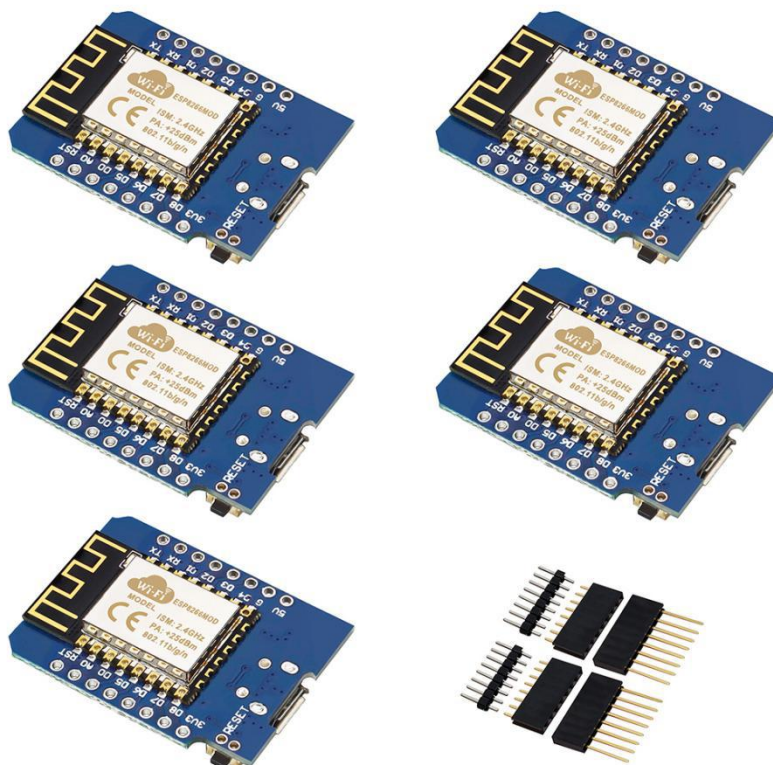




# KeeYees ESP8266 ESP-12F NodeMcu Mini WiFi Development Board





## Preface

### About Our Company

Located in Shenzhen, the Silicon Valley of China, KeeYees Technology Inc. is a big & professional Electronic Products Manufacturer and Seller, dedicated to open-source hardware research & development, production and marketing. All of our products comply with International Quality Standards and are very popular in a variety of different markets throughout of the world. KeeYees is your best choice in various electronic modules & components designed for customers of any level to learn Arduino and Raspberry Pi knowledge. In addition, we also sell products like 3D printer accessories, connectors and terminals kits, DIY parts and tools to support your work and design challenges from Home, School to Industrial applications!

US Amazon Store Homepage:

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JP Amazon Store Homepage:

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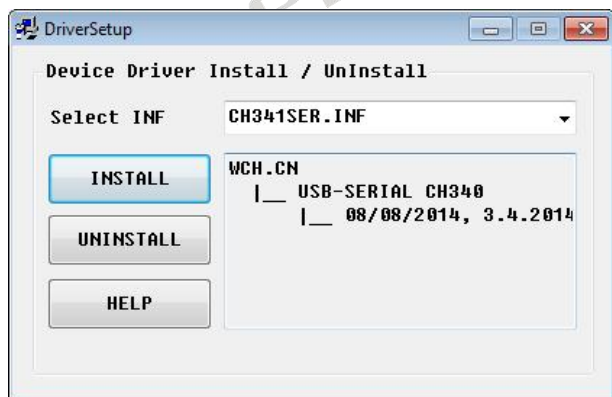


## 1. How to light the LED on the board or an external LED?

### 1. Connect the ESP8266 module to the computer

First connect the ESP8266 module to the computer with a USB cable.

