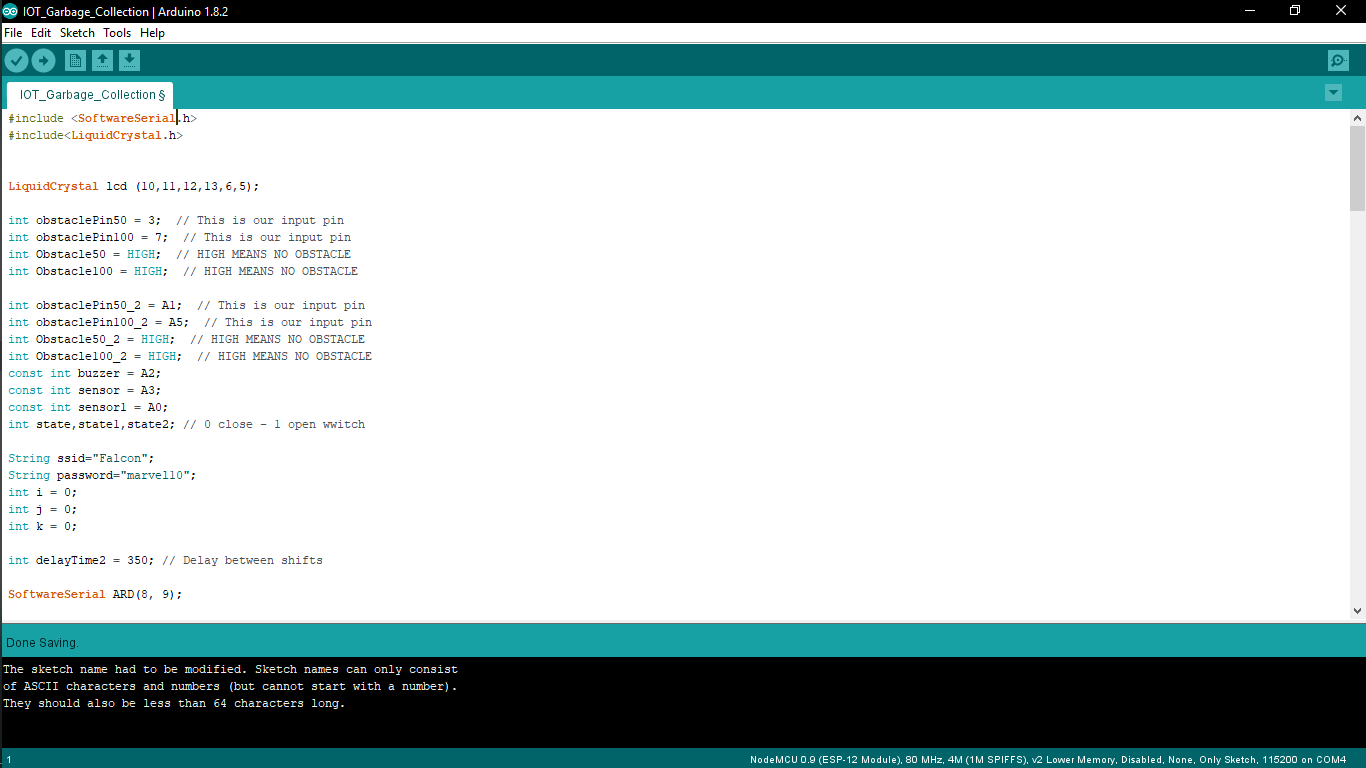
Testing Document

**CODING:**

1. First you have to change the SSID and PASSWORD of node.

* Open the “IOT\_Sensor\_Interfacing\_node1.ino” file.



In ssid you have to place your user name of Wi-Fi.

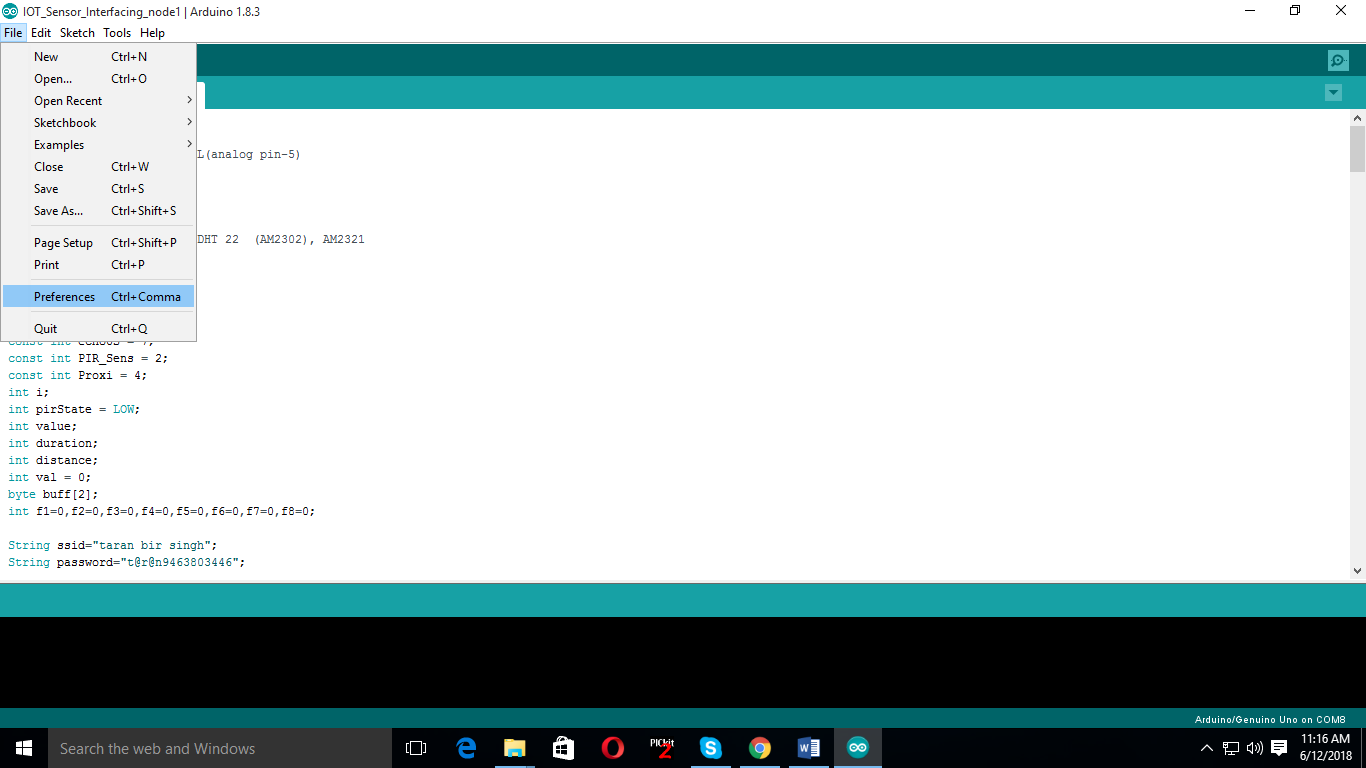
And in password, the respective password of Wi-Fi.

