUMBER	910019106026
MAXIMUM MARKS	2 MARKS

Build a smart home in Thinkercad with 2 sensors, an Led, and buzzer and submit it.



CODE :

```
int t=2;
int e=3;
void setup()
{
  Serial.begin(9600);
  pinMode(t,OUTPUT);
  pinMode(e,INPUT);
  pinMode(12,OUTPUT);
}

void loop()
{
```

```

//ultrasonic sensor
digitalWrite(t,LOW);
digitalWrite(t,HIGH);
delayMicroseconds(10);
digitalWrite(t,LOW);
float dur=pulseIn(e,HIGH);
float dis=(dur*0.0343)/2;
Serial.print("Distance is: ");
Serial.println(dis);

//LED ON
if(dis>=100)
{
digitalWrite(8,HIGH);
digitalWrite(7,HIGH);
}

//Buzzer For ultrasonic Sensor
if(dis>=100)
{
For (int i=0; i<=30000; i=i+10)
{
tone (12, i);
delay (1000);
noTone (12);
delay (1000);
}
}

//Temperate Sensor
double a= analogRead(A0);
double t=((a/1024) *5)-0.5)*100;
Serial. Print ("Temp Value: ");
Serial.println(t);
delay (1000);
//LED ON
if(t>=100)
{
digitalWrite(8,HIGH);
digitalWrite(7,HIGH);
}

//Buzzer for Temperature Sensor
if(t>=100)
{
for(int i=0; i<=30000; i=i+10)
{
tone(12,i);
delay(1000);
noTone(12);
delay(1000);
}
}

```

```
}  
}  
//LED OFF  
if(t<100)  
{  
digitalWrite(8,LOW);  
digitalWrite(7,LOW);  
}  
}
```