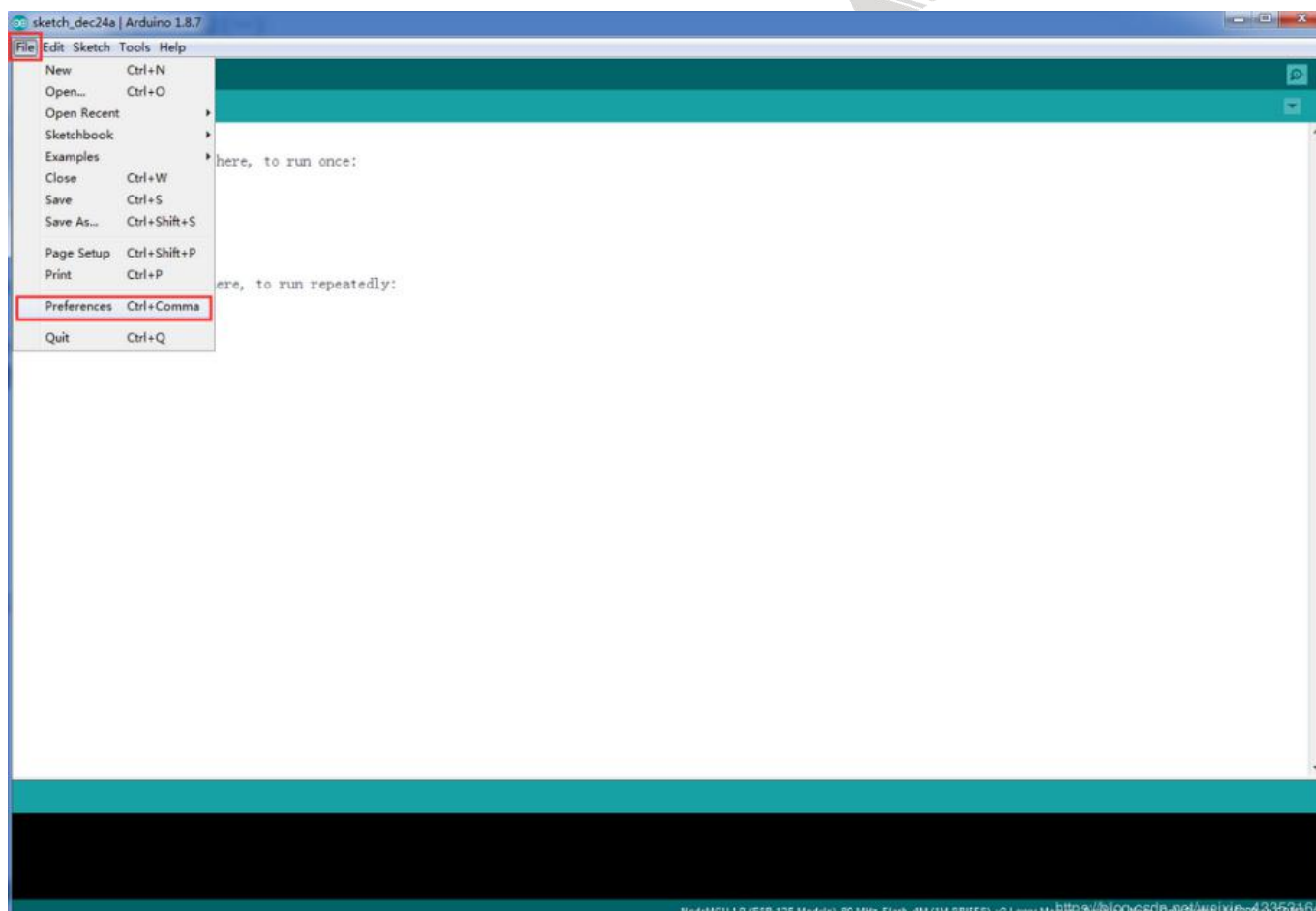
(If the computer cannot recognize this module, please install the corresponding CH340 driver. You can download the driver through this link: <https://sparks.gogo.co.nz/ch340.html>)

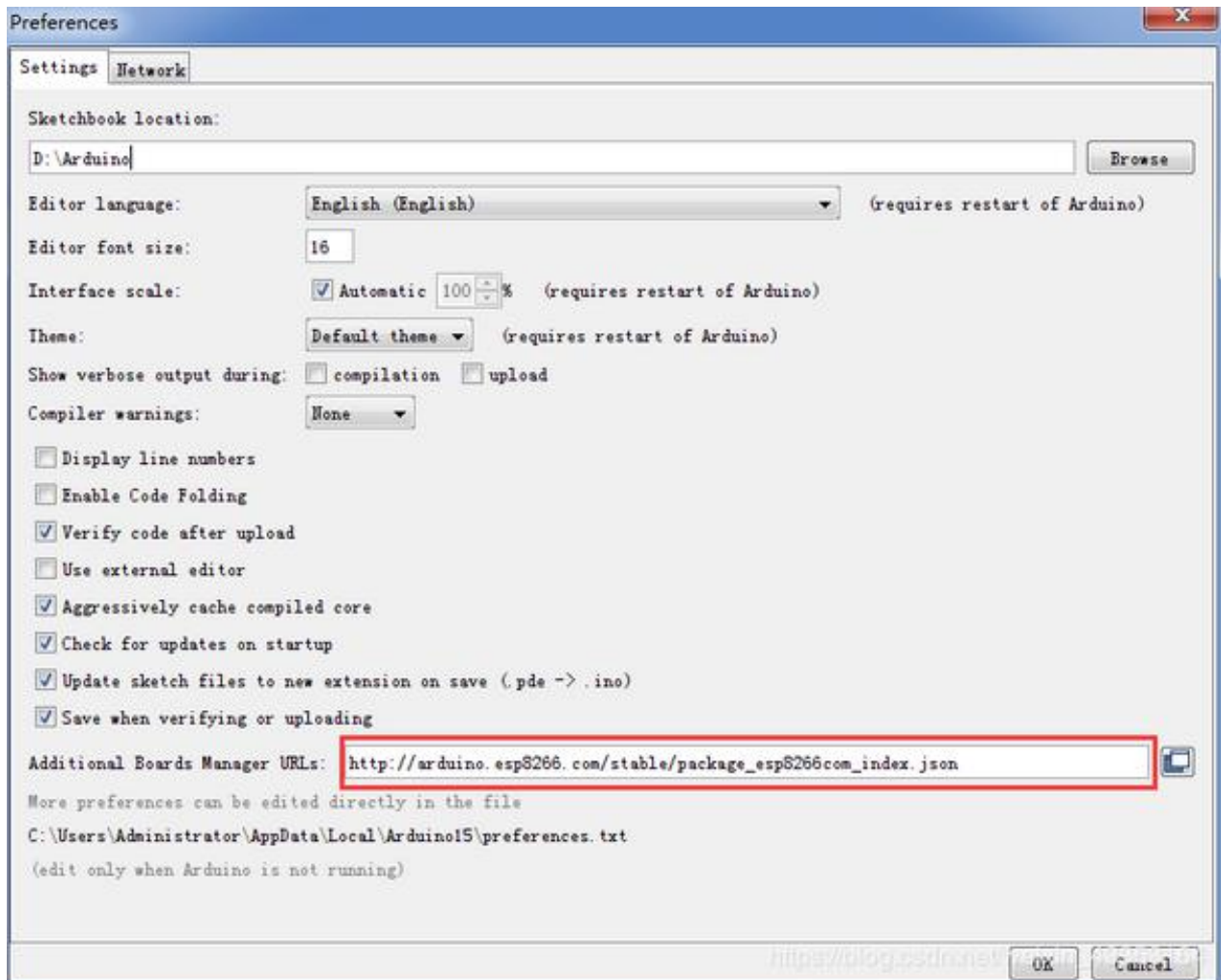


### 2. Add ESP8266 development board to Arduino IDE

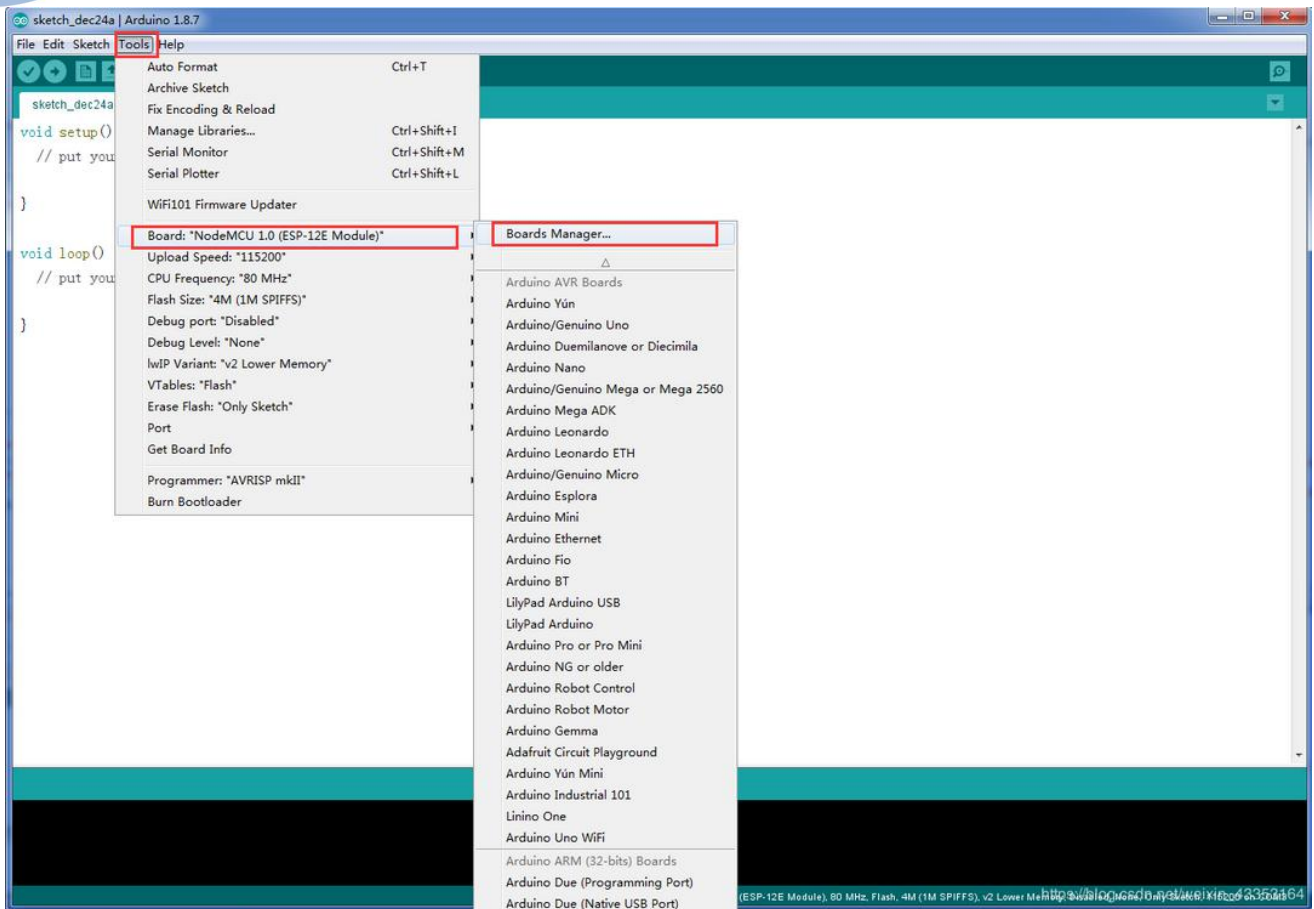
a. Open the Arduino IDE and click **file->Preferences**.