1. Add the libraries

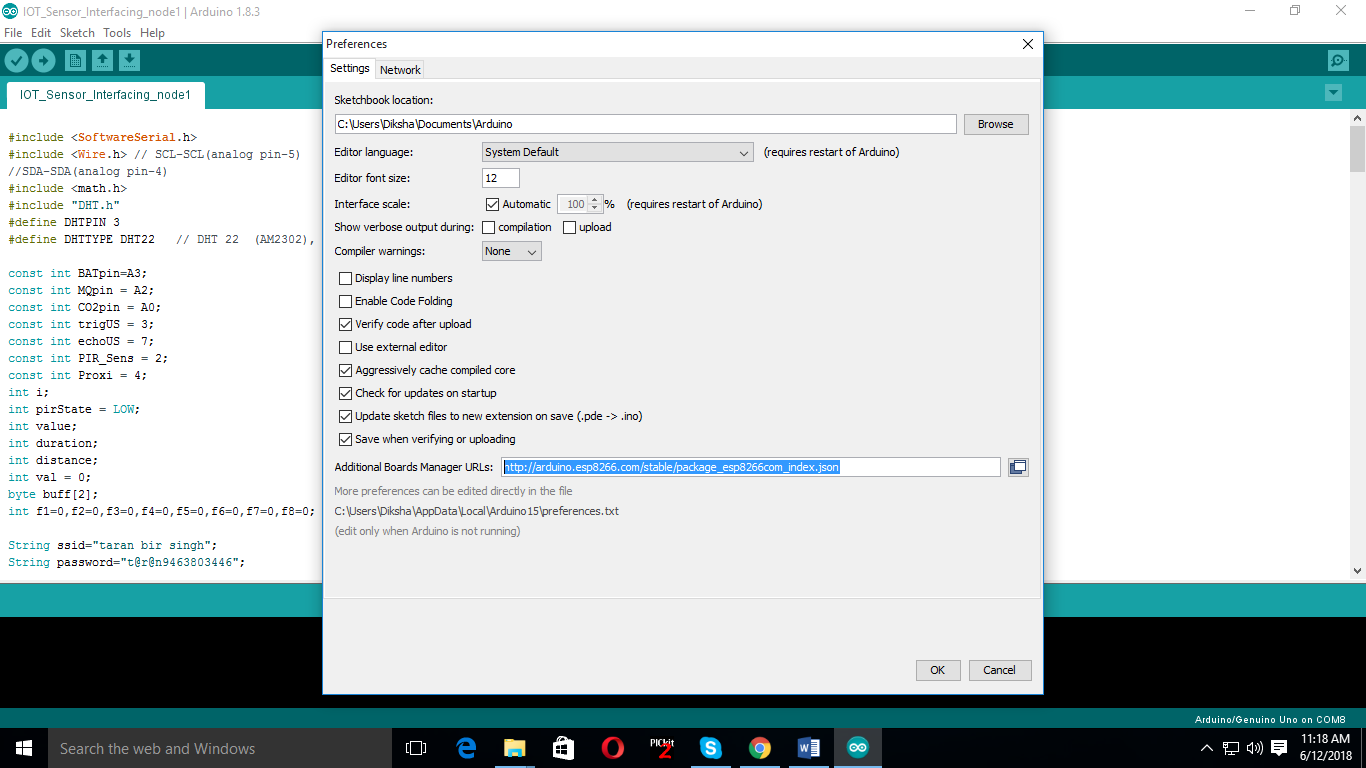
* PubSubClient
* pubsubclient-master
* PubSubClientTools

