Assignment -1

Smart Home using Tinkercad
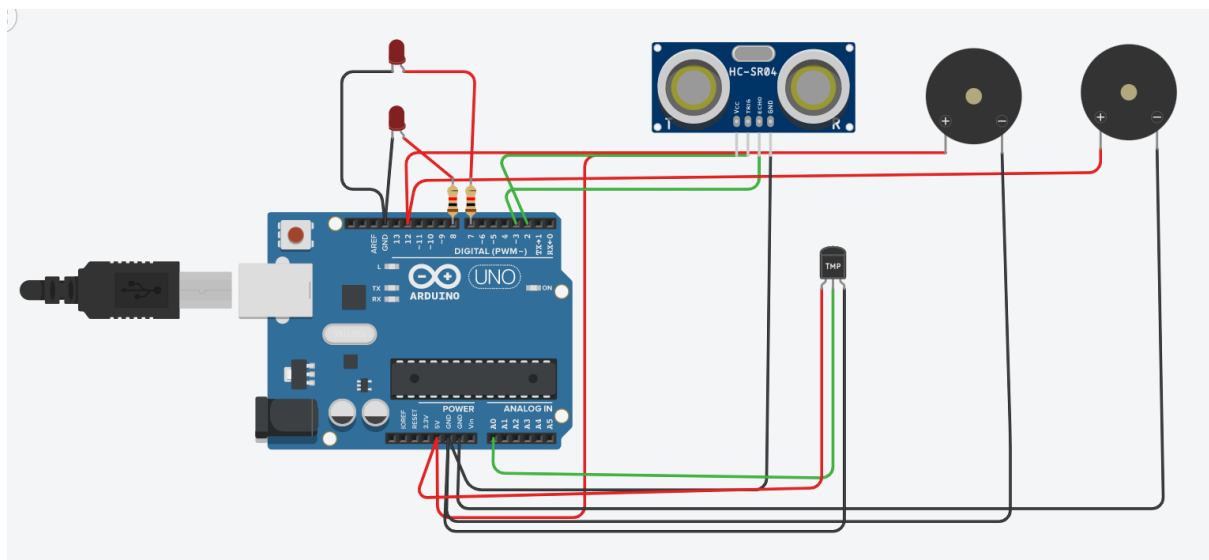
Assignment Date	09 November 2022
Student Name	Ms. Gowri Shangari E
Student Roll Number	717819L212
Maximum Marks	2 Marks

Question-1:

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

Solution:
Circuit Diagram:

Source Code:

```
int temp=2;
int e=3;
void setup()
{
Serial.begin(9600);
pinMode(temp,OUTPUT);
pinMode(e,INPUT);
pinMode(12,OUTPUT);
}
void loop()
{
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);
}
if(dis>=100)
{
for(int i=0; i<=30000; i=i+10)
{
tone(12,i);
delay(1000);
noTone(12);
delay(1000);
}
}
double a=analogRead(A0);
temp=(((a/1024)*5)-0.5)*100;
Serial.print("Temp Value: ");
Serial.println(temp);
delay(1000);
if(t>=100)
{
digitalWrite(8,HIGH);
digitalWrite(7,HIGH);
}
if(temp>=100)
{
for(int i=0; i<=30000; i=i+10)
{
tone(12,i);
delay(1000);
noTone(12);
delay(1000);
}
}
if(temp<100)
{

digitalWrite(8,LOW);

digitalWrite(7,LOW);

}
```

}

Simulation Output: