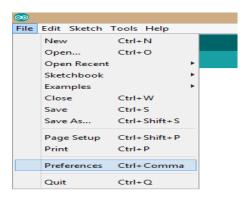
- 1 -In the first step download Arduino ide
- 2 -Install a pieceESP-32 on the computer

Connect the tool to the computer and install it on the computer

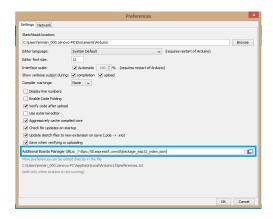
3- Installing the ESP32 board support on the Arduino

For programming ESP32 board with Arduino IDE first step is to add ESP32 board support on Arduino IDE. For this follow the steps below:

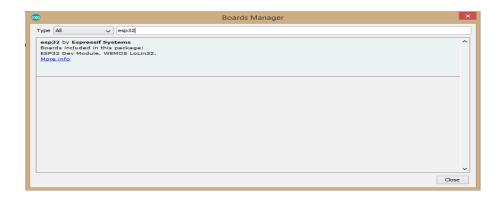
1-Open Arduino IDE go to "File" in menu bar and open "Preferences"



2-As "Preferences" dialog box opens, copy the URL in "Additional Board Manager URLs" box highlighted in image below. After this select "OK".



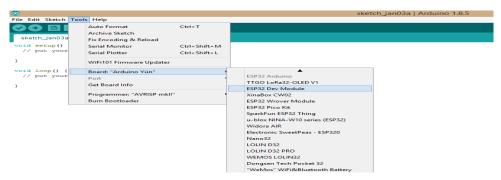
- 3 -Now go to "Tools>Board>Board Manager".
- 4 open Board Manager you can see certain download process going at the bottom of screen. Once this process is completed search for "esp32"



5- NOW You can see the esp32 package select it and then select "Install".



- 6 Once installation starts wait for a while till installation process gets completed. As the process is completed you can see "INSTALLED" written beside esp32 board name.
- 7 Now close the Board Manager and goto "Tools>Board" and scroll down, there you can see a complete category of different esp32 boards under the name "ESP32 Arduino" written in grey colored fonts. In that select "ESP32 Dev Module" if you are using standard ESP32 board made by Espressif Systems or select any other depending on which board you are using.



8 - After selecting esp32 board you can see the board name at the bottom right corner of your Arduino screen changes to board name selected by you. Beside board

9 - name you can see certain other parameters, this are mainly parameters related to the code upload process on esp32. You can change them from "Tools" in menu bar. For now let them remain as it is.

```
miman_000.Lenovo-PC\Documents\Arduino\libraries\ledstrip

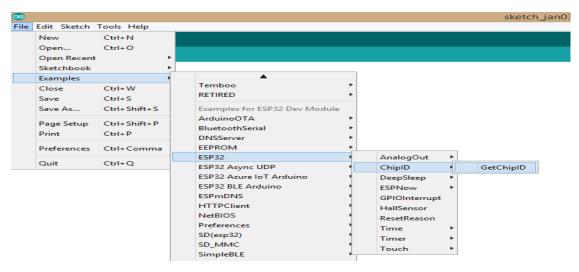
Users\miman_000.Lenovo-PC\Documents\Arduino\libraries\modbus_library

rs\miman_000.Lenovo-PC\Documents\Arduino\libraries\Rtc_Pcf8563

master: C:\Users\miman_000.Lenovo-PC\Documents\Arduino\libraries\ESP32_BLE_Arduino-master

ESP32 Dev Module, Disabled, Default, Q10, 80MHz, 4MB (32Mb), 921600, None on COM14
```

10 - Let's flash one of the example code in esp32. Goto "Files>Examples". Scroll across the examples list you can see separate sections of examples titled as "Built-in Examples", "Examples for any board" etc is grey colored fonts. One such section is "Examples for ESP32 Dev Module". This section consists of examples exclusively made for esp32 boards. Flash the example "GetChipID" that gives you chipId of your esp32 chip present on your board.



11 Go to Tools>Port and select the port available in the list and then upload the code