1. For code in ESP8266 , you have to add the ESP8266 board in Arduino through board manager.

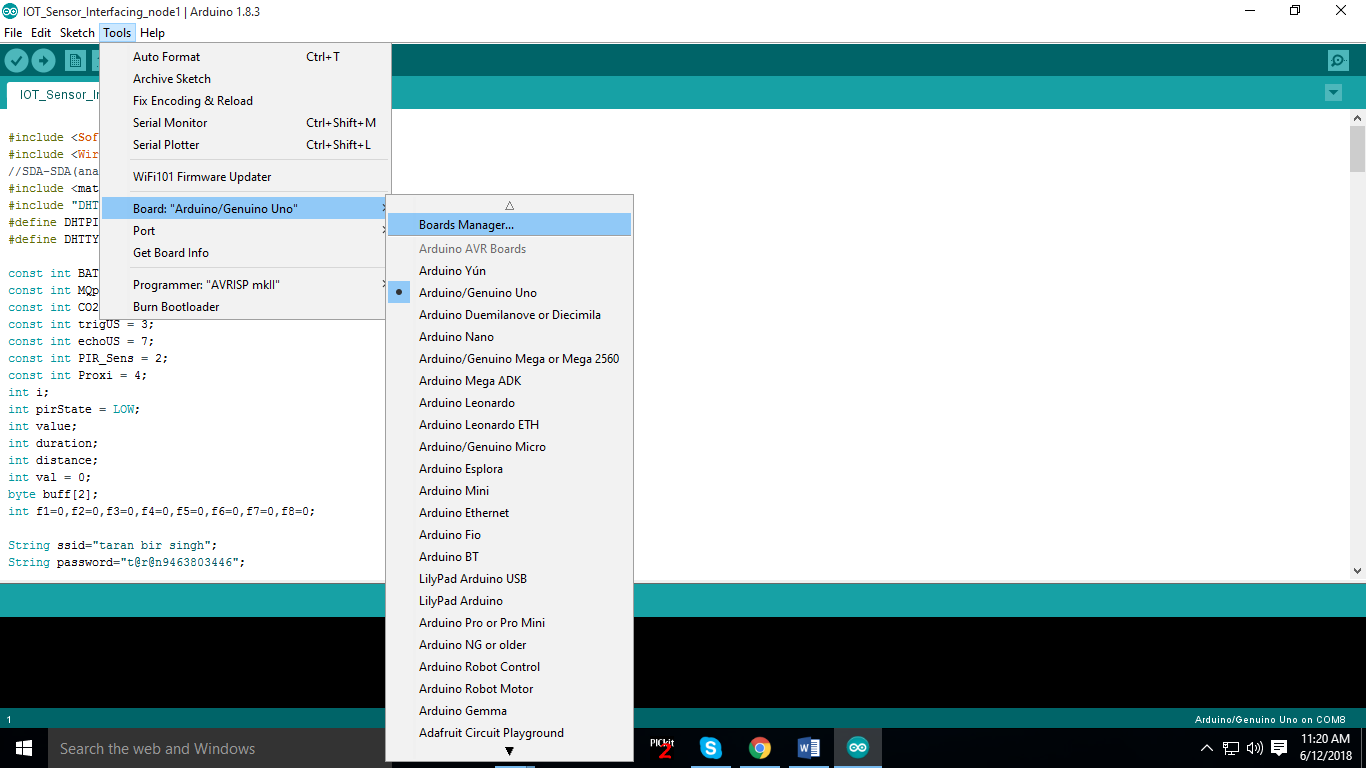
* Open the file in Arduino and click on preferences



