

### ASSIGNMENT-I

Assignment Date	19 September 2022
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Team ID	PNT2022TMID43384
Project Name	Smart Farmer - IoT Enabled Smart Farming Application
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:**

