

Assignment -4






Assignment Date	19 NOVEMBER 2022
Project Name	Smart Farmer-IOT Enabled smart farming application
Team ID	PNT2022TMID04701



Code:

```
#define ECHO_PIN 2
#define TRIG_PIN 3
#define organization = "3gcqg0"
#define deviceType = "Ultrasonicsensor"
#define deviceId = "b11m3edevicid"
#define authMethod = "use-token-auth"
#define authToken = "v?J8iAARoSx(p_gCsL"void setup()
{
  Serial.begin(9600);
  pinMode(TRIG_PIN, OUTPUT);
  pinMode(ECHO_PIN, INPUT);
}
float readDistanceCM()
{
  digitalWrite(TRIG_PIN, LOW);
  delayMicroseconds(2);
  digitalWrite(TRIG_PIN, HIGH);
  delayMicroseconds(10);
  digitalWrite(TRIG_PIN, LOW);
  int duration = pulseIn(ECHO_PIN, HIGH);
  return duration * 0.034 / 2;
}
void loop()
{
  float distance = readDistanceCM();

  if (distance <= 100)
  {
    Serial.println("ALERT!!! ALERT!!! Object Detected");
  }
  else
  {
    Serial.print("Measured distance: ");
    Serial.println(readDistanceCM());
  }
  delay(1000);
}
```




Output:

WOKWI     Docs 

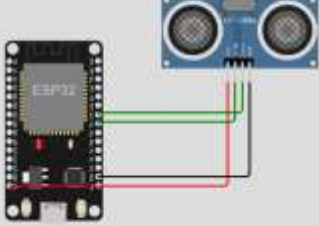
sketch.ino   Library Manager

```
1 #define ECHO_PIN 2
2 #define TRIG_PIN 3
3 #define organization = "jgcqg9"
4 #define deviceType = "Ultrasonicsensor"
5 #define deviceId = "blindeddeviceid"
6 #define authMethod = "use-token-auth"
7 #define authToken = "v7J8IAAR0sX(p_gCsl"
8 void setup()
9 {
10   Serial.begin(9600);
11   pinMode(TRIG_PIN, OUTPUT);
12   pinMode(ECHO_PIN, INPUT);
13 }
14 float readDistanceCM()
15 {
16   digitalWrite(TRIG_PIN, LOW);
17   delayMicroseconds(2);
18   digitalWrite(TRIG_PIN, HIGH);
19   delayMicroseconds(10);
20   digitalWrite(TRIG_PIN, LOW);
21   int duration = pulseIn(ECHO_PIN, HIGH);
22   return duration * 0.034 / 2;
23 }
24 void loop()
25 {
26   float distance = readDistanceCM();
27   ...
28   if (distance <= 100)
```

Simulation

00:30.057 99%



ALERT!!! ALERT!!! Object Detected
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