

JP COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
IBM NALAIYA THIRAN
ASSIGNMENT-4

IOT based smart crop production system for agriculture

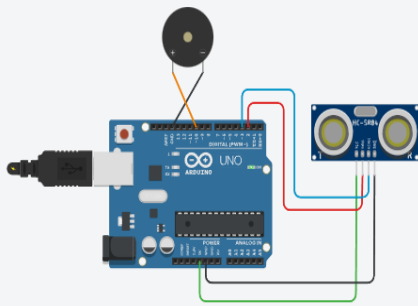
TEAM LEADER: vaishnavi nesam k

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
```