JOBSHEET 1

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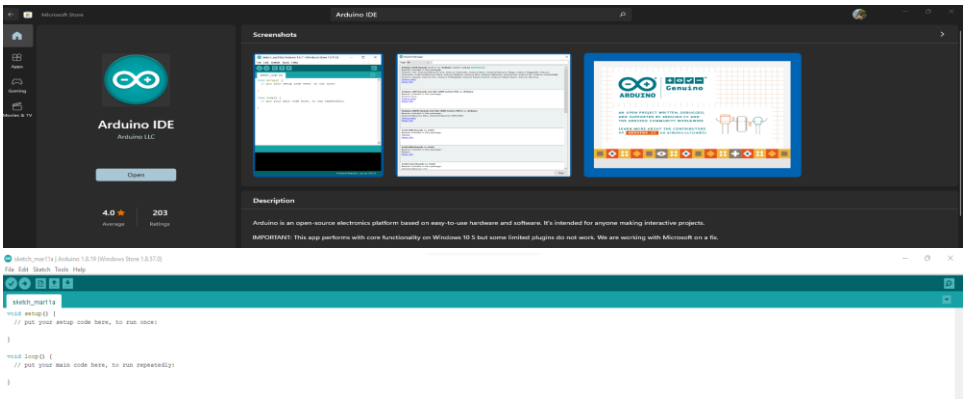
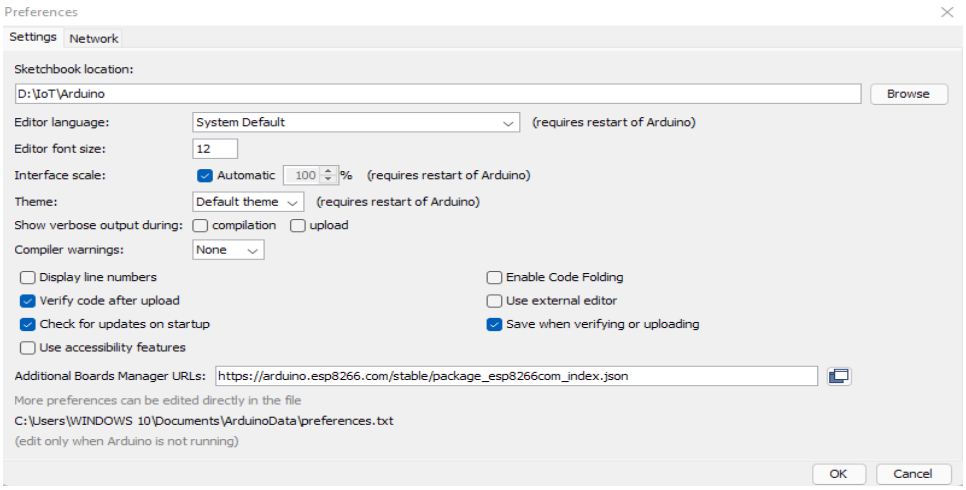
Practical Steps:

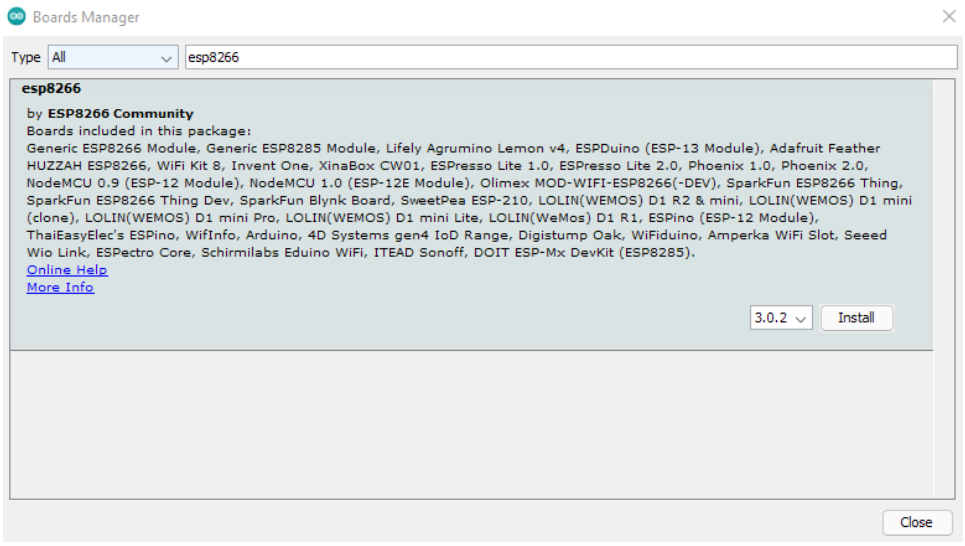
1. Download and install Arduino IDE:
   We can download Arduino from Microsoft Store:



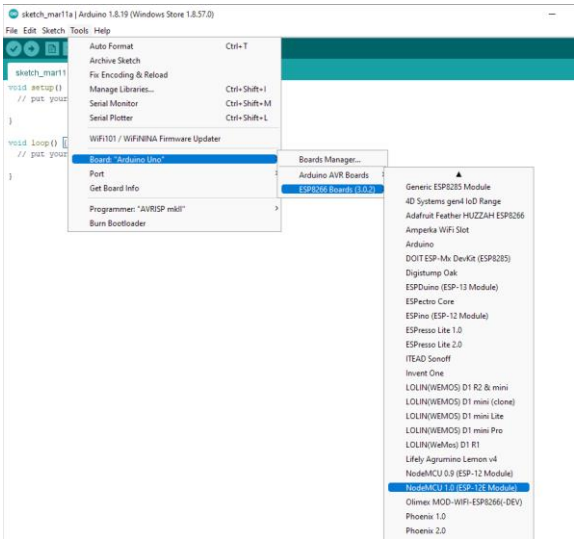
2. Configure Arduino preference:



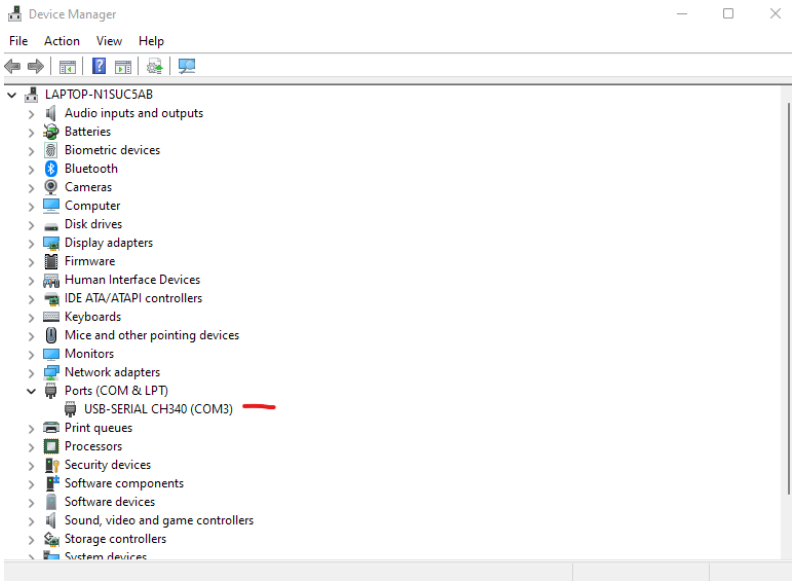
3. Install Esp8266:



