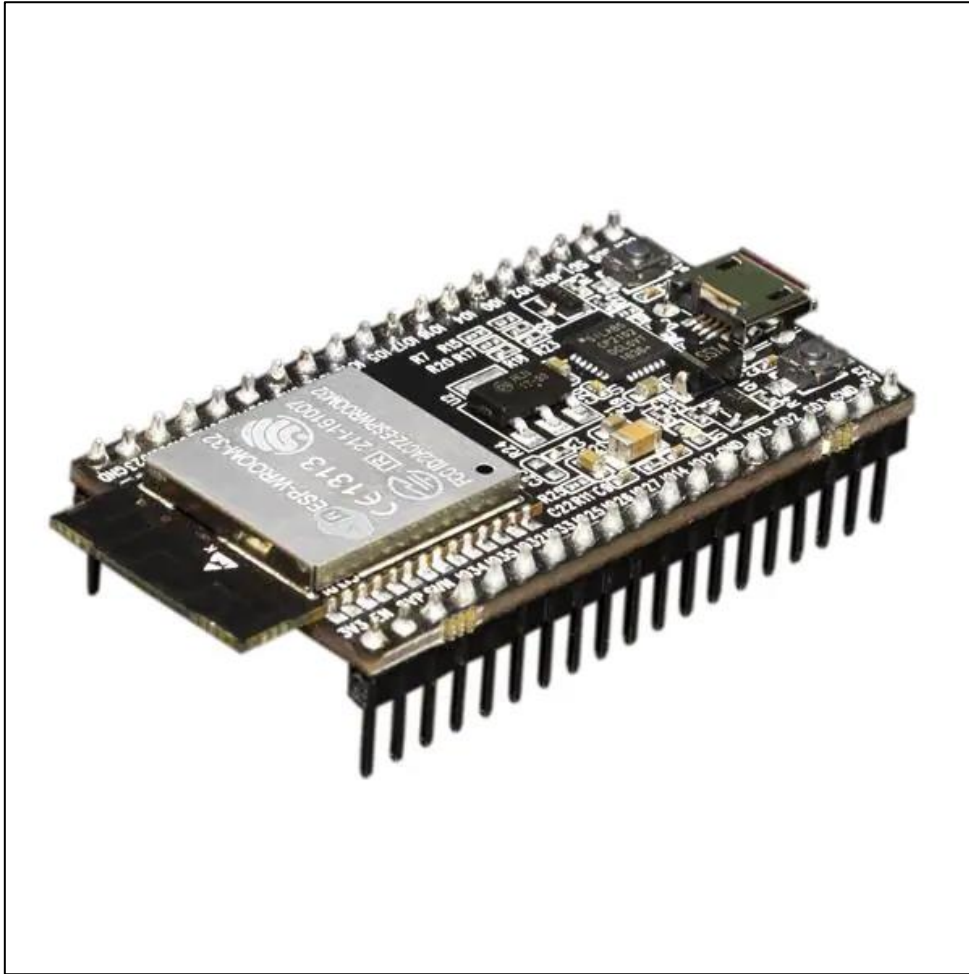# Getting Started with ESP-32 Devkit

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Abstract: This document will help you with the initial use of ESP-32 DevKit Board.

Hardware you will need before getting started:

1. ESP-32 DevKitC Board

2. Micro USB to USB 3.0 Cable

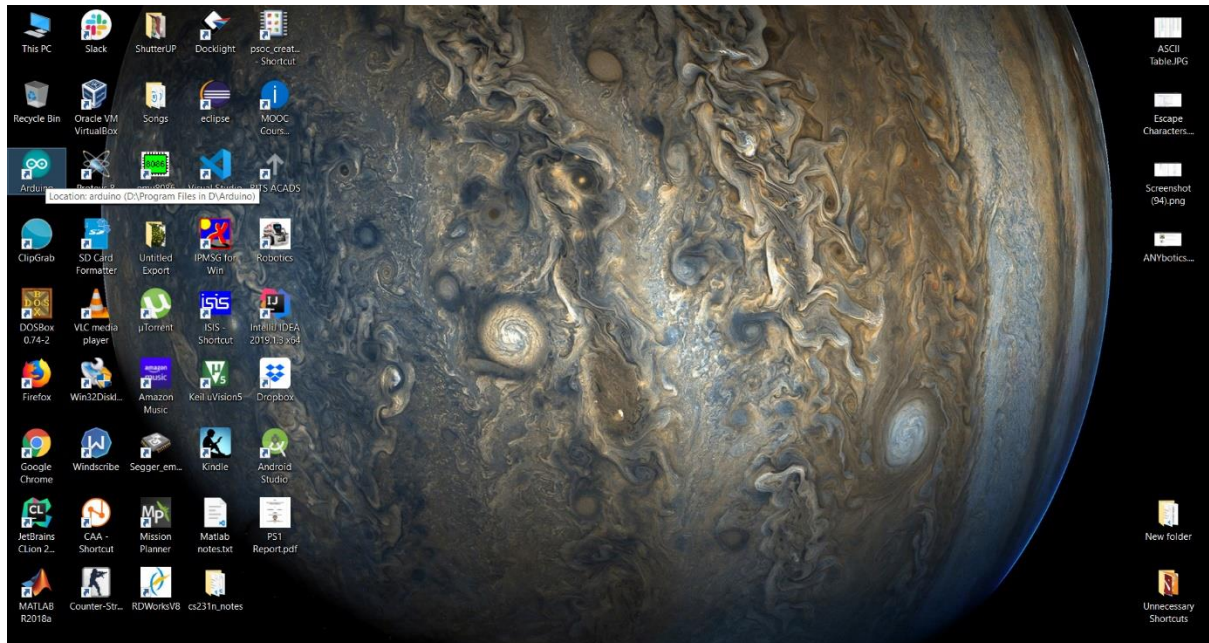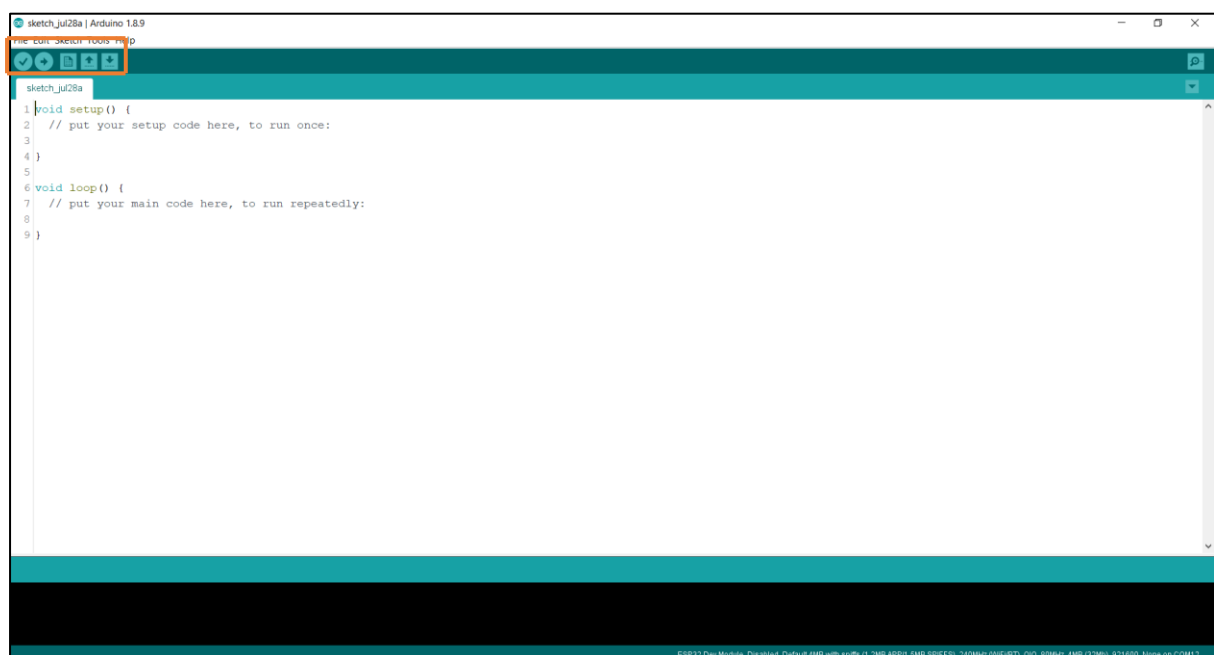# Software you will need before getting started:

1. Arduino IDE

You can download it from here: https://www.arduino.cc/en/main/software

Steps to be followed for board bring up:-

1. After installing Arduino IDE, you will need to add the ESP-32 board support in the IDE. First open the IDE by double clicking on it.
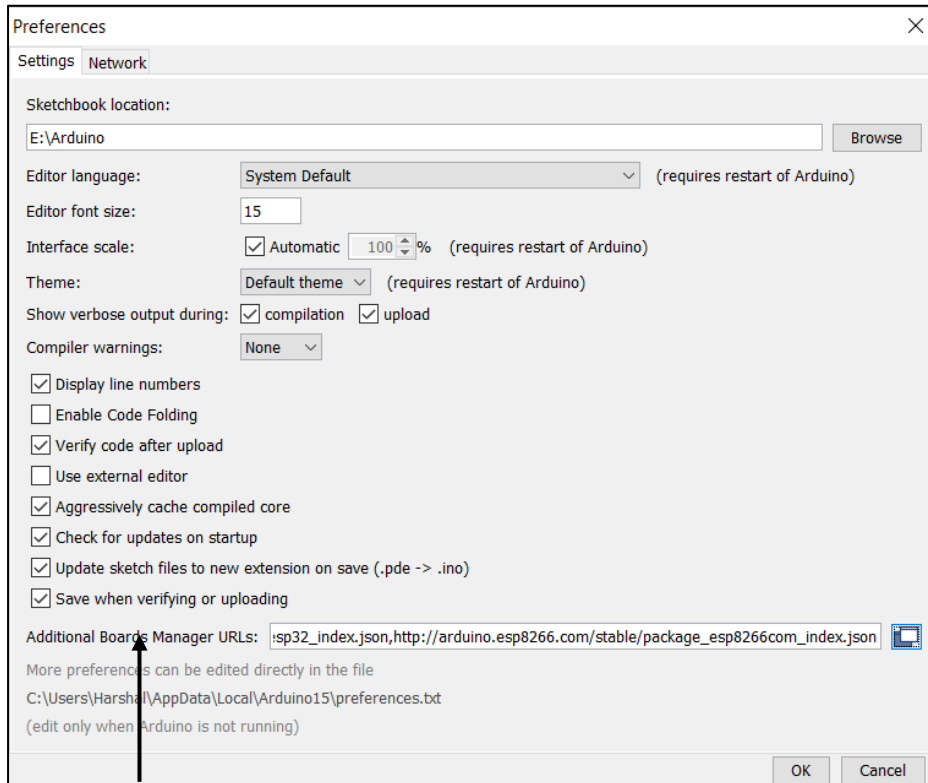

2. You'll see a window like this:

You can see the function of each button in the orange box by hovering on it. Here's a short description of each button:
1. Verify: This button compiles the code
2. Upload: This button flashes the code on the development board in our case, ESP-32.
3. New: Creates new file.
4. Open: Opens existing file.
5. Save: Saves the current code example (Sketch)

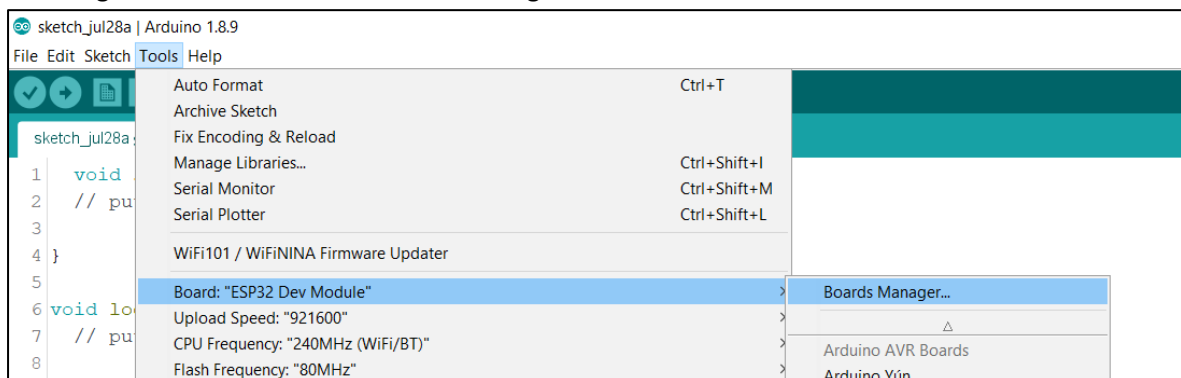3. To add ESP-32 board support in Arduino IDE go to: File -> Preferences

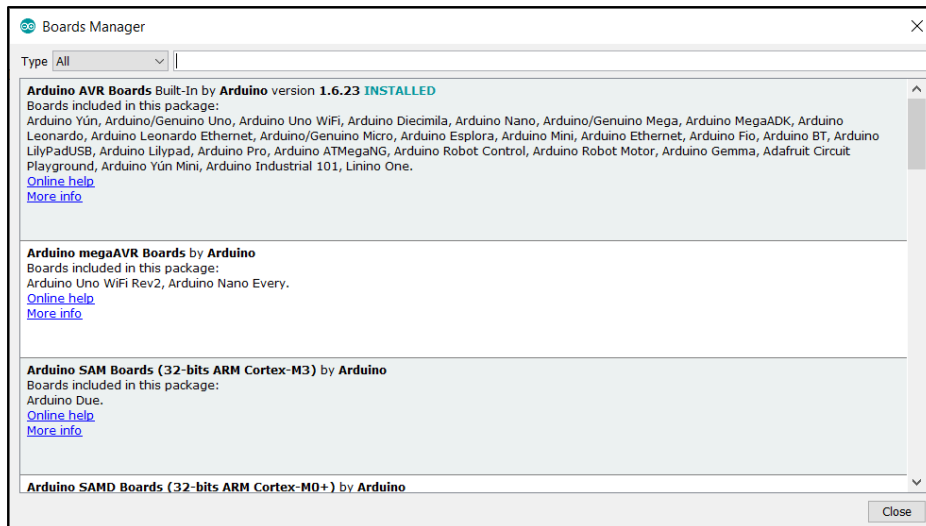In the Additional Board Manager URLs option paste the following URL:
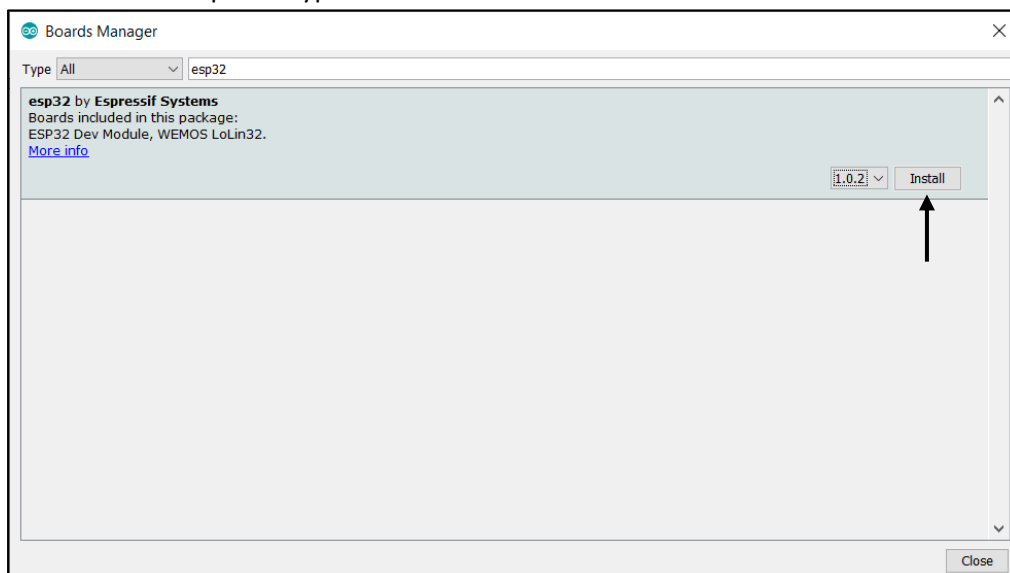https://dl.espressif.com/dl/package_esp32_index.json
Then press OK.

