ASSIGNMENT - 4

Date	November 17 2022
Team ID	PNT2022TMID20828
Project Name	Project – Smart Farmer - IoT Enabled Smart Farming Application
Maximum Mark	2 Marks
Student Name	KIRUBAVATHI U

CODE:

```
#define ECHO_PIN 2
#define TRIG_PIN 3

#define ORG "9g75cf"
#define DEVICE_TYPE "assignment"
#define DEVICE_ID "1234"
#define TOKEN_ID "12345678"
void setup() {
     Serial.begin(9600);
     pinMode(TRIG_PIN, OUTPUT);
     pinMode(ECHO_PIN, INPUT);
}
```
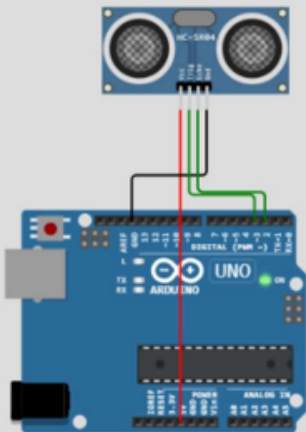
```cpp
float readDistanceCM() {
    digitalWrite(TRIG_PIN, LOW);
    delayMicroseconds(2);
    digitalWrite(TRIG_PIN, HIGH);
    delayMicroseconds(10);
    digitalWrite(TRIG_PIN, LOW);
    int duration = pulseIn(ECHO_PIN, HIGH);
    return duration * 0.034 / 2;
}
void loop() {
    float distance = readDistanceCM();
    if (distance <= 100) {
        Serial.println("Movement detected ");
    }
    else {
        Serial.print("Distance: ");
        Serial.println(readDistanceCM());
    }
    delay(1000);
}
```

```
Distance: 186.68
Distance: 186.68
Distance: 186.68
Distance: 186.68
Distance: 186.78
Distance: 186.68
```

IBM Cloud:

Event	Value	Format	Last Received
event_1	{"Persondetected" }	json	a few seconds ago
event_1	{"Persondetected" }	json	a few seconds ago
event_1	{"Persondetected" }	json	a few seconds ago
event_1	{"Persondetected" }	json	a few seconds ago
event_1	{"Persondetected" }	json	a few seconds ago