Assignment -1
Smart Home Automation

Assignment Date	9 September 2022
Student Name	Mr.Manoj
Student Roll Number	422119106005
Maximum Marks	2 Marks

Question:

Smart home automation.

Title:

Object detection using buzzer

Solution:

```
const int trigpin = 9;
const int echopin = 10;
const int buzzer = 11;
const int ledpin = 13;
int time;
long duration;
int distance;
int safetyDistance;

void setup(){
Serial.begin (9600);
pinMode(trigpin, OUTPUT);
pinMode(echopin, INPUT);
pinMode(buzzer,  OUTPUT);
pinMode(ledpin,  OUTPUT);

}

void loop(){
 digitalWrite(trigpin, HIGH);
 delayMicroseconds(10);
```

```
digitalWrite(trigpin, LOW);

duration = pulseIn(echopin, HIGH);

distance= duration*0.034/2;

safetyDistance = distance;
if (safetyDistance <=5){
  Serial.println (" Door Open ");
  Serial.print (" Distance ");
  Serial.println(distance);
  digitalWrite(buzzer, HIGH);
  digitalWrite(ledpin, HIGH);
  delay (500);
}
  else{
    Serial.println(distance);
    digitalWrite(buzzer, LOW);
    digitalWrite(ledpin, LOW);
  }
}
```

Circuit: