Assignment -1

Thinkercad

Assignment Date	17 September 2022
Student Name	Mr. Gunaseelan
Student Roll Number	910819104002
Maximum Marks	2 Marks

Question-1:

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

Solution:

Thinkercad Link : https://www.tinkercad.com/things/dNVzOyrwemt-neat-amur-habbi/editel?sharecode=sgoi3KliC-a8VG5nZPlwccXE0y3w6AyNSqE2fvY8NHQ
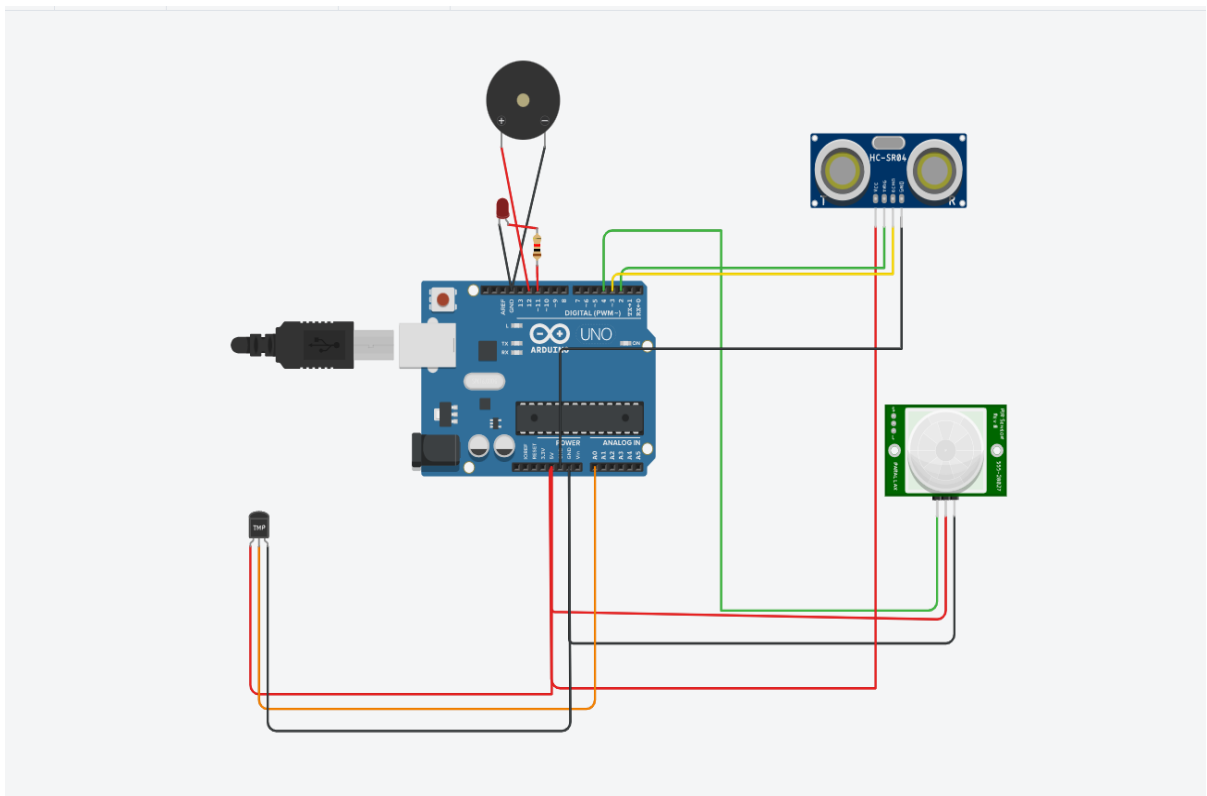
Code:

```
int t=2;
int e=3;
void setup()
{
  Serial.begin(6000);
  pinMode(12,OUTPUT);
  pinMode(4,INPUT);
  pinMode(t,OUTPUT);
  pinMode(e,INPUT);
  pinMode(11,OUTPUT);

}

void loop()
{
  double a=analogRead(A0);
  double te=(((a/1024)*5)-0.5)*100;
  if(te>100)
    tone(12,125);
  else
    noTone(12);
  digitalWrite(t,LOW);
  digitalWrite(t,HIGH);
  delayMicroseconds(10);
  digitalWrite(t,LOW);
  float dur=pulseIn(e,HIGH);
  float dis=(dur*0.0343)/2;
   if(dis<130)
   digitalWrite(11,HIGH);
   else
   digitalWrite(11,LOW);

  int p=digitalRead(4);
  if(p)
   tone(12,100);
  else
   noTone(12);
}
```

Output: