Algorithm installing and working ESP32 board in Arduino IDE

First of all install the Arduino IDE

1. In your Arduino IDE = go to File> Preferences

2. Enter

https://dl.espressif.com/dl/package_esp32_index.json Into the “Additional Board Manager URLs” Field Click the “OK” Button

3. Open the Boards Manager = Go to Tools > Board > Boards Manager

4. Search for ESP32 and Press Install Button for the “ESP32 by Espressif Systems“

5. It Should Be Installed After a Few Seconds

6. Check for text files (board.txt و ، platform.txt) folders, documents tools all inside the esp32 folder.

7. In order to compile ESP32 code, you need the Xtensa GNU compiler (GCC) suite installed on your machine. Go to esp32 > tools folder and execute get.exe

8. This executable download the Xtensa GNU Tools and ESP32 SDK, and then unzip it to the appropriate location.

9. The D2 pin of the board is connected to the blue LED on the board

10. make sure the board is correctly identified in the Arduino IDE. Open the Arduino IDE and select the ESP32 Dev Module option under Arduino IDE > Tools > Board menu.

11. connect the ESP32 development board to the computer via micro-B USB cable. Once the board is connected, the communication or COM port must be set. On Windows machines, this will be like COM#, select this serial port under Arduino IDE > Tools > Port menu.