Part I: Setup a chip programmable environment

1.Download Arduino IDE.

https://www.arduino.cc/en/Main/Software

2.Select either Windows installer for Windows operating system, while Mac OS X for Mac OS X operating system.

3.Run the setup.

Part II: Hardware setup for a microcontroller unit (MCU)

- 1.Micro-USB connector connects to the NodeMCU.
- 2.USB connector connects to the laptop or personal computer (PC).

Part III: Startup a microcontroller unit (MCU)

- 1.In Arduino IDE, go to File, Preferences, Add Additional Boards Manager URLs: http://arduino.esp8266.com/stable/package\_esp8266com\_index.json
- 2. Then select the board name, go to Tools, Board: "NodeMCU 1.0 (ESP-12E Module)", Boards Manager..., search: ESP8266, install ESP8266 Community version 2.7.4, Close.
- 3. Then select the COM port, go to Tools, Port, COM?. ? select the only port number.

Part IV: Upload an example code

- 1. In Arduino IDE, go to File, Examples, 01. Basics, Blink.
- 2.Compile the example code using ctrl+r keystroke.
- 3.Upload the example code to MCU using ctrl+u keystroke.
- 4. Verify the blink of blue LED light emitted from ESP8266 of NodeMCU.