Enter [http://arduino.esp8266.com/stable/package\\_esp8266com\\_index.json](http://arduino.esp8266.com/stable/package_esp8266com_index.json) in the Additional Boards Manager URLs field of the the pop-up window. Then click OK, as shown below.

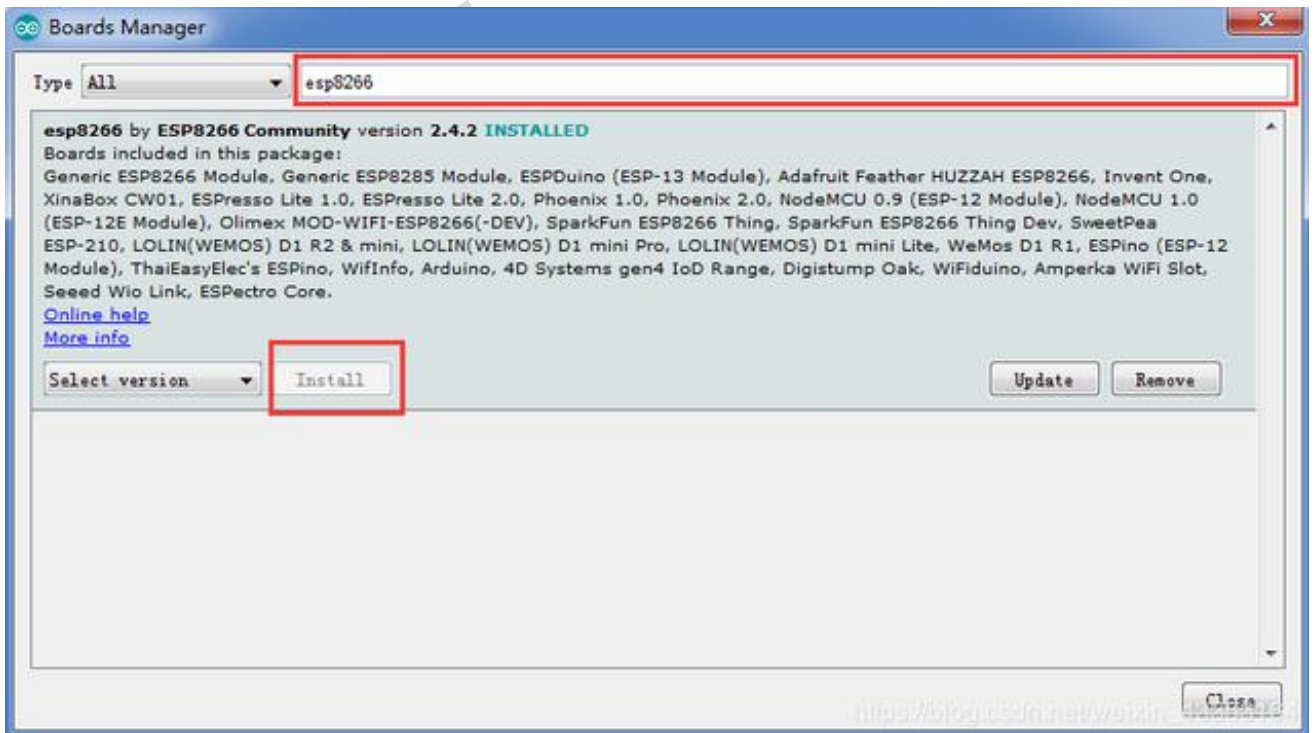




b. Download the ESP8266 development board and click the red circle button in the figure below.



c. Search for esp8266 in the pop-up window, and then click **Install**, as shown below.

