

SRI SHANMUGHA COLLEGE OF ENGINEERING AND TECHNOLOGY  
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IBM NALAIYA THIRAN

ASSIGNMENT-1

SMART HOME AUTOMATION-DOOR BUZZER

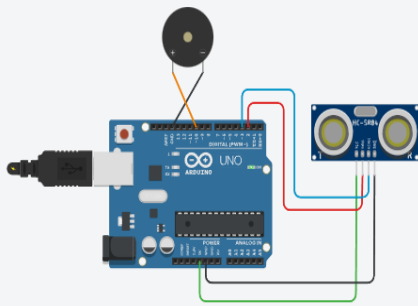
TEAM MEMBER : UMABHARATHI S

**CODING :**

```
int trig=2;
int echo=3;
int buzzer=10;
int time;
int distance;
void setup()
{
  Serial.begin(9600);
  pinMode(trig,OUTPUT);
  pinMode(echo,INPUT);
  pinMode(buzzer,OUTPUT);
}
void loop()
{
  digitalWrite(trig,HIGH);
  delayMicroseconds(10);
  digitalWrite(trig,LOW);
  time=pulseIn (echo,HIGH);
  distance=(time*0.034)/2;
```

```
if(distance<=10)
{
    Serial.println("DOOR OPEN");
    Serial.print("distance:");
    Serial.println(distance);
    digitalWrite(buzzer,HIGH);
    delay(500);
}
Else
{
    Serial.println("DOOR CLOSED");
    Serial.print("distance:");
    Serial.println(distance);
    digitalWrite(buzzer,LOW);
    delay(500);
}
}
```

## OUTPUT:



```
11  pinMode(buzzer,OUTPUT);
12  }
13  void loop()
14  {
15    digitalWrite(trig,HIGH);
16    delayMicroseconds(10);
17    digitalWrite(trig,LOW);
18    time=pulseIn (echo,HIGH);
19    distance=(time*0.034)/2;
20    if(distance<=10)
21    {
22      Serial.println("DOOR OPEN");
23      Serial.print("distance:");
24      Serial.println(distance);
25      digitalWrite(buzzer,HIGH);
26      delay(500);
27    }
28    else
29    {
30      Serial.println("DOOR CLOSED");
31      Serial.print("distance:");
32      Serial.println(distance);
33      digitalWrite(buzzer,LOW);
34      delay(500);
35    }
36  }
37  }
38  }
39  }
```

Serial Monitor

```
distance:2
DOOR OPEN
distance:2
DOOR OPEN
distance:2
DOOR OPEN
distance:2
DOOR OPEN
```