

## WORKSHEET

Class: 20bcs26-B

Group No: 05

### Group Members Details

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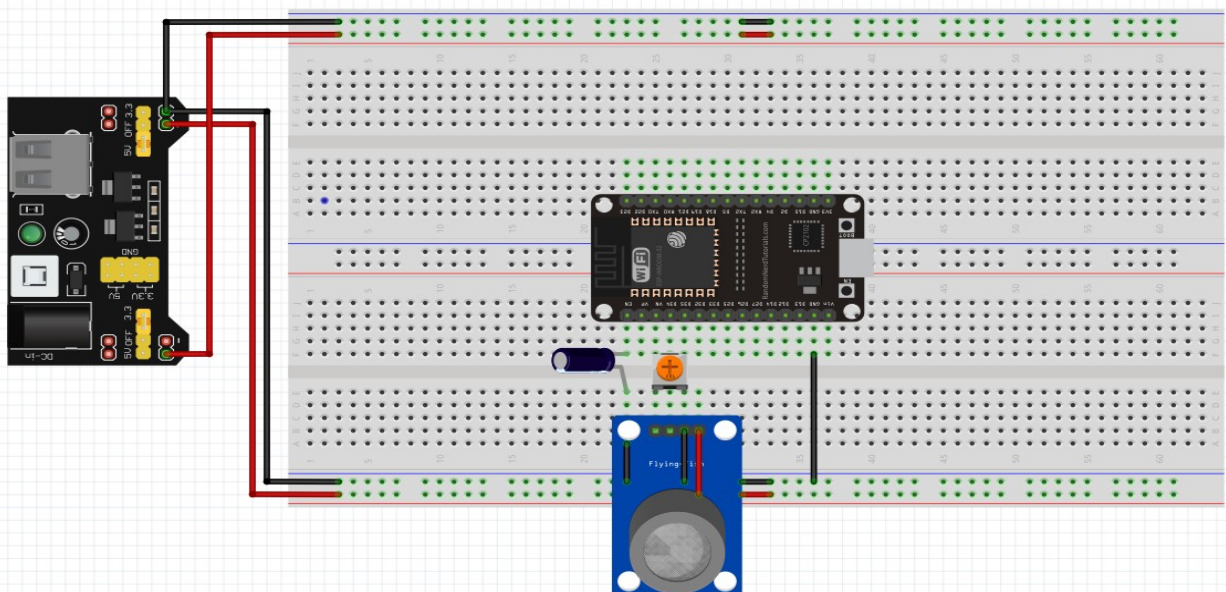
### Task:

Design an air quality monitoring system using an IoT analytics platform service.

### Requirements:

- PC with Arduino
- Connecting Wires
- Breadboard
- DOIT ESP32 DEVKIT V1
- 10uF Electrolytic Capacitor
- Wire Clipper
- USB Type A to Micro USB Cable
- DC 5V Power Supply
- DC 3.3V Power Supply
- MQ135
- 1K Trimpot

### Circuit Diagram:



### Code (if any):

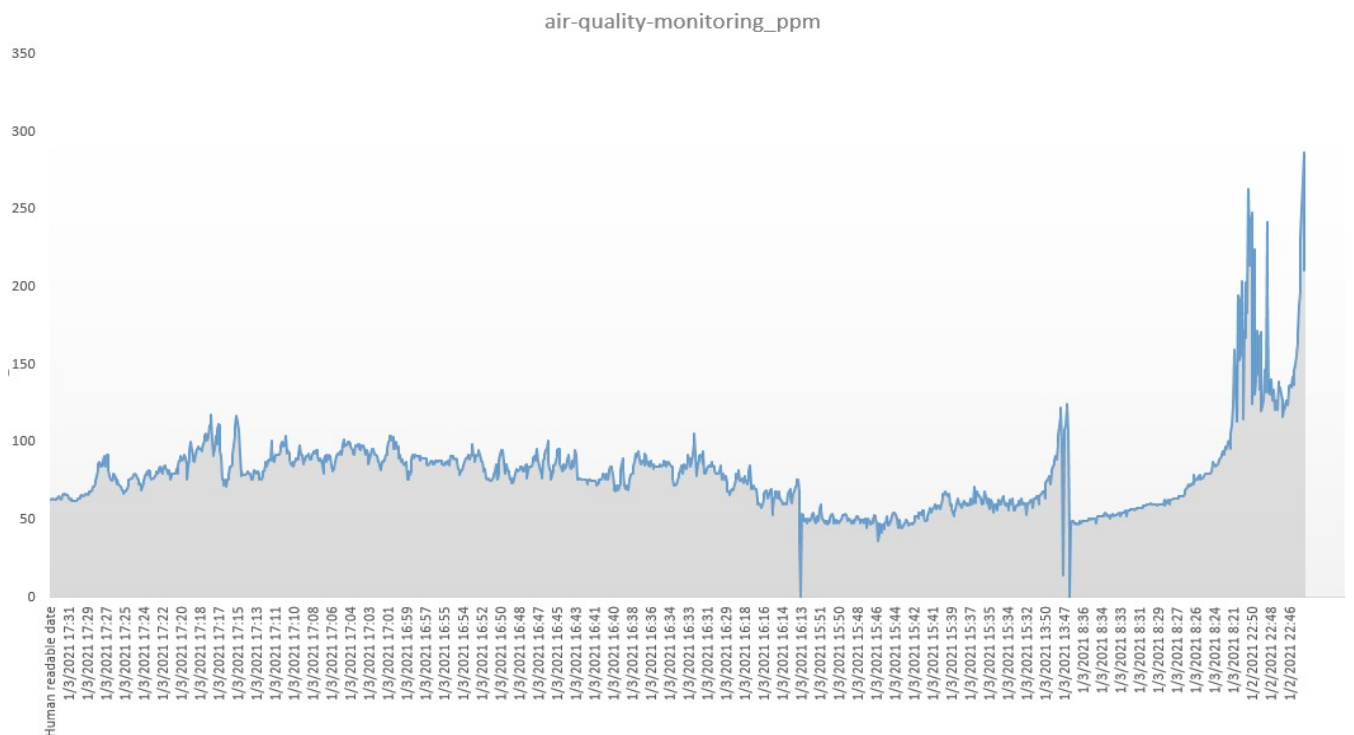
```

T3_Air_Quality | Arduino 1.8.13
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T3_Air_Quality
1 /*
2  * Board: DOIT ESP32 DEVKIT v1
3  * Sensor: MQ-135
4  */
5 #include <UbidotsESP8266.h>
6
7 #define MQ135 34
8
9 #define TOKEN "BBFF-ont8uqf2rGdmVmggqkee6HyxFLE2d" // Your Ubidots TOKEN
10 #define WIFISSID "Joker" // Your SSID
11 #define WIFIPASS "Joker@tenda" // Your Wifi Pass
12
13 Ubidots client(TOKEN);
14
15 void callback(char* topic, byte* payload, unsigned int length) {
16   Serial.print("Message arrived [");
17   Serial.print(topic);
18   Serial.print("] ");
19   for (int i = 0; i < length; i++) {
20     Serial.print((char)payload[i]);
21   }
22   Serial.println();
23 }
24
25 void setup() {
26   Serial.begin(9600);
27   Serial.println("Init... T3_Air_Quality");
28
29   Serial.print("Connecting to SSID: ");
30   Serial.print(WIFISSID);
31   Serial.print(", Password: ");

```

### Dashboard Snippet (if any):



**Outcome:**

- Using IBDots designed an air quality monitoring system.
- Learnt to use Fritzing to make circuit diagrams.
- Learnt to use Arduino to upload code to an Arduino IC.