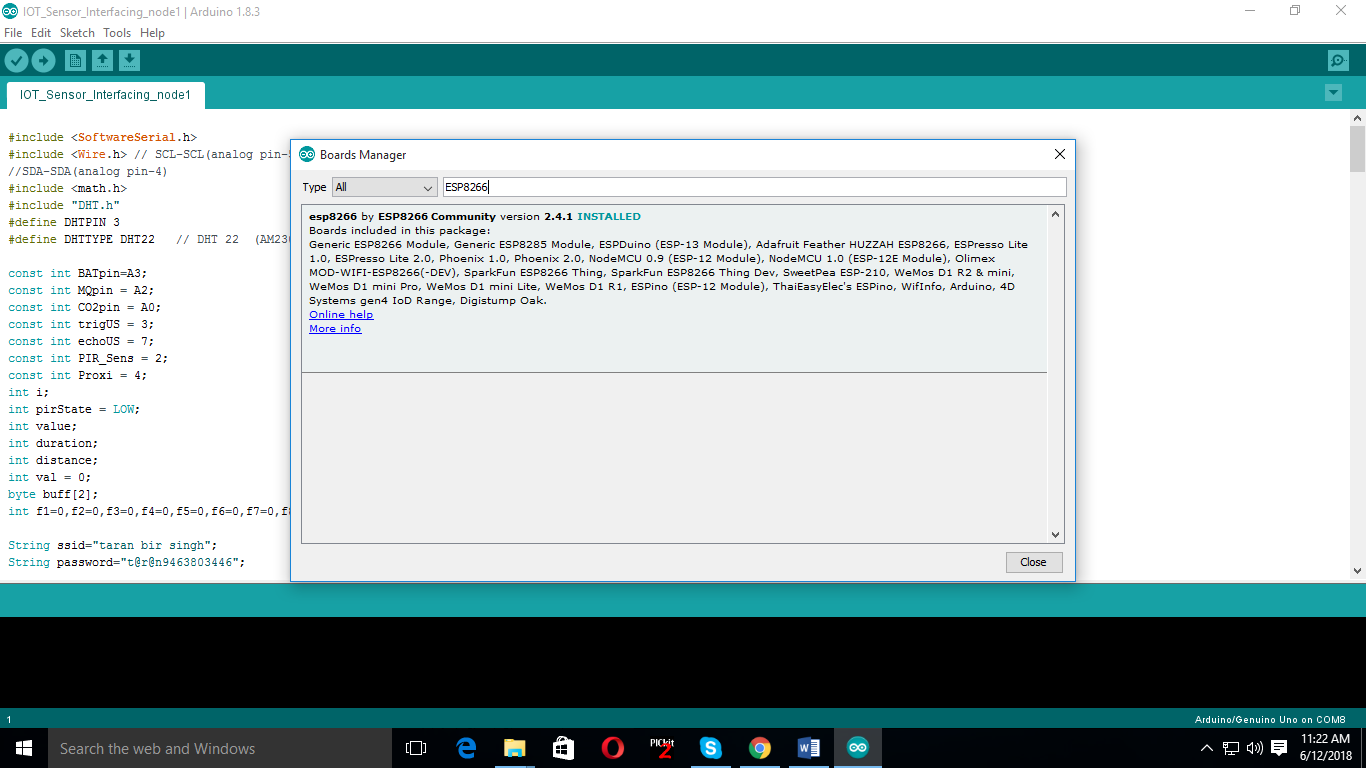
* And copy this link “<http://arduino.esp8266.com/stable/package_esp8266com_index.json> “ in below mention part. And then press ok.



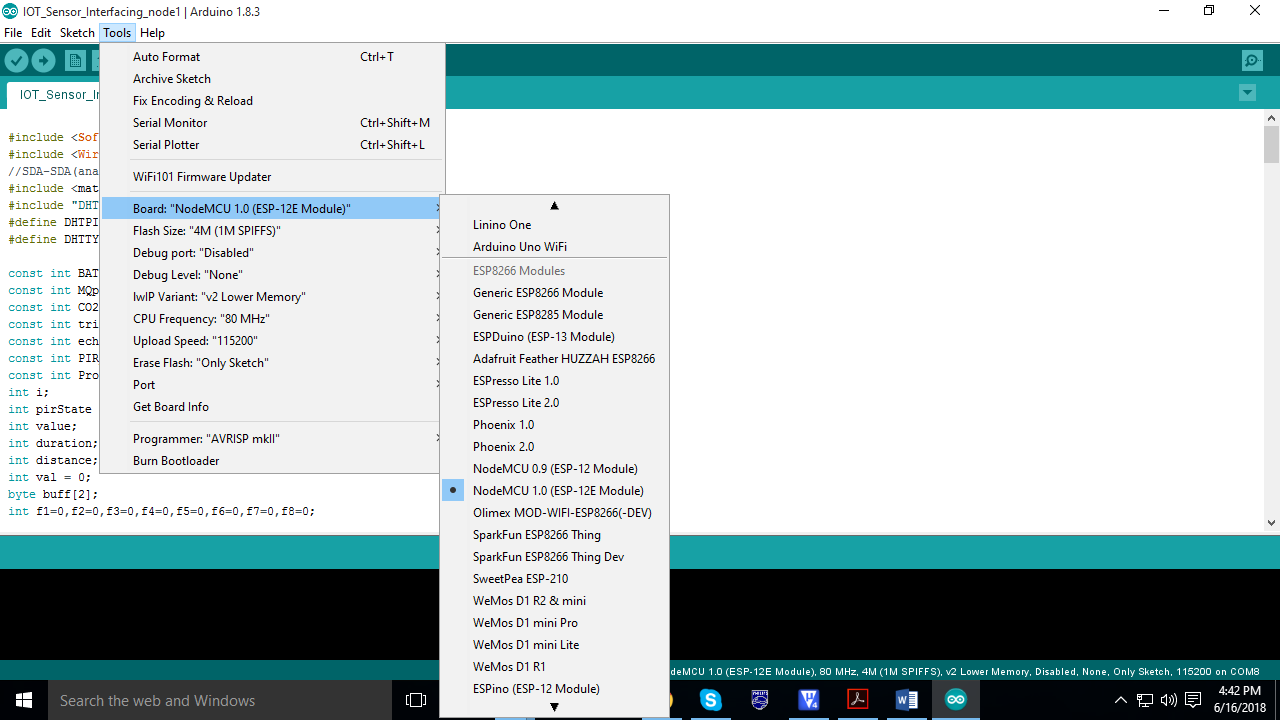
* Now go to Tools>Board>Board manager



* Now type the ESP8266 In search window and click on install button.

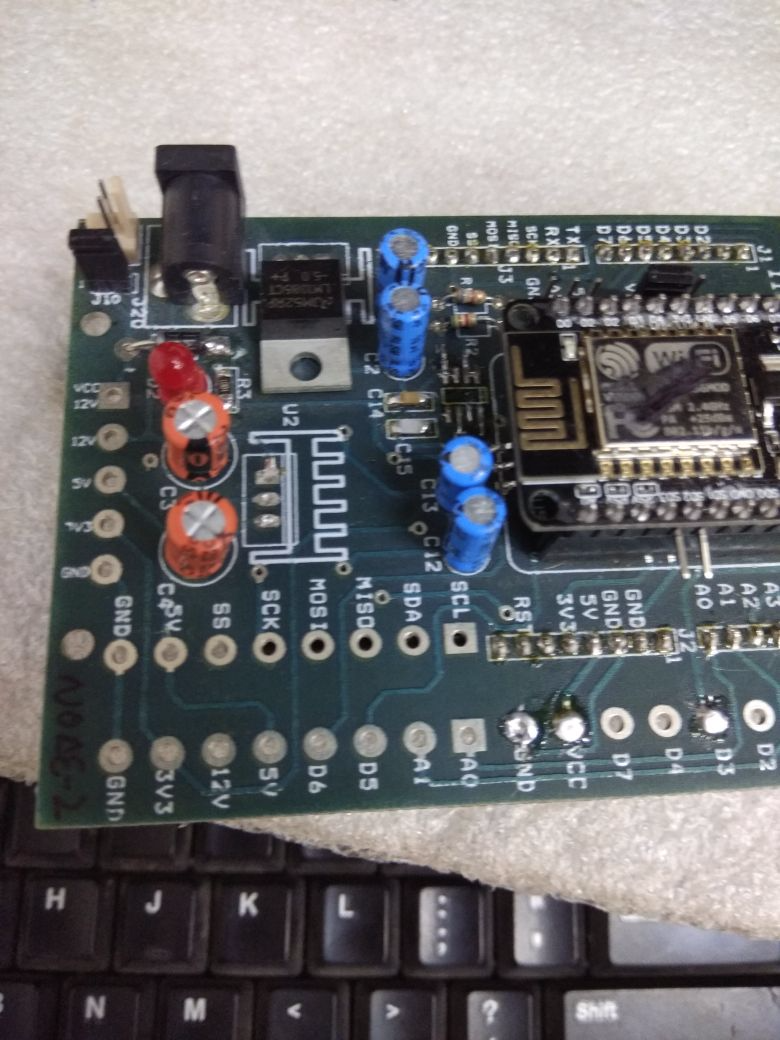


* Now the ESP Board has been added to your Arduino.
* Now burn the code by selecting the board shown in below mention fig.



**HARDWARE:**

1. Verify the component as mention in BOM , right component should be place at right position.
2. Now check the power supply of PCB , by placing jumper at J10



Check the respective voltages here, if not coming then test the pcb and verify the components

1. Now in Arduino Uno genuine board, upload the blink code and check is it working condition?
2. Interface the LCD with Arduino Uno having pin numbers:
3. **ACTUAL SYSTEM**