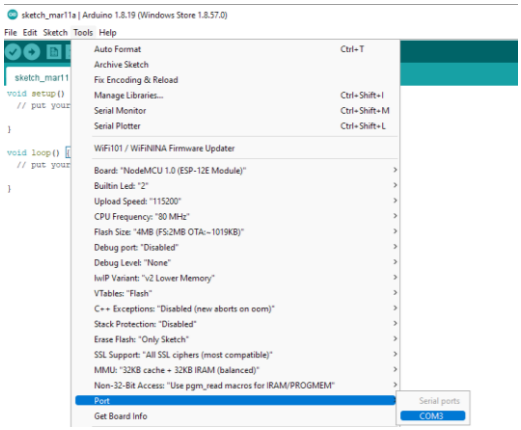
4. Choose the board NodeMCU 1.0 (ESP-12E Module):



5. Check the board connection:

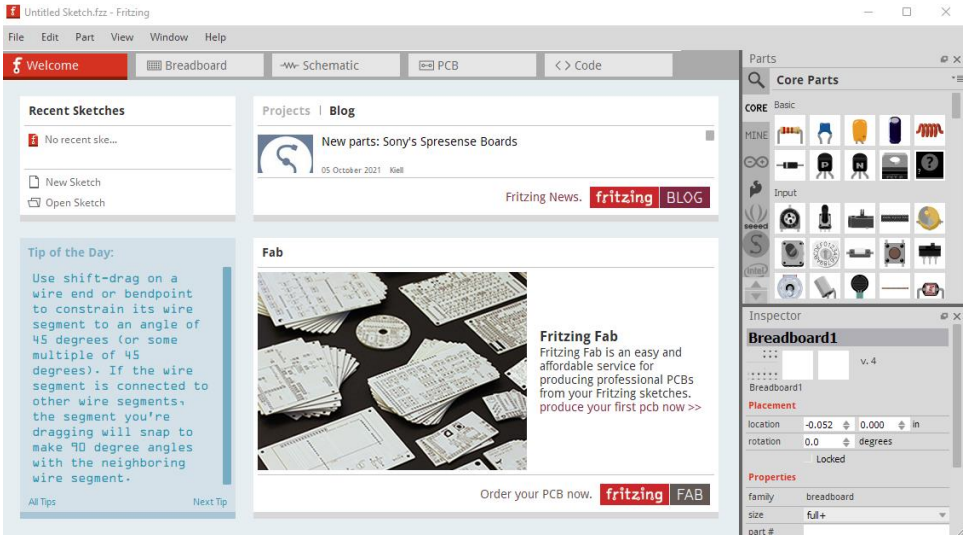


