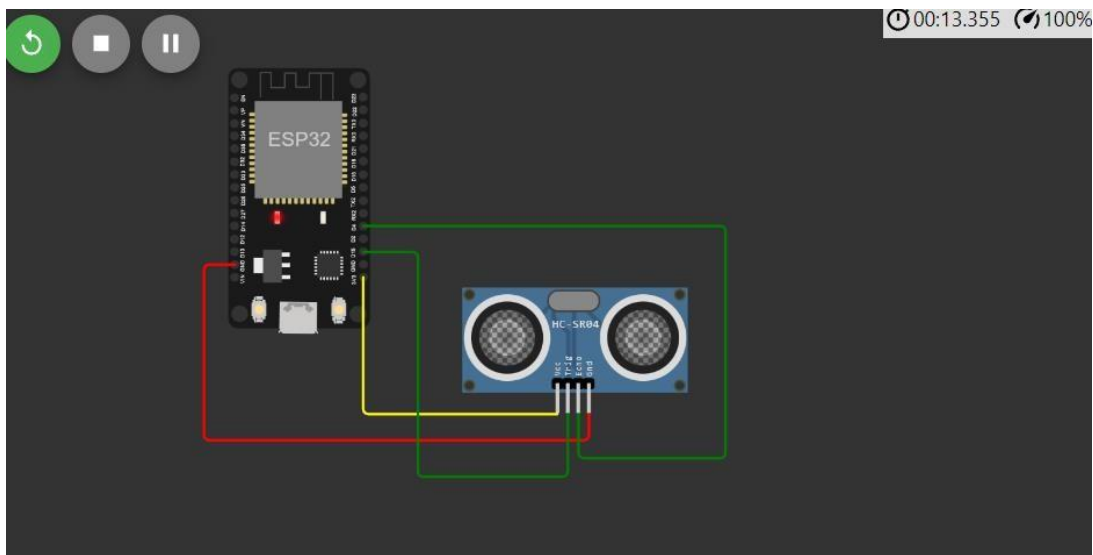# ASSIGNMENT - 4

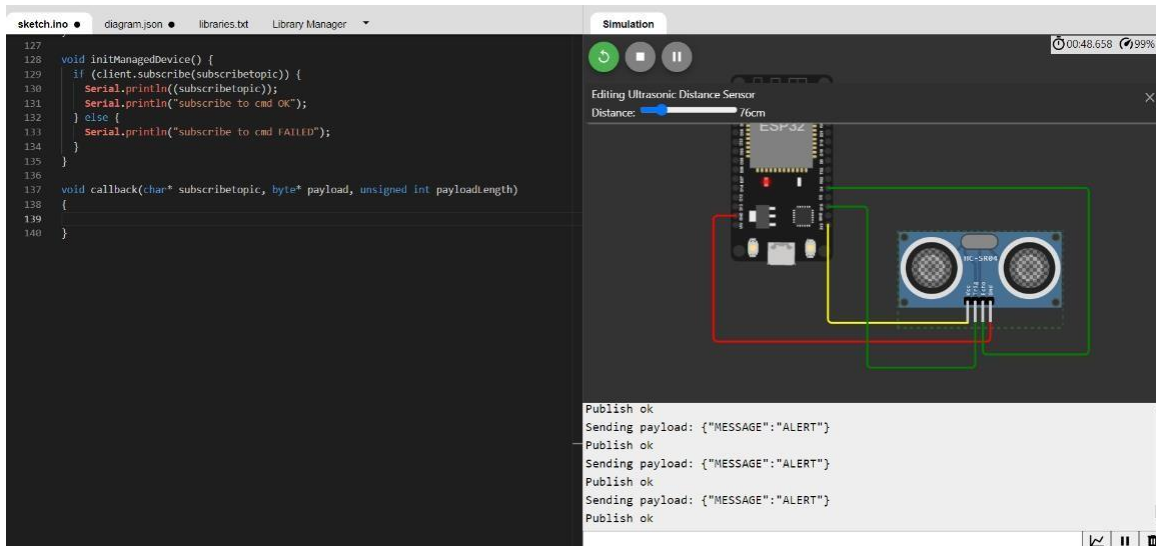| Date	19 September 2022
Team ID	PNT2022TMID21316
Project Name	Real time River Water Quality Monitoring System.
Maximum Marks	2 Marks

Objective:
Write code and connections in wokwi for the ultrasonic sensor. Whenever the distance is less than 100 cms send an "alert" to the IBM cloud and display in the device recent events.

Circuit Diagram:

Link: https://wokwi.com/projects/347777894414549587

```
127
128  void initManagedDevice() {
129    if (client.subscribe(subscribetopic)) {
130      Serial.println((subscribetopic));
131      Serial.println("subscribe to cmd OK");
132    } else {
133      Serial.println("subscribe to cmd FAILED");
134    }
135  }
136
137  void callback(char* subscribetopic, byte* payload, unsigned int payloadLength)
138  {
139
140  }
```

Simulation

Editing Ultrasonic Distance Sensor

Distance: _____ 76cm

```
Publish ok
Sending payload: {"MESSAGE":"ALERT"}
Publish ok
Sending payload: {"MESSAGE":"ALERT"}
Publish ok
Sending payload: {"MESSAGE":"ALERT"}
Publish ok
Sending payload: {"MESSAGE":"ALERT"}
Publish ok
```

OUTPUT:

Browse   Action   Device Types   Interfaces   Add Device

| 12 | ● Connected | abcd | Device | Oct 19, 2022 10:06 PM | → ... |

| Identity | Device Information | Recent Events | State | Logs | ✕ |

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
Data	{"MESSAGE":"ALERT"}	json	a few seconds ago
Data	{"MESSAGE":"ALERT"}	json	a few seconds ago
Data	{"MESSAGE":"ALERT"}	json	a few seconds ago
Data	{"MESSAGE":"ALERT"}	json	a few seconds ago
Data	{"MESSAGE":"ALERT"}	json	a few seconds ago

| 12 | Disconnected | zxcv | Device | Oct 20, 2022 6:11 PM |