Link:

https://wokwi.com/projects/347029623224140371

Program Code:

```
1   #define ECHO_PIN 2
2   #define TRIG_PIN 3
3   #define organization = "t18snh
4   #define deviceType = "ibm"
5   #define deviceId = "20"
6   #define authMethod = "token"
7   #define authToken = "12345678"
8
9   void setup(){
10      Serial.begin(9600);
11      pinMode(TRIG_PIN,OUTPUT);
12      pinMode(ECHO_PIN,INPUT);
13  }
14
15   float readDistanceCM(){
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      float distance=readDistanceCM();
26
27
28      if(distance<=100)
29      {
30          Serial.println("person detected");
31      }
32      else{
33          Serial.print("Measured distance:");
34          Serial.println(readDistanceCM());
35      }
```

```
36      delay(1000);
37 }
38
```

IBM ClOUD :

```
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21      int duration=pulseIn(ECHO_PIN,HIGH);
22      return duration*0.034/2;
23  }
24  void loop(){
25      float distance=readDistanceCM();
26
27
28      if(distance<=100)
29      {
```

Measured distance:177.67
Measured distance:177.57
Measured distance:177.67
Measured distance:177.57
person detected
person detected
person detected