6. Select COM3:

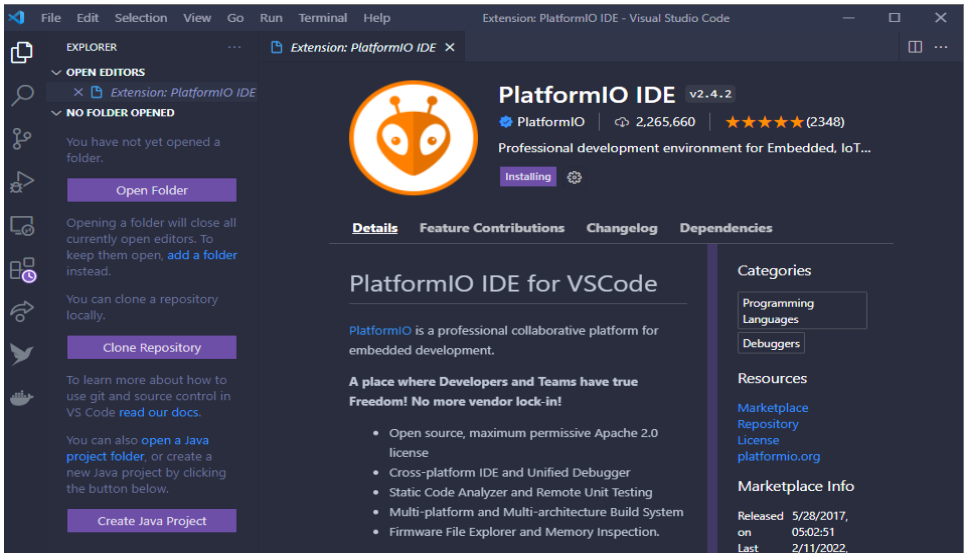


7. Compiling to the ESP8266 board:

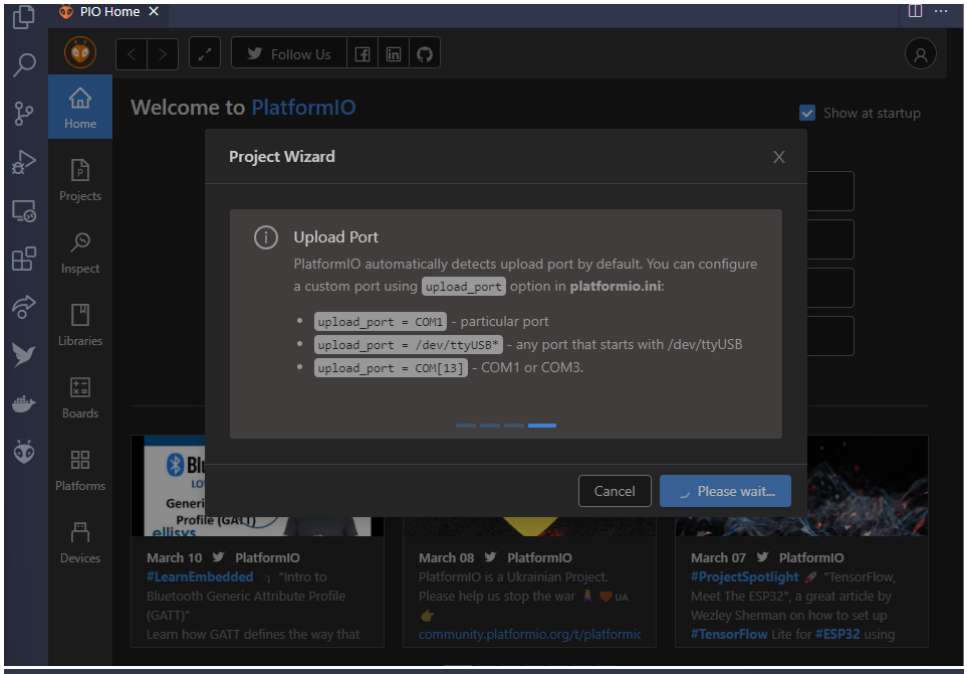
8. Download Fritzing Designer:

