# ASSIGNMENT - 4

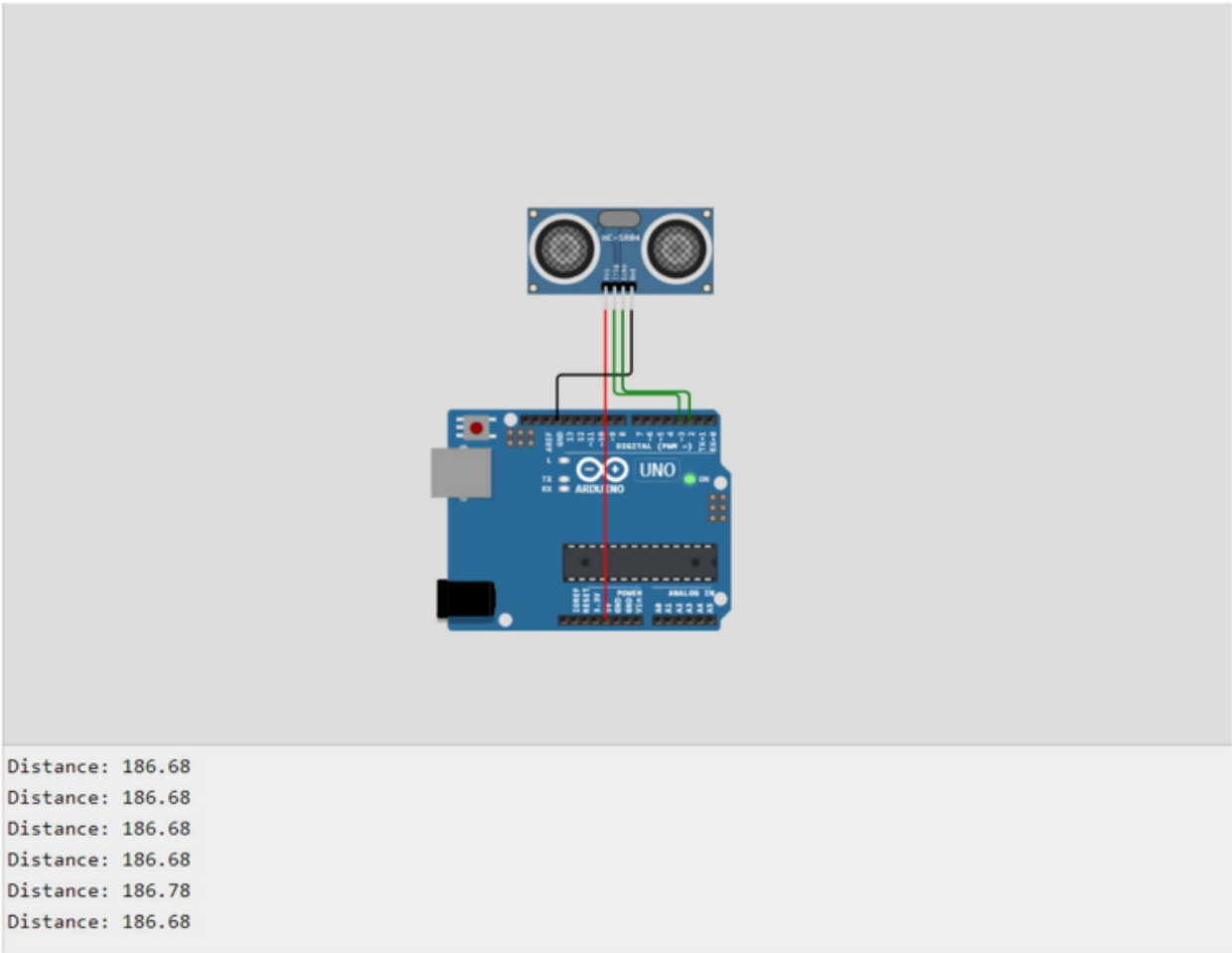| Date | November 17 2022 |
|------|------------------|
| Team ID | PNT2022TMID20828 |
| Project Name | Project – Smart Farmer - IoT Enabled Smart Farming Application |
| Maximum Mark | 2 Marks |
| Student Name | Harini.G |

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);
}
```

```
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 |