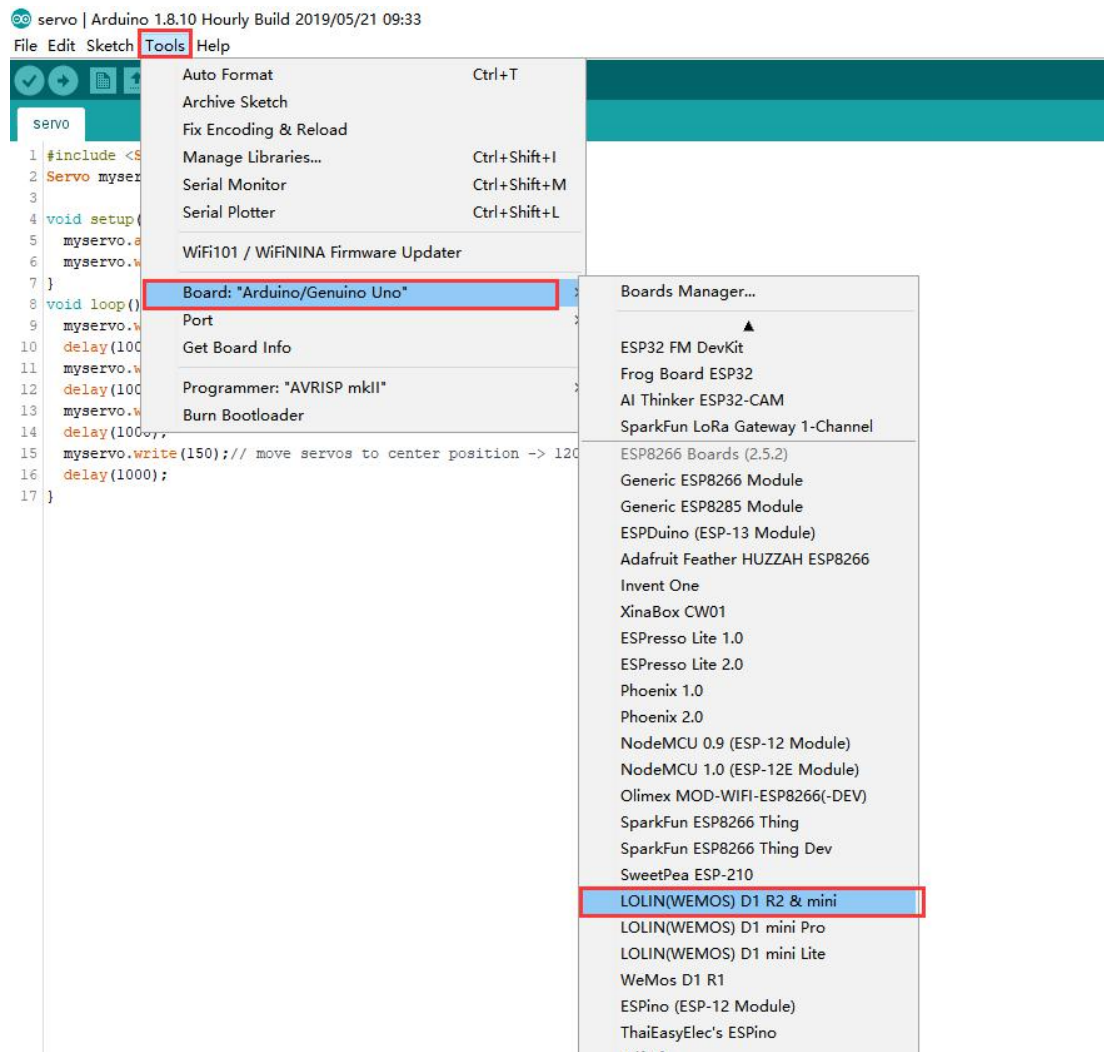




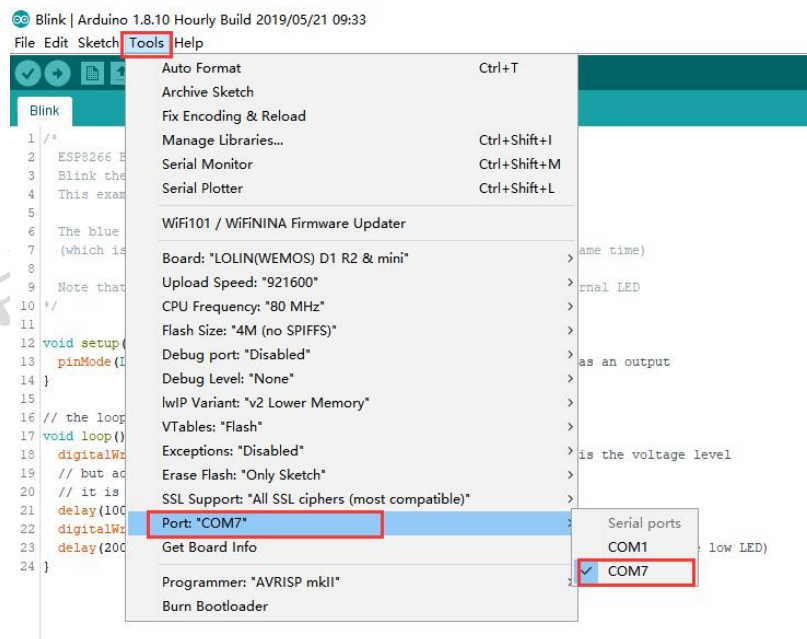


d. After downloading, set the download board and select the following option.

