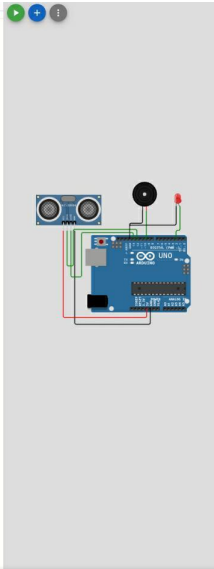


<https://wokwi.com/projects/363154016446599169>

```
1 //define variables
2 #define trigerPin 12
3 #define echoPin 13
4 #define ledPin 2
5 #define speakerPin 10
6 #define pitch 262
7
8 double duration,distance;
9
10 void setup() {
11   //setup for sensor
12   Serial.begin(9600);
13   pinMode(trigerPin,OUTPUT);
14   pinMode(echoPin,INPUT);
15
16   //setup for LED
17   pinMode(ledPin,OUTPUT);
18
19   //setup for speaker
20   pinMode(speakerPin,OUTPUT);
21 }
22
23
24 void loop() {
25   //looping sensor(create sound wave)
26   digitalWrite(trigerPin,LOW);
27   delayMicroseconds(2);
28   digitalWrite(trigerPin,HIGH);
29   delayMicroseconds(10);
30   digitalWrite(trigerPin,LOW);
31   delayMicroseconds(2);
32
33   //getduration
34   duration = pulseIn(echoPin,HIGH);
35
36   //calculate distance
37   distance = (duration/2) * 0.0343;
38
39   //consider maximum width of the door = 200 cm
40
41   if(distance<200){
42     digitalWrite(ledPin,HIGH);
43     tone(speakerPin, pitch);
44     delay(500);
45
46     digitalWrite(ledPin, LOW);
47     noTone(speakerPin);
48     delay(500);
49   }
50   else{
51     digitalWrite(ledPin,LOW);
52     noTone(speakerPin);
53   }
54 }
55 }
```



```
//define variables
#define trigerPin 12
#define echoPin 13
#define ledPin 2
#define speakerPin 10
#define pitch 262
```

```
double duration,distance;
```

```
void setup() {
  //setup for sensor
  Serial.begin(9600);
  pinMode(trigerPin,OUTPUT);
  pinMode(echoPin,INPUT);
```

```
  //setup for LED
  pinMode(ledPin,OUTPUT);
```

```
  //setup for speaker
  pinMode(speakerPin,OUTPUT);
```

```
}
```

```
void loop() {
  //looping sensor(create sound wave)
  digitalWrite(trigerPin,LOW);
  delayMicroseconds(2);
  digitalWrite(trigerPin,HIGH);
  delayMicroseconds(10);
  digitalWrite(trigerPin,LOW);
  delayMicroseconds(2);
```

```
  //getduration
  duration = pulseIn(echoPin,HIGH);
```

```
//caculate distance
distance = (duration/2) * 0.0343;

//consider maximum width of the door = 200 cm

if(distance<200){
  digitalWrite(ledPin,HIGH);
  tone(speakerPin, pitch);
  delay(300);

  digitalWrite(ledPin, LOW);
  noTone(speakerPin);
  delay(300);
}
else{
  digitalWrite(ledPin,LOW);
  noTone(speakerPin);
}
}
```