

## Project Purpose

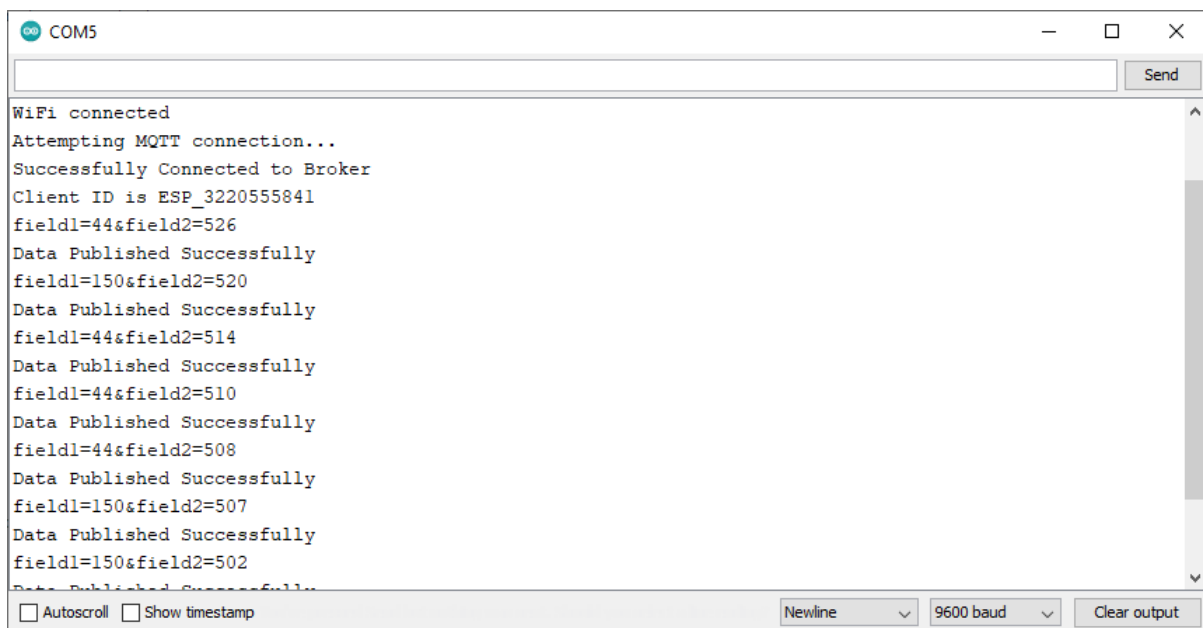
- The primary purpose of this project is to publish the sensor data to ThingSpeak using MQTT Protocol.

## Experiment

To publish the data of Two Sensors in ThingSpeak using MQTT:

- In this experiment, two sensors viz., Water Level Sensor (RKI 2350) & DHT11 sensors are interfaced with the esp8266.
- The data from these two sensors, i.e. Water Level & Humidity is published on ThingSpeak Server using MQTT.

## Screen Grab of the Implementation



The screenshot shows a Serial Monitor window titled 'COM5'. The output text is as follows:

```
WiFi connected
Attempting MQTT connection...
Successfully Connected to Broker
Client ID is ESP_3220555841
field1=44&field2=526
Data Published Successfully
field1=150&field2=520
Data Published Successfully
field1=44&field2=514
Data Published Successfully
field1=44&field2=510
Data Published Successfully
field1=44&field2=508
Data Published Successfully
field1=150&field2=507
Data Published Successfully
field1=150&field2=502
Data Published Successfully
```

At the bottom of the window, there are checkboxes for 'Autoscroll' and 'Show timestamp', and dropdown menus for 'Newline' and '9600 baud', along with a 'Clear output' button.

