Coding:

#include <ESP8266WiFi.h>

#include <Wire.h>

#include <Adafruit\_Sensor.h>

#include <Adafruit\_MPU6050.h>

#include <Arduino\_ConnectionHandler.h>

Adafruit\_MPU6050 mpu;

const int triggerPin1 = 4; // Trigger pin for first ultrasonic sensor

const int echoPin1 = 5; // Echo pin for first ultrasonic sensor

const int triggerPin2 = 6; // Trigger pin for second ultrasonic sensor

const int echoPin2 = 7; // Echo pin for second ultrasonic sensor

Arduino\_ConnectionHandler conn;

void setup() {

// Start serial communication

Serial.begin(115200);

// Connect to Wi-Fi

WiFi.begin("Your\_SSID", "Your\_Password");

while (WiFi.status() != WL\_CONNECTED) {

delay(1000);

Serial.println("Connecting to WiFi...");

}

Serial.println("Connected to WiFi");

// Initialize the MPU6050 sensor

mpu.begin();

// Set up the ultrasonic sensor pins

pinMode(triggerPin1, OUTPUT);

pinMode(echoPin1, INPUT);

pinMode(triggerPin2, OUTPUT);

pinMode(echoPin2, INPUT);

// Connect to the Arduino IoT Cloud

conn.begin("Your\_Device\_Name", "Your\_Device\_Secret");

while (!conn.connected()) {

delay(1000);

Serial.println("Connecting to Arduino IoT Cloud...");

}

Serial.println("Connected to Arduino IoT Cloud");

}

void loop() {

// Read data from the MPU6050 sensor

int16\_t accelX, accelY, accelZ;

int16\_t gyroX, gyroY, gyroZ;

mpu.getMotion6(&accelX, &accelY, &accelZ, &gyroX, &gyroY, &gyroZ);

// Publish the MPU6050 data to the cloud

conn.publish("accelX", String(accelX));

conn.publish("accelY", String(accelY));

conn.publish("accelZ", String(accelZ));

conn.publish("gyroX", String(gyroX));

conn.publish("gyroY", String(gyroY));

conn.publish("gyroZ", String(gyroZ));

// Read data from the first ultrasonic sensor

long duration1;

digitalWrite(triggerPin1, LOW);

delayMicroseconds(2);

digitalWrite(triggerPin1, HIGH);

delayMicroseconds(10);

digitalWrite(triggerPin1, LOW);

duration1 = pulseIn(echoPin1, HIGH);

float distance1 = (duration1 / 2) / 29.1;

// Publish the first ultrasonic sensor data to the cloud

conn.pub