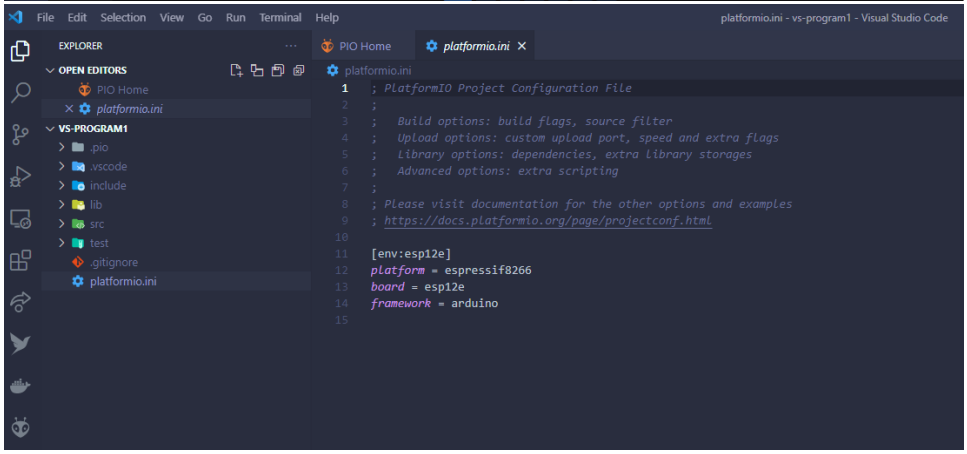


9. Download PlatformIO IDE extension to Visual Studio:



10. Create a new project using PlatformIO IDE:





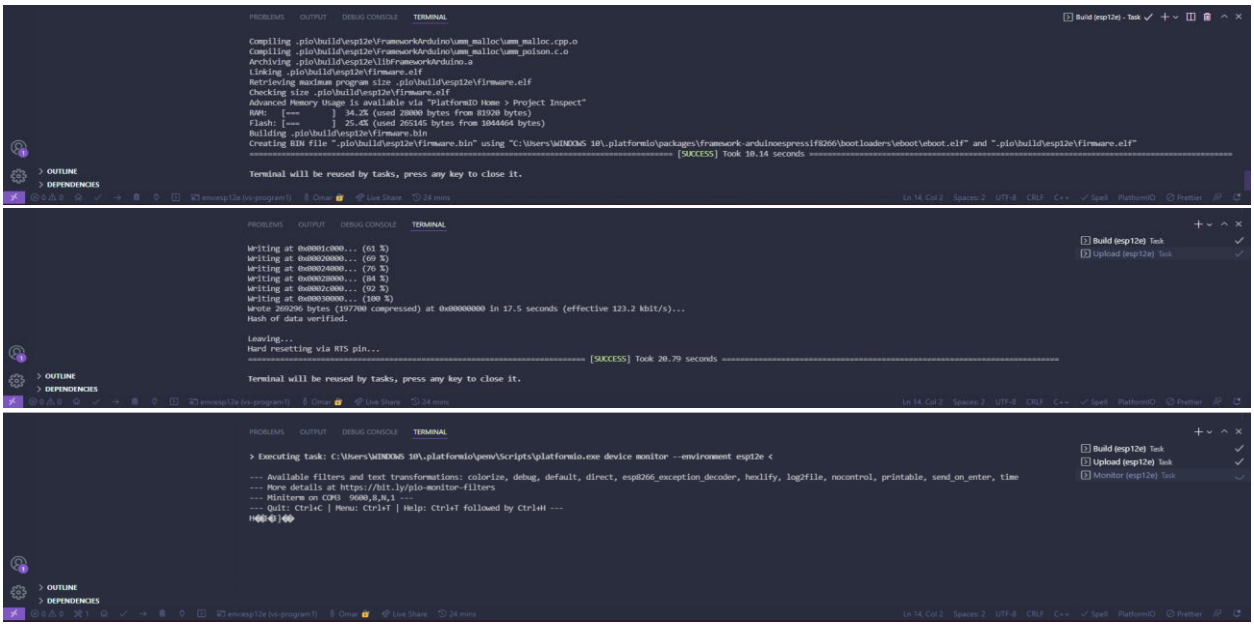
11. Configure the “Hello World” code:

```cpp
#include <Arduino.h>

void setup()
{
  // put your setup code here, to run once:
  Serial.begin(115200); // setbaudrate 115200
}

void loop()
{
  // put your main code here, to run repeatedly:
  Serial.println("Hello world"); // show the following string to the serial monitor
  delay(1000);                  // delay 1000 ms
}
```

12. Build, upload, and show the serial monitor the project



13. Make the LED run:

```cpp
#include <Arduino.h>

void setup()
{
  // put your setup code here, to run once:

  //practicum 1
  // Serial.begin(115200); // setbaudrate 115200

  //practicum 2
  pinMode(D4, OUTPUT);

}

void loop()
{
  // put your main code here, to run repeatedly:

  //practicum 1
  // Serial.println("Hello World"); // show the following string to the serial monitor
  // delay(1000);                  // delay 1000 ms

  //practicum 2
  digitalWrite(D4, HIGH);
  delay(1000);
  digitalWrite(D4, LOW);
  delay(1000);
}
```

Results: