

## Arduino IDE Software

Let's see interface of the Arduino IDE

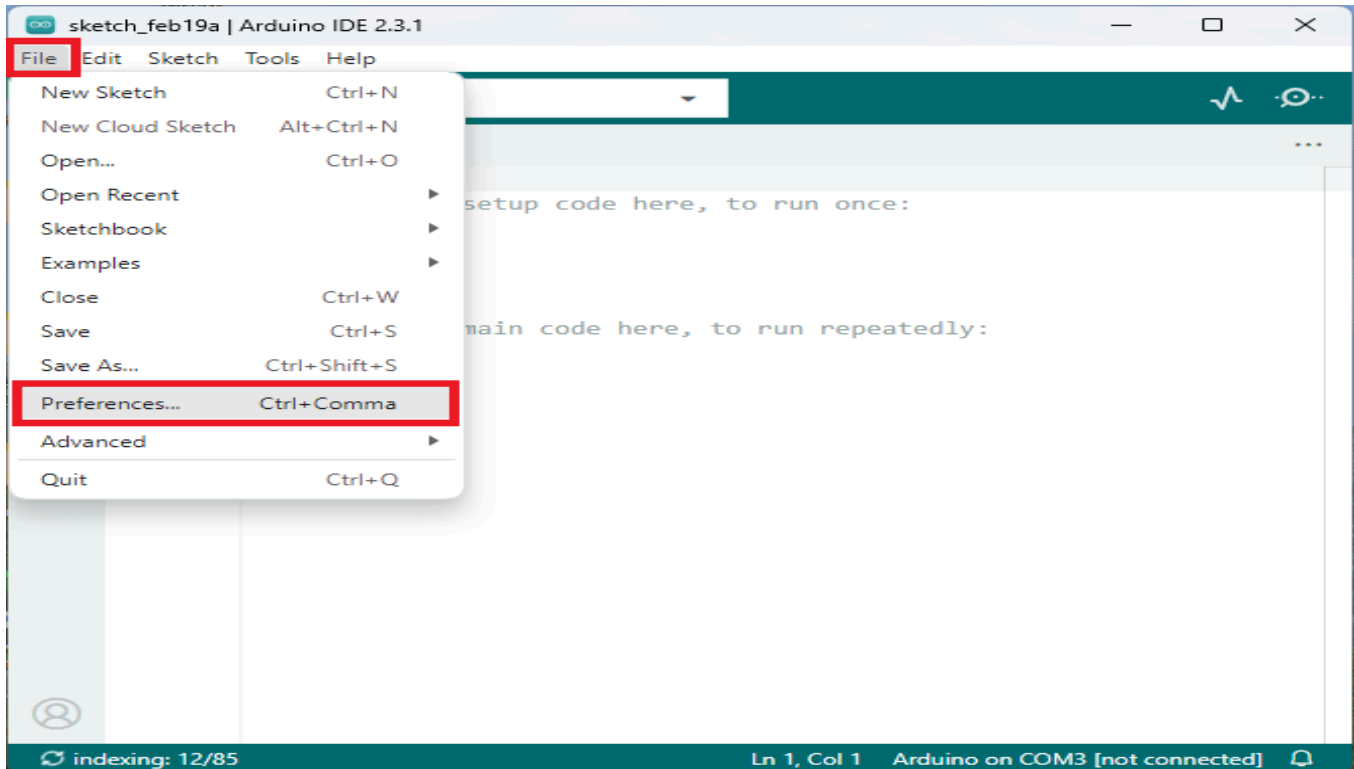


- **Verify / Upload** - compile and upload your code to your Arduino Board.
- **Select Board & Port** - detected Arduino boards automatically show up here, along with the port number.
- **Sketchbook** - here you will find all of your sketches locally stored on your computer. Additionally, you can sync with the **Arduino Cloud**, and also obtain your sketches from the online environment.
- **Boards Manager** - browse through Arduino & third-party packages that can be installed. For example, using a MKR Wi-Fi 1010 board requires the Arduino SAMD Boards package installed.
- **Library Manager** - browse through thousands of Arduino libraries, made by Arduino & its community.
- **Debugger** - test and debug programs in real time.
- **Search** - search for keywords in your code.
- **Open Serial Monitor** - opens the Serial Monitor tool, as a new tab in the console.

## How to add ESP32 board in the Arduino IDE software:

Before move to interfacing let's see how to include the board of the ESP32

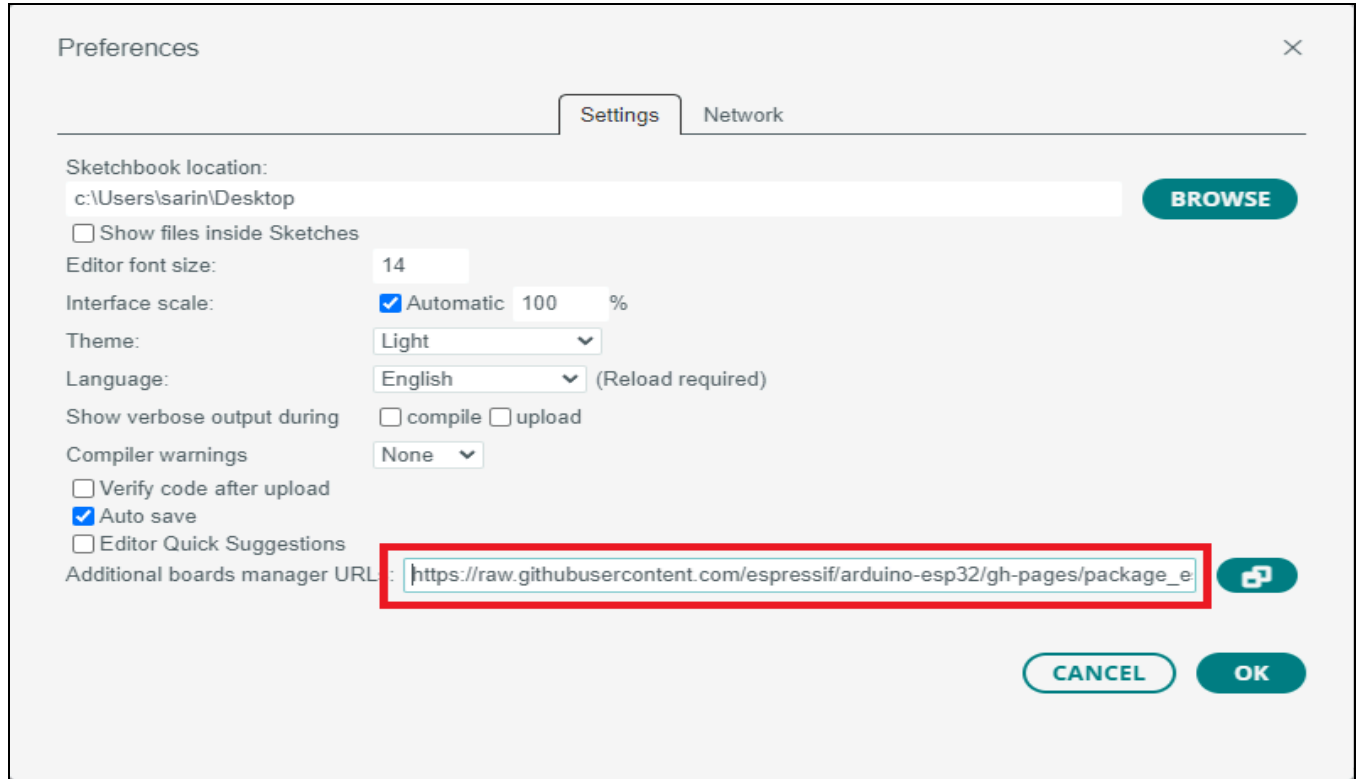
1. In your Arduino IDE 2, go to **File > Preferences**.



2. Copy and paste the following line to the Additional Boards Manager URLs field.



[https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package\\_esp32\\_index.json](https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_index.json)



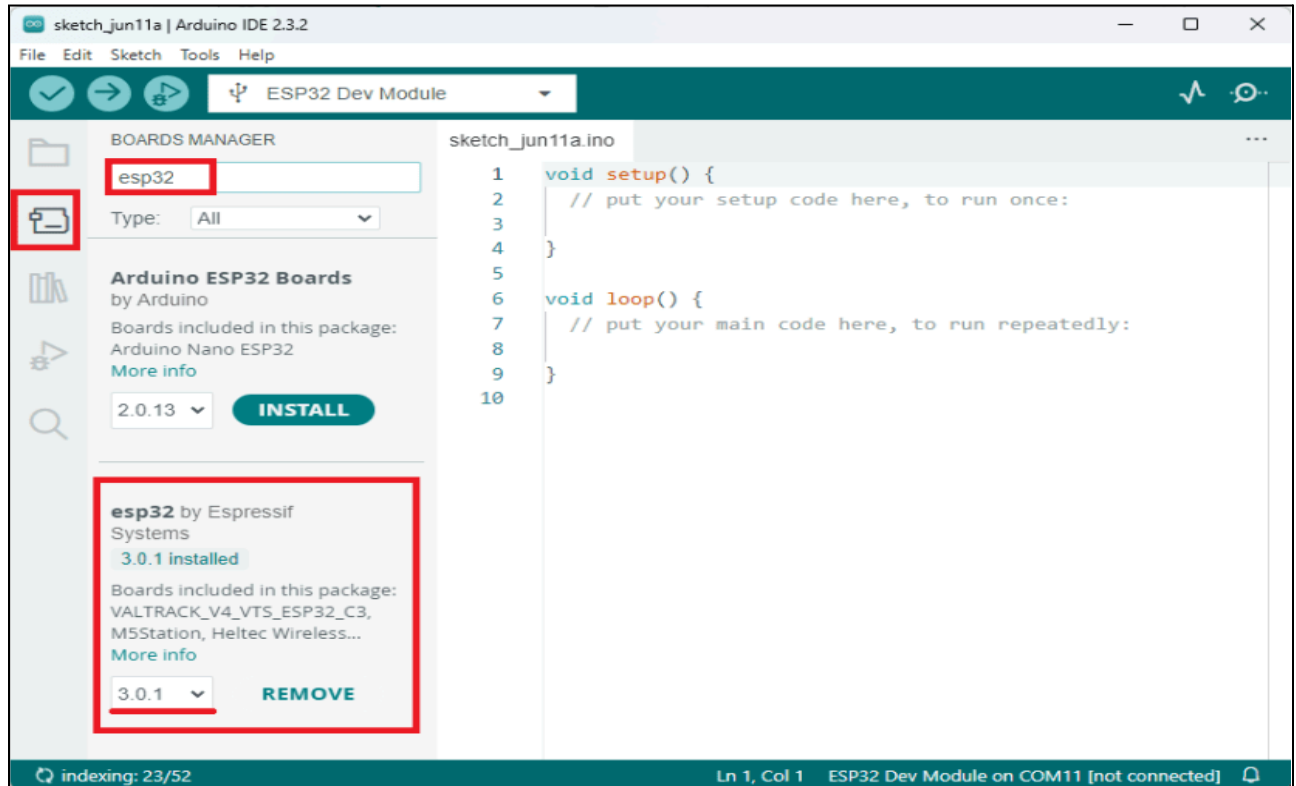
3. **Note:** if you already have the ESP8266 boards URL, you can separate the URLs with a comma, as follows:  
[http://arduino.esp8266.com/stable/package\\_esp8266com\\_index.json](http://arduino.esp8266.com/stable/package_esp8266com_index.json),  
[https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package\\_esp32\\_index.json](https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_index.json)

4. Open the Boards Manager. You can go to **Tools > Board > Boards Manager...** or you can simply click the **Boards Manager** icon in the left-side corner.

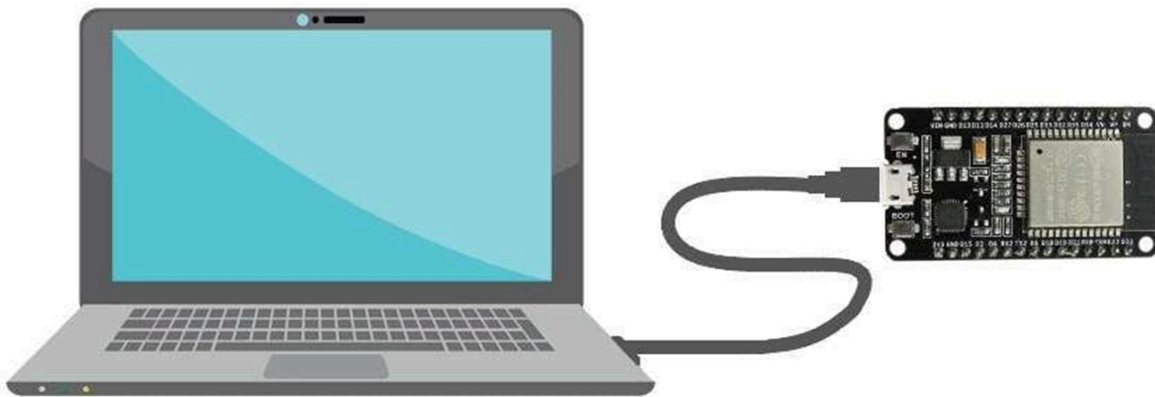




5. Search for **ESP32** and press the install button for **esp32** by **Espressif Systems** version **3.X**.

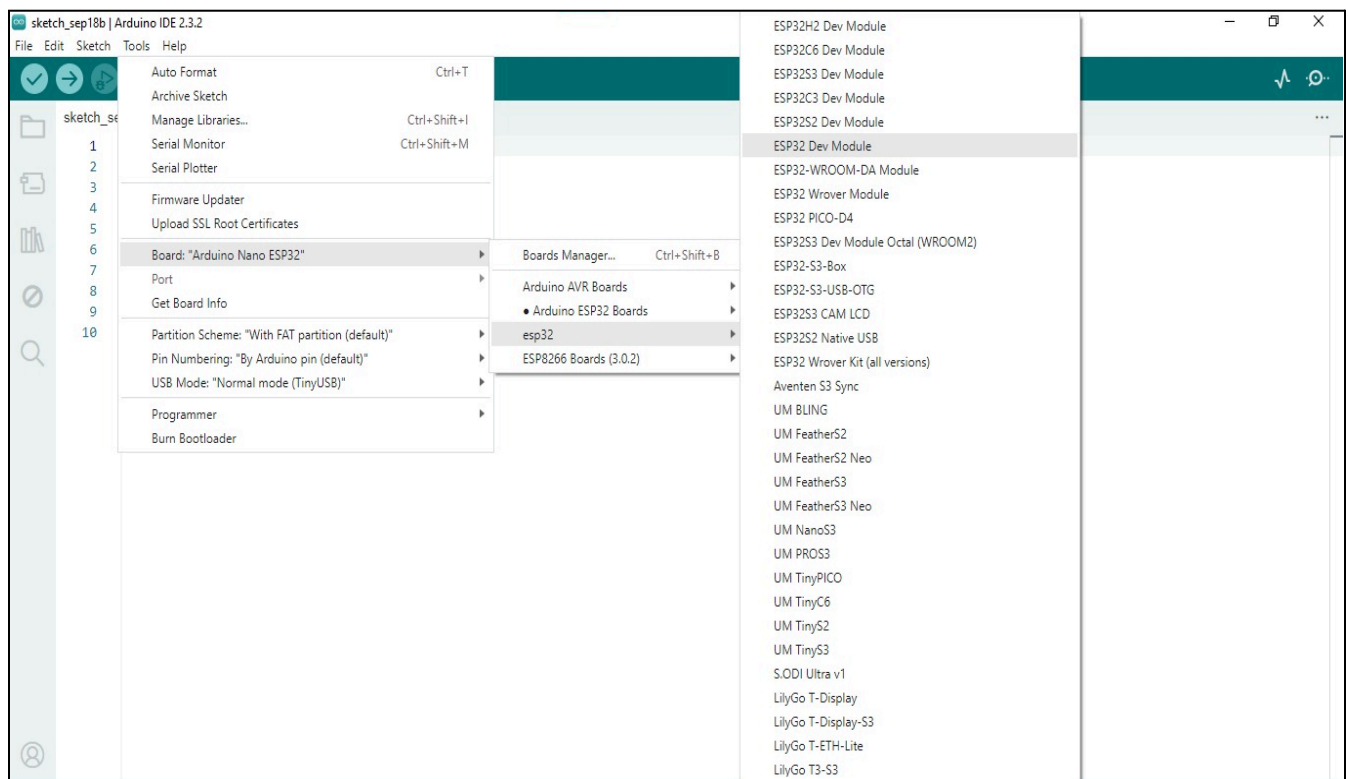


## 6. Connect the Expansion board to your computer



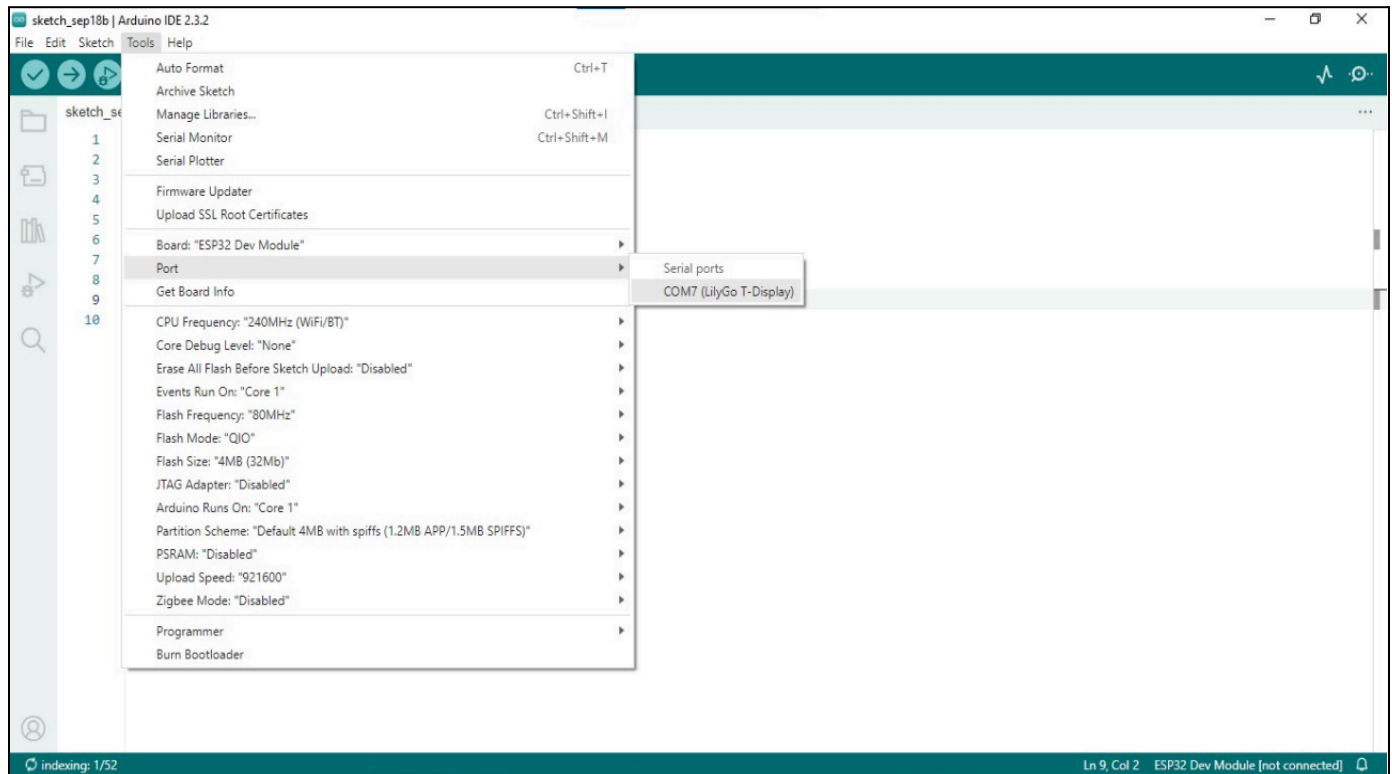
## 7. Select the board:

- o Open the Tools menu -> Select Board -> Select ESP32 Boards -> Select ESP32



## 8. Select the port:

- o Open the Tools menu -> Select Port -> Select Port Number



Now You will see Board and port get added in screen