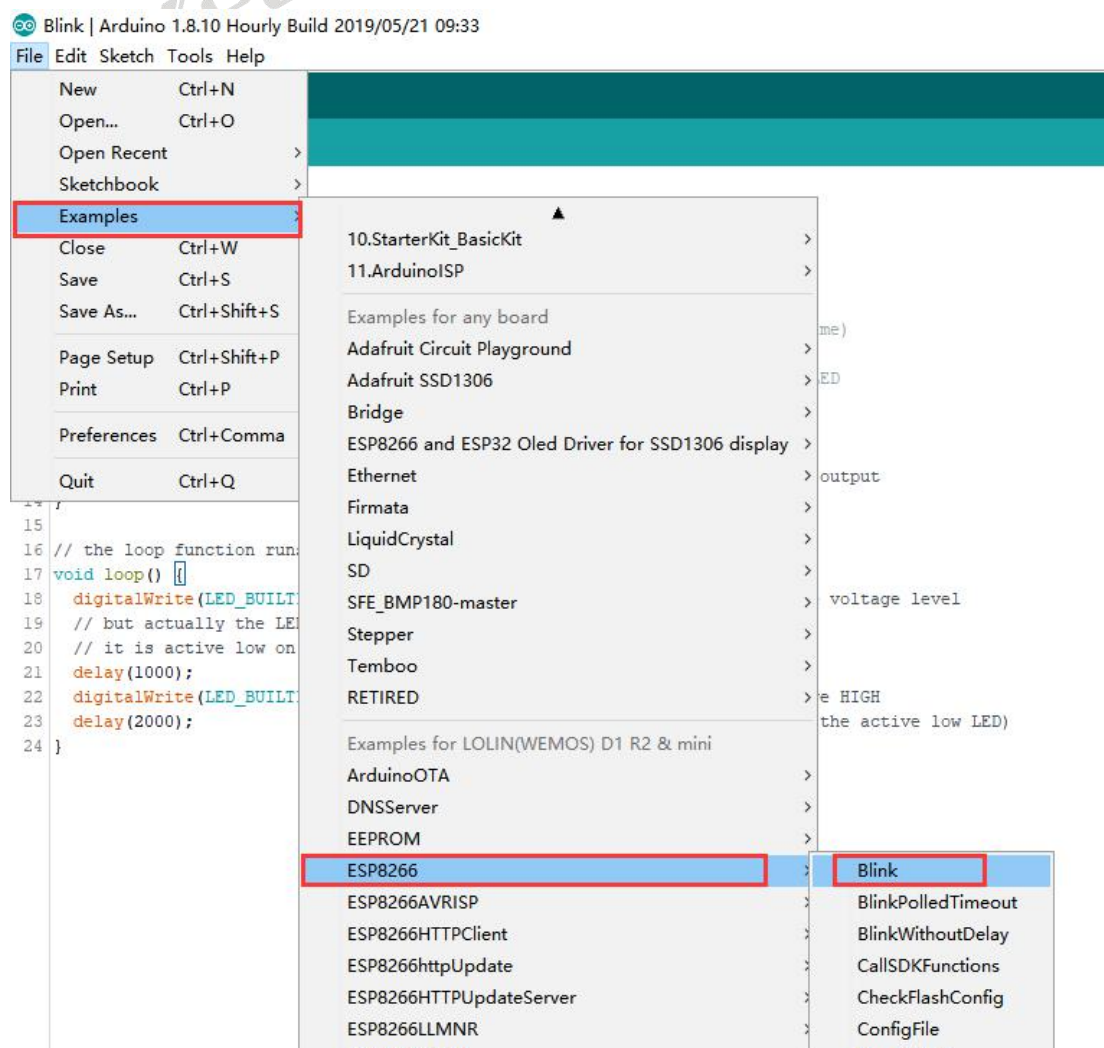
If the list shown below does not appear, it means the download failed, please download again.



e. Connect the development board to the computer by the USB cable, then set the development board port in the arduino IDE as follows:



f. After the setup is complete, select the Blink sample code as shown below:

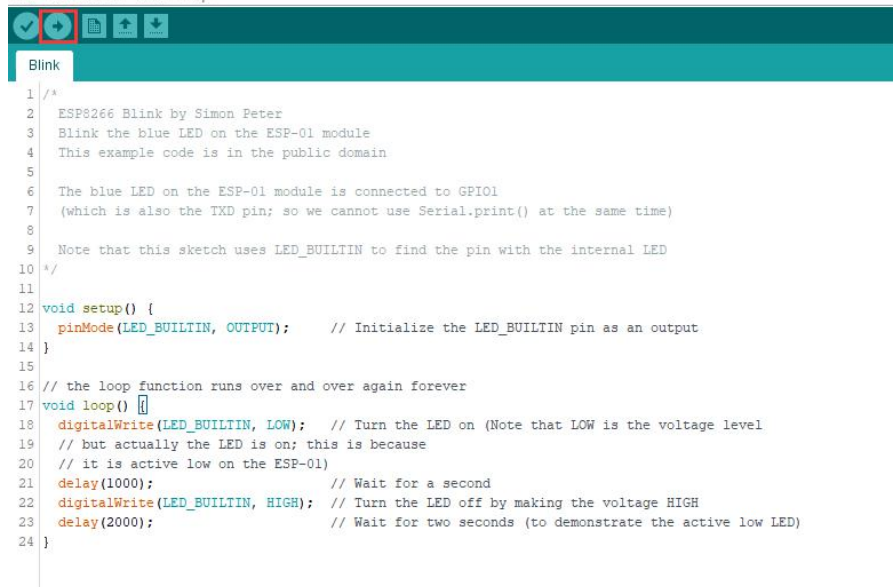




g. Click the button below to download the program to the development board and you can see that the blue LED on the development board is constantly flashing.

Blink | Arduino 1.8.10 Hourly Build 2019/05/21 09:33

File Edit Sketch Tools Help



```
1 /*
2  ESP8266 Blink by Simon Peter
3  Blink the blue LED on the ESP-01 module
4  This example code is in the public domain
5
6  The blue LED on the ESP-01 module is connected to GPIO1
7  (which is also the TXD pin; so we cannot use Serial.print() at the same time)
8
9  Note that this sketch uses LED_BUILTIN to find the pin with the internal LED
10 */
11
12 void setup() {
13   pinMode(LED_BUILTIN, OUTPUT); // Initialize the LED_BUILTIN pin as an output
14 }
15
16 // the loop function runs over and over again forever
17 void loop() {
18   digitalWrite(LED_BUILTIN, LOW); // Turn the LED on (Note that LOW is the voltage level
19   // but actually the LED is on; this is because
20   // it is active low on the ESP-01)
21   delay(1000); // Wait for a second
22   digitalWrite(LED_BUILTIN, HIGH); // Turn the LED off by making the voltage HIGH
23   delay(2000); // Wait for two seconds (to demonstrate the active low LED)
24 }
```

### 3. Light up the external LED light

After completing the above steps, you can connect the LED lights directly.

