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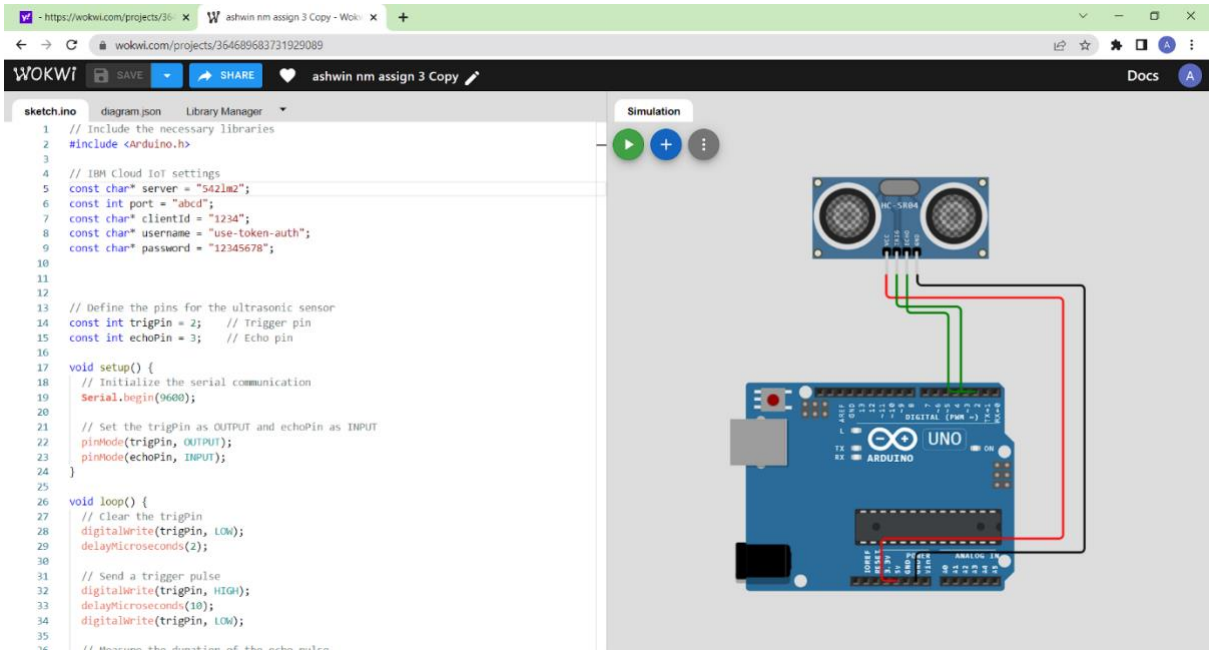
Link - https://wokwi.com/projects/364689683731929089



Code-

```
// Include the necessary libraries
#include <Arduino.h>

// IBM Cloud IoT settings
const char* server = "542lm2";
const int port = "abcd";
const char* clientId = "1234";
const char* username = "use-token-auth";
const char* password = "12345678";



// Define the pins for the ultrasonic sensor
const int trigPin = 2;    // Trigger pin
const int echoPin = 3;    // Echo pin

void setup() {
  // Initialize the serial communication
  Serial.begin(9600);

  // Set the trigPin as OUTPUT and echoPin as INPUT
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
```

```
}

void loop() {
  // Clear the trigPin
  digitalWrite(trigPin, LOW);
  delayMicroseconds(2);

  // Send a trigger pulse
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);

  // Measure the duration of the echo pulse
  long duration = pulseIn(echoPin, HIGH);

  // Calculate the distance
  // Speed of sound = 343 m/s or 34300 cm/s
  // Divide by 2 to account for the round trip of the sound wave
  // Distance in cm = duration * 34300 / 2
  int distance = duration * 34300 / 2;

  // Print the distance to the serial monitor
  Serial.print("Distance: ");
  Serial.print(distance);
  Serial.println(" cm");

  delay(1000);  // Wait for a second before taking the next measurement
}
```