Assignment 4

Project Link: https://wokwi.com/projects/290056311044833800

Code:

```
#define ECHO_PIN 2

#define TRIG_PIN 3

#define organization ="kv09p4"

#define device type ="Groot"

#define deviceId="13"

#define authmethod="token" #define
authToken="123456789"

void setup() {  Serial.begin(115200);
 pinMode(LED_BUILTIN, OUTPUT);

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("person detected");

}

 else{

Serial.print("Measured distance:");

Serial.println(readDistanceCM());
```

```
    }
delay(1000);
}
```

```
 6    #define ECHO_PIN 2
 7    #define TRIG_PIN 3
 8    #define organization ="kv09p4"
 9    #define device type ="Groot"
10    #define deviceId="13"
11    #define authmethod="token"
12    #define authToken="123456789"
13    void setup() {
14      Serial.begin(115200);
15      pinMode(LED_BUILTIN, OUTPUT);
16      pinMode(TRIG_PIN, OUTPUT);
17      pinMode(ECHO_PIN, INPUT);
18    }
19    float readDistanceCM() {
20      digitalWrite(TRIG_PIN, LOW);
21      delayMicroseconds(2);
22      digitalWrite(TRIG_PIN, HIGH);
23      delayMicroseconds(10);
24      digitalWrite(TRIG_PIN, LOW);
25      int duration = pulseIn(ECHO_PIN, HIGH);
26      return duration * 0.034 / 2;
27    }
28    void loop(){
29      float distance=readDistanceCM();
30      if(distance<=100)
31      {
32      Serial.println("person detected");
33      }
34      else{
35      Serial.print("Measured distance:");
36      Serial.println(readDistanceCM());
37      }
38      delay(1000);
39    }
40
```

00:22.280 99%

Measured distance:177.34
Measured distance:177.24
Measured distance:177.40
Measured distance:177.24
Measured distance:177.33
Measured distance:177.24
Measured distance:177.33