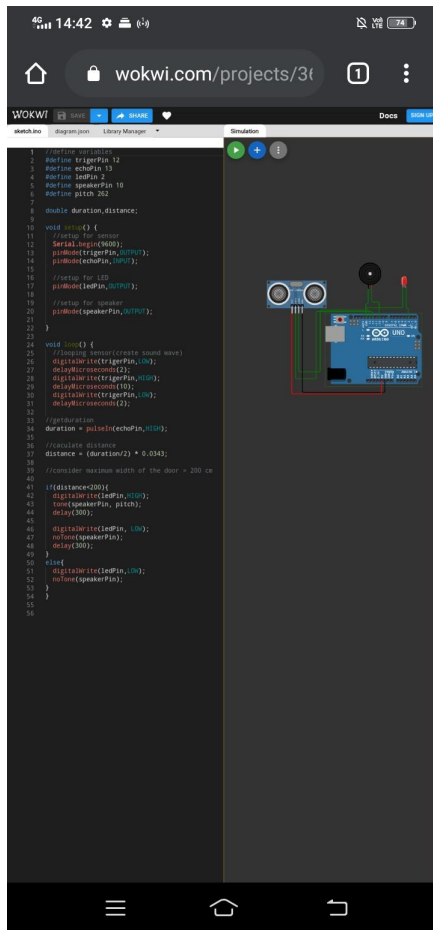


<https://wokwi.com/projects/363169261024664577>



```
//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);
  }
}

```