

## Assignment - 4

### Code:

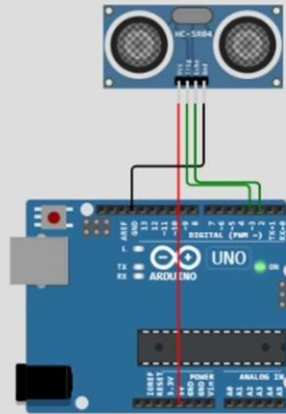
```
#define ECHO_PIN 2
#define TRIG_PIN 3

#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