The connection method is as follows:

LED positive <-----> D4 pin on development board

LED negative <-----> one end of the resistor

The other end of the resistor is connected to the GND pin of the development board

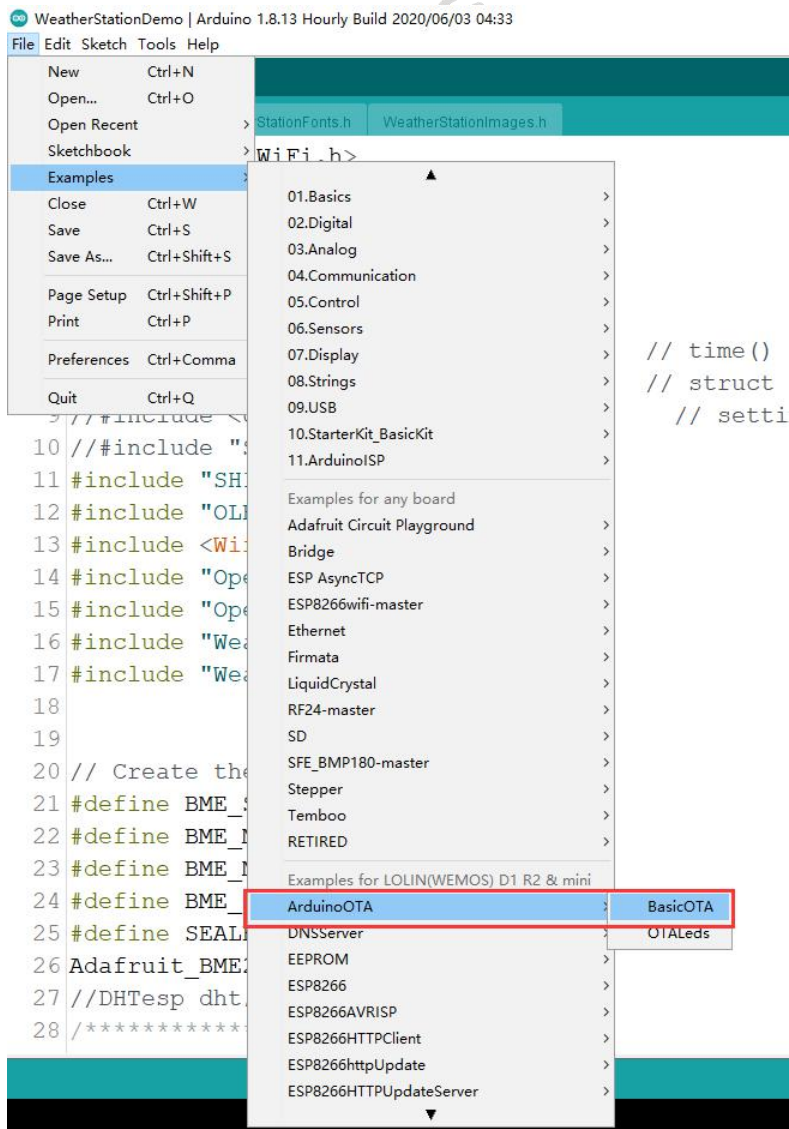
When the circuit is connected, you can see the LED flashing.

Please note that the positive and negative LEDs cannot be reverse



## 2. WIFI Function Test

1. Open **Examples->ArduinoOTA->BasicOTA** in turn



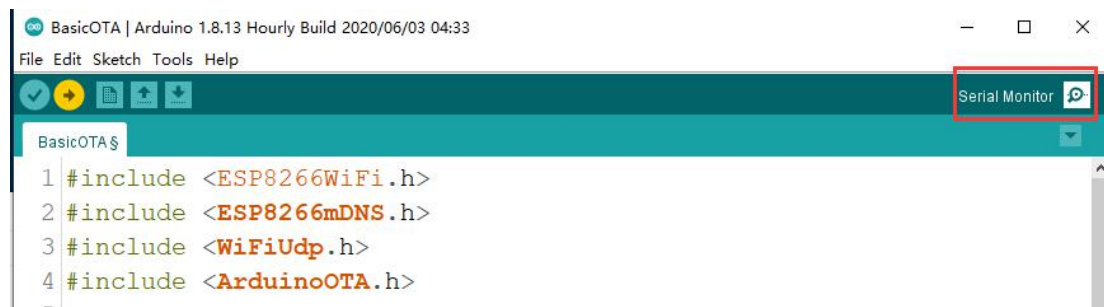
2. Change the 7th and 8th lines of code. Change the name to your WIFI name, and change the password to WIFI access password.

```
6 #ifndef STASSID
7 #define STASSID "your-ssid"
8 #define STAPSK "your-password"
9 #endif
```

3. After the modification is completed, save the code and set the parameters under the Tools window. The setting method is the same as the previous LED light case.



4. Upload the code. After the upload is successful, click the button in the upper right corner to open the serial monitor.



5. After opening, set the serial port baud rate to 115200, and then press the reset button on the development board. If the IP address appears, then the WIFI connection is successful.