Figure 1 Output verified in Serial Monitor

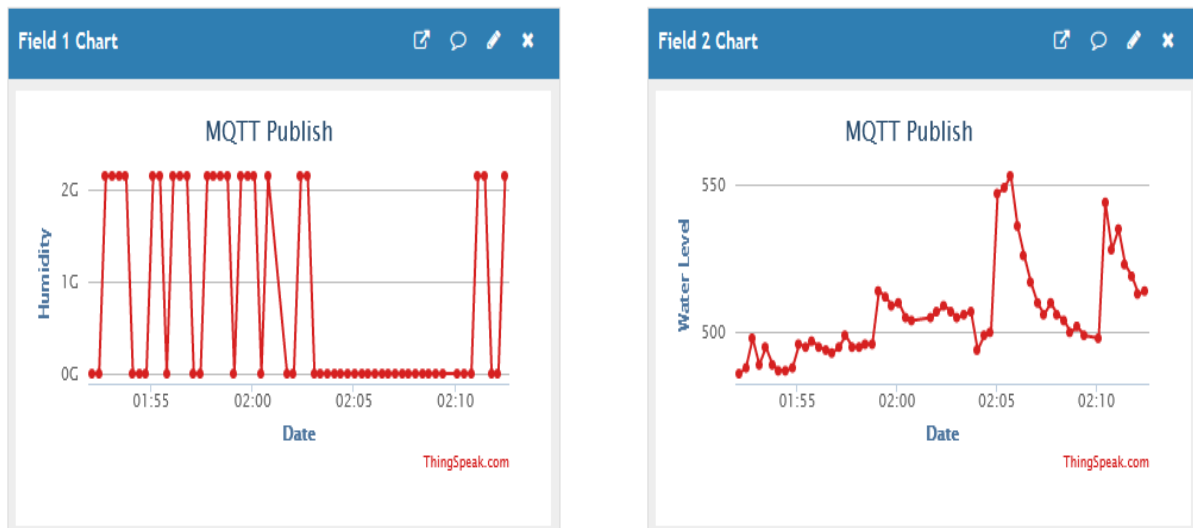


Figure 2 Output Verified in ThingSpeak .

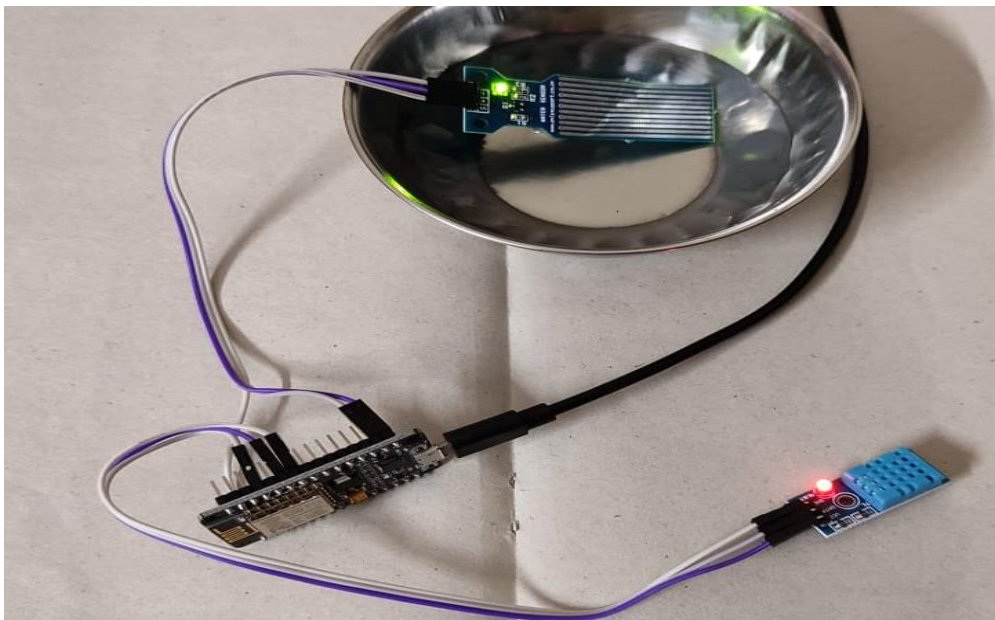


Figure 3 Hardware connections and Interfacing

**GitHub upload:** [GitHub - sriharshakns/IIITH-Research-Internship-2021-K-N-S-Sri-Harsha](https://github.com/sriharshakns/IIITH-Research-Internship-2021-K-N-S-Sri-Harsha)

This contains my Video Implementation, Documentation & Code for all goals.