Assignment -1

Assignment Date 30 October 2022
Student Name Hariharan S
Student Roll Number 910019106012
Maximum Marks 2 Marks

Question :

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

Code:

```
int led = 8;
int trig = 2;
int echo = 5;
int buzzer = 4;

void setup()
{
  Serial.begin(9000);
  pinMode(led,OUTPUT);
  pinMode(trig,OUTPUT);
  pinMode(echo,INPUT);
  pinMode(buzzer,OUTPUT);
}

void loop()
{
  double a = analogRead(A2);
  double v = a / 1024;
  double tvolt = v * 5;
  double o = tvolt - 0.5;
  double t = 0 * 100;
  Serial.print("Temperature in degree");
  Serial.println(t);
```

```
    if(t >= 50)
    {
      digitalWrite(led,HIGH);
    }
    else
    {
      digitalWrite(led,LOW);
    }
    digitalWrite(trig,LOW);
    digitalWrite(trig,HIGH);
    delayMicroseconds(10);
    digitalWrite(trig,LOW);
    float dur = pulseIn(echo,HIGH);
    float dist = (dur * 0.343)/2;
    Serial.print("Distance");
    Serial.println(dist);
    if(dist >= 17)
    {
      digitalWrite(buzzer,HIGH);
    }
    else
    {
      digitalWrite(buzzer,LOW);
    }
}
Output :
```