**Assignment -4**

| Student’s Name | M.Karthika |
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| Assignment Date | 01 November 2022 |
| Team ID | PNT2022TMID18159 |
| Project Name | Project – SMART SIGN CONNECTIVITY FOR ROAD SAFETY |
| Maximum Marks | 2 Marks |

**WRITE CODE AND CONNECTIONS IN WOKWI FOR ULTRASONIC. WHENEVER DISTANCE IS LESS THAN 100 CMS SEND “ALERT” TO IBM CLOUD AND DISPLAY IN DEVICE RECENT EVENTS.**

**SOLUTION:**

#define ECHO\_PIN 2

#define TRIG\_PIN 3

**#define organization = "mmbh4c"**

**#define deviceType = "Ultrasonic"**

**#define deviceId = "1112"**

**#define authMethod = "use-token-auth"**

**#define authToken = "123456789"**

**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("person detected ");**

**}**

**else{**

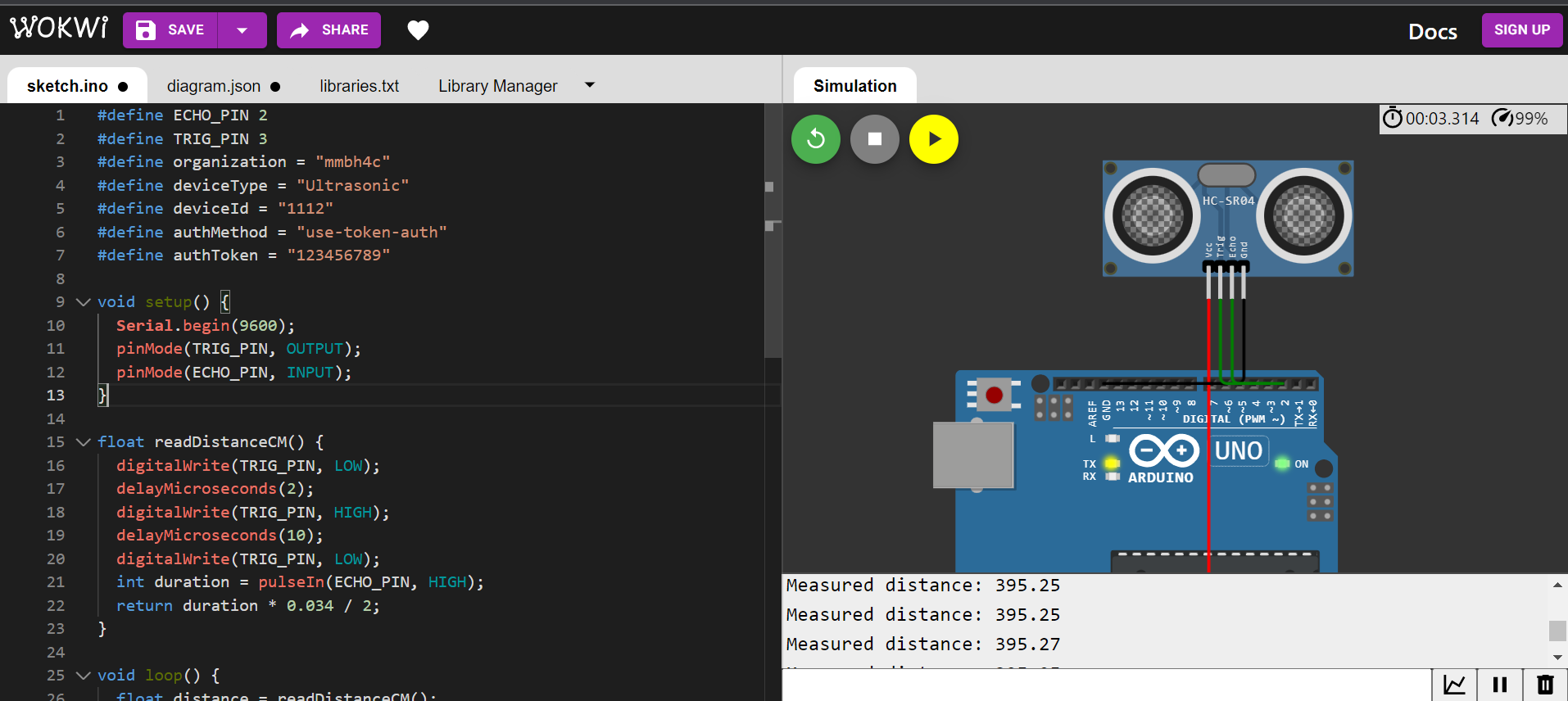
**Serial.print("Measured distance: ");**

**Serial.println(readDistanceCM());**

**}**

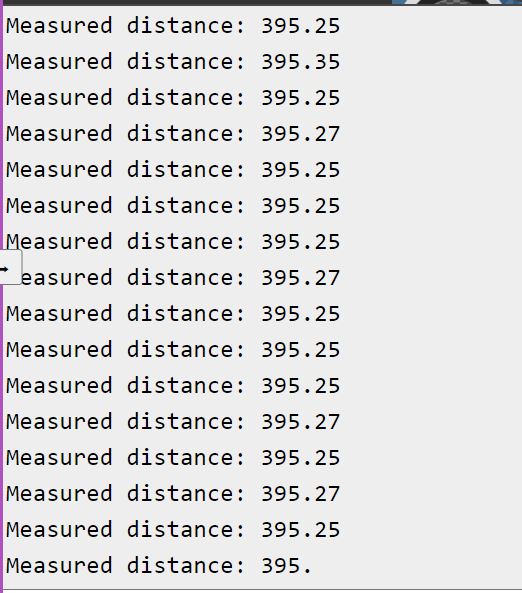
**delay(100);**

**}**



**Wokwi Link:** [**https://wokwi.com/projects/345395196387656275**](https://wokwi.com/projects/345395196387656275)

**OUTPUT:**



**IBM Cloud**

Device Recent Events

