Assignment -1

Assignment Date	19 September 2022
Student Name	ARCHANA G
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Maximum Marks	2 Marks

Question: Build a smart home using buzzers and sensors

Code:

```
//door buzzer using ultrasonic sensor

int trigger_pin = 2; int echo_pin = 3;

int buzzer_pin = 10;  int time; int

distance;  void setup()

{

    Serial.begin (9600);

pinMode (trigger_pin, OUTPUT);

pinMode (echo_pin, INPUT);

pinMode (buzzer_pin, OUTPUT);

} void

loop()  {

   digitalWrite (trigger_pin, HIGH);

delayMicroseconds (10);

digitalWrite (trigger_pin, LOW);

time = pulseIn (echo_pin, HIGH);

distance = (time * 0.034) / 2;


 if (distance <= 10)

    {
```

```
    Serial.println (" Door Open ");

    Serial.print   ("   Distance=   ");
Serial.println                (distance);
digitalWrite    (buzzer_pin,    HIGH);
delay (500);

    }
else {
    Serial.println (" Door closed ");

    Serial.print   ("   Distance=   ");
Serial.println                (distance);
digitalWrite    (buzzer_pin,    LOW);
delay (500);

    }
}
```

Output: