Assignment - 4

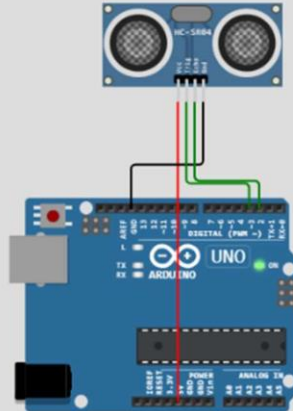| Team Member Name	M.Gobi Shankar
Team ID	PNT2022TMID05567
Project Name	IoT Based Safety Gadget for Child Safety Monitoring & Notification

Code:

```c
#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
```

Wokwi Link: https://wokwi.com/projects/346604126712365651

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