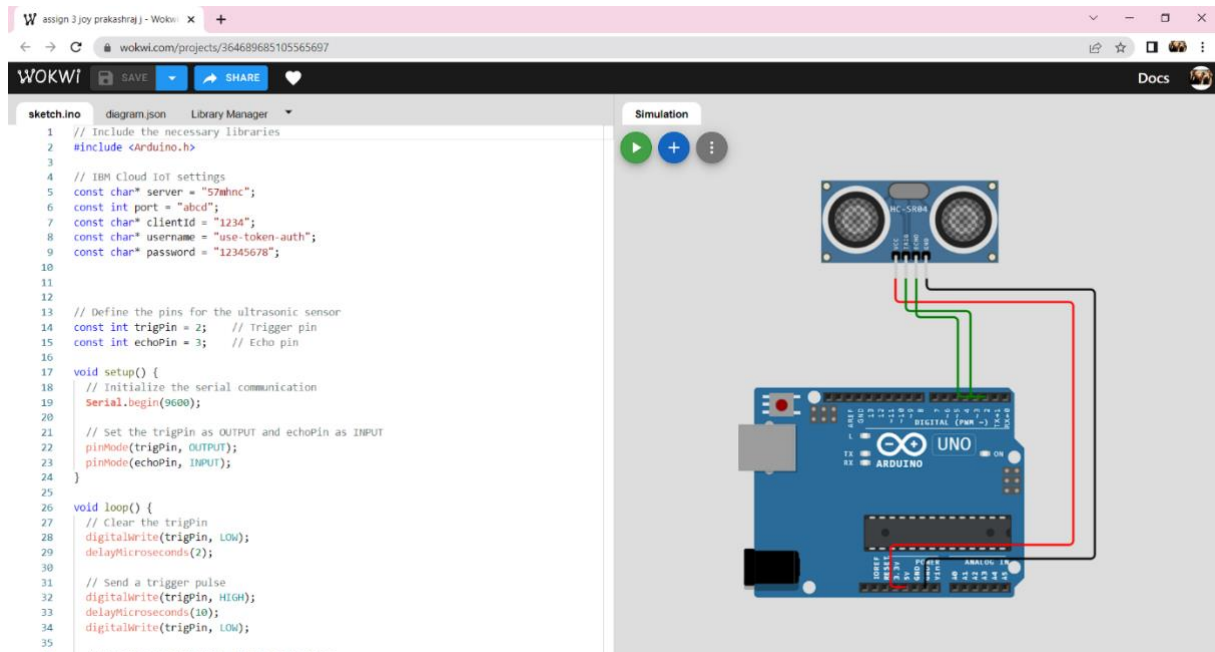


Name- Joy prakashraj J

Reg No- 711120106041

Link- <https://wokwi.com/projects/364689685105565697>



Code-

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

// IBM Cloud IoT settings const char*
server = "57mhnc"; 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
}

```