* RS: D10
* EN: D11
* D4: D12
* D5: D13
* D6: D6
* D7: D5

1. **CONTROL SYSTEM**

* RS: D13
* EN: D12
* D4: D11
* D5: D13
* D6: D6
* D7: D5

1. Then check the buzzer interfacing,
2. **ACTUAL SYSTEM**

* buzzer = A2

1. **CONTROL SYSTEM**

* buzzer = D7

1. Check the sensors i.e. Magnetic Sensors and IR sensors, is these working or not?
2. Now make all the connection as per mentioned in connection diagram doc.
3. Now for ESP8266 there is small modification for PCB Model no.1197

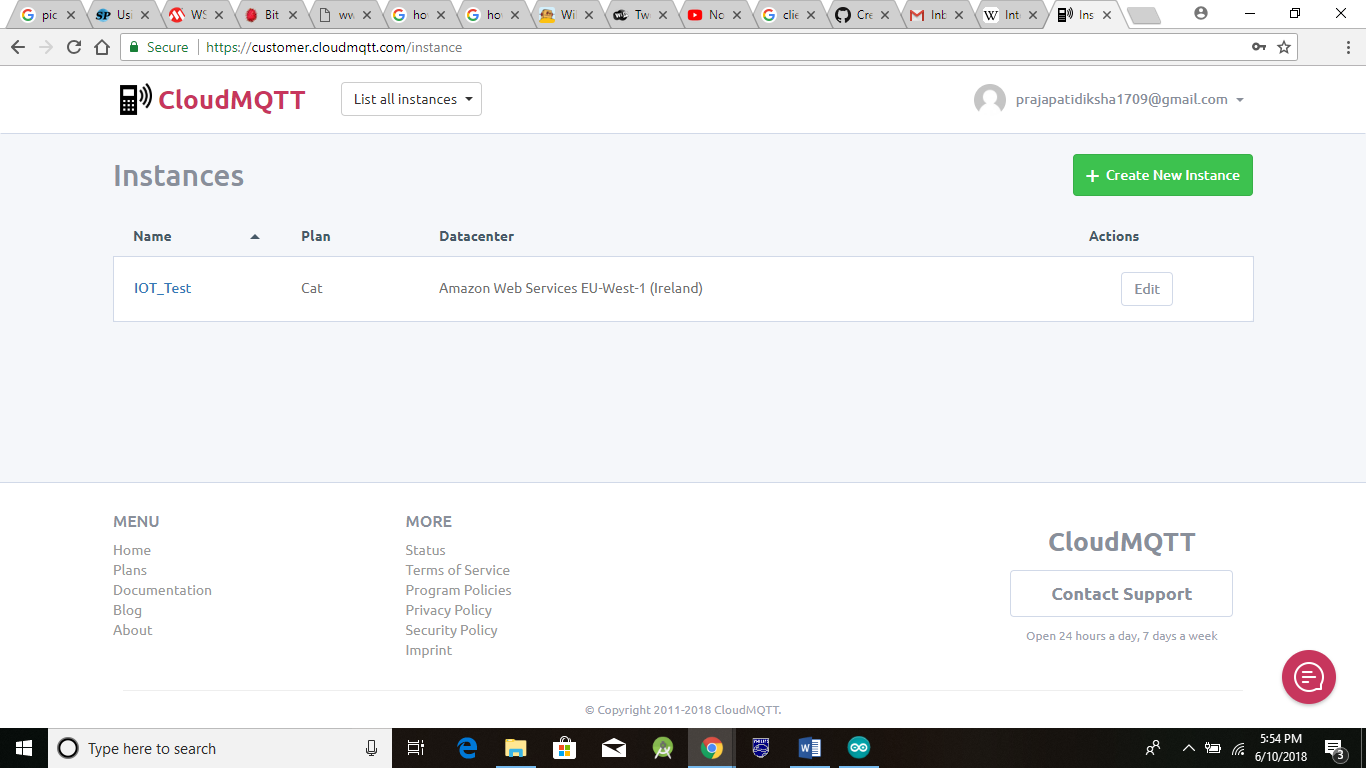


Cut the these two pins of ESP8266

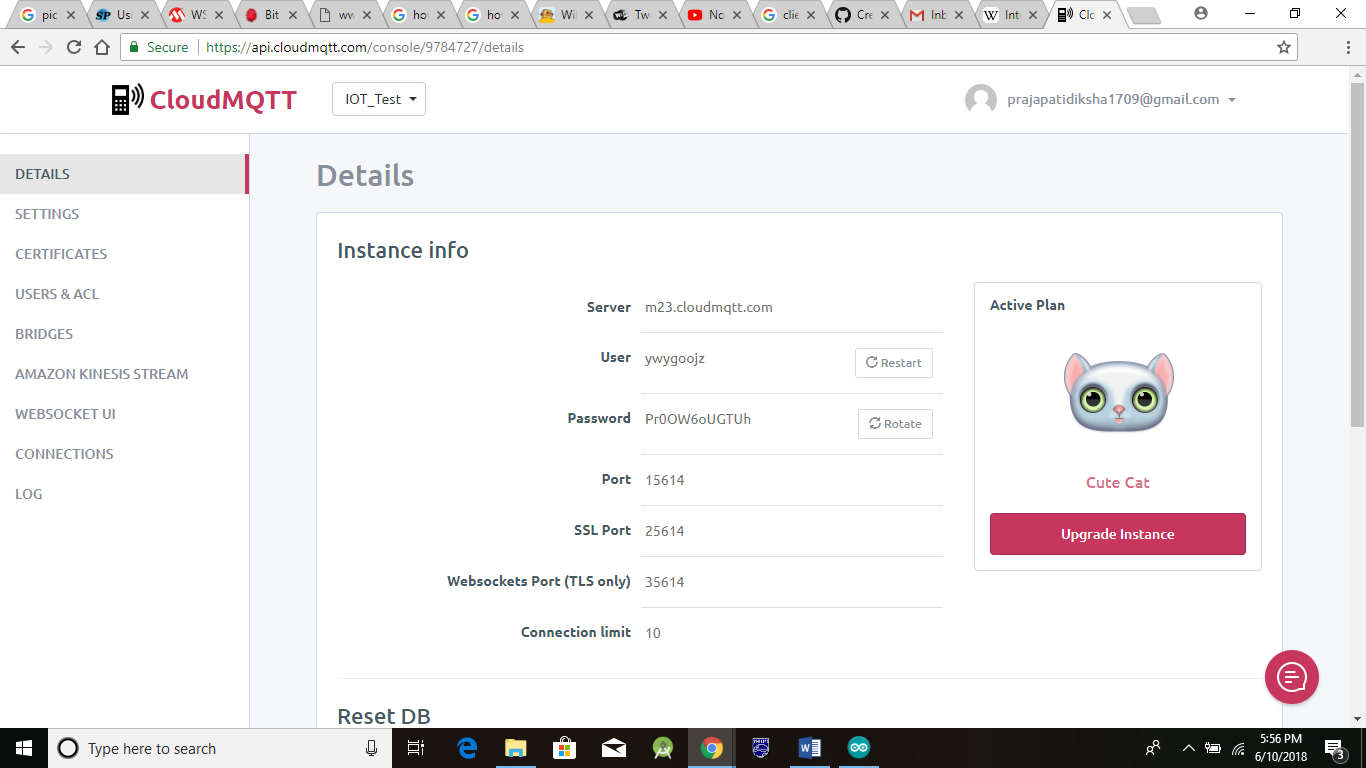
1. Now place the esp8266 and Arduino Uno at right place and burn the actual code.
2. Don’t place jumper j21 between A3 and VD

**CLOUD MQTT (create new account for every order)**

1. Go to <https://www.cloudmqtt.com/>
2. Create a new gmail account.
3. Create a new account on cloud mqtt with newly create gmail.
4. Login into account
5. At the right side of page there is button to create new instance , click on it.
6. Now make a instance



1. Now click on instance e.g. here it is IOT\_Test



1. From details you get the information , now update this information into the code “mqtt\_node”

For example:

const char \*mqtt\_server = "**m23.cloudmqtt.com**";

const int mqtt\_port = **15614**;

const char \*mqtt\_user = "**fkfpjzsx**";

const char \*mqtt\_pass = "**JdulLTIH\_sGW**";