4. Now go to: Tools -> Board -> Board Manager
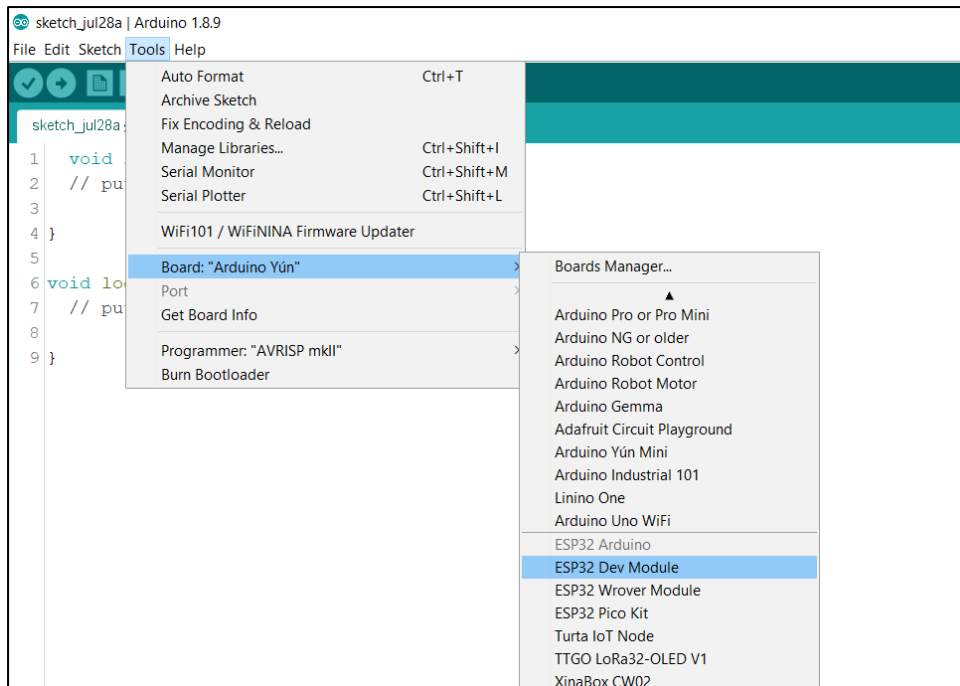

You will see a window like this:

5. In the search options type ESP32 and then click on the install button.

After the download completes you can close this window.

6. Now you should be able to select the board from boards menu. In our case we are using a ESP32 Dev Module.

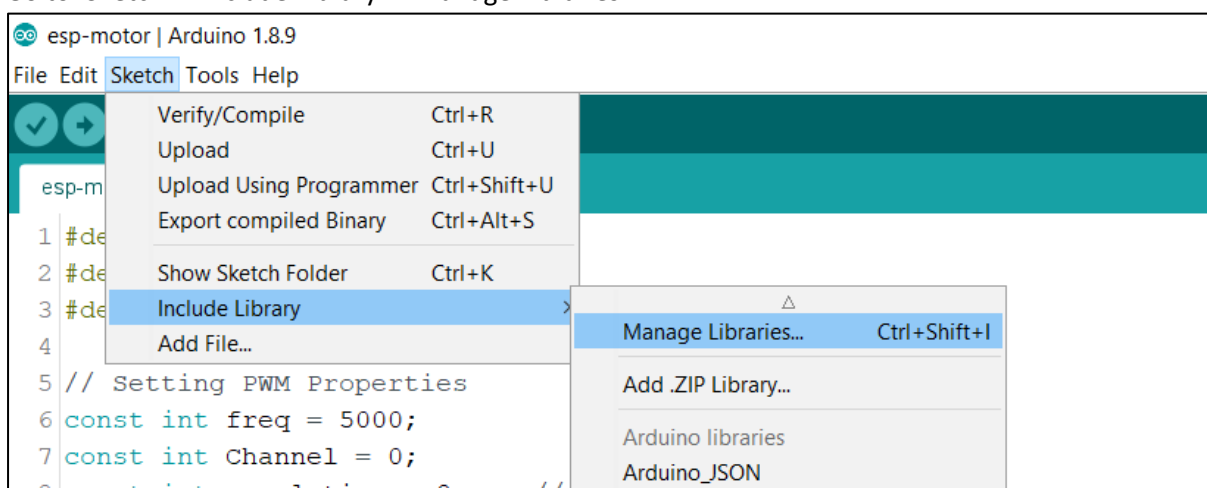Go to: Tools -> Board -> Select ESP32 Dev Module

Your programming environment is now ready. You can write programs (sketches) in the IDE and those can be uploaded on the ESP-32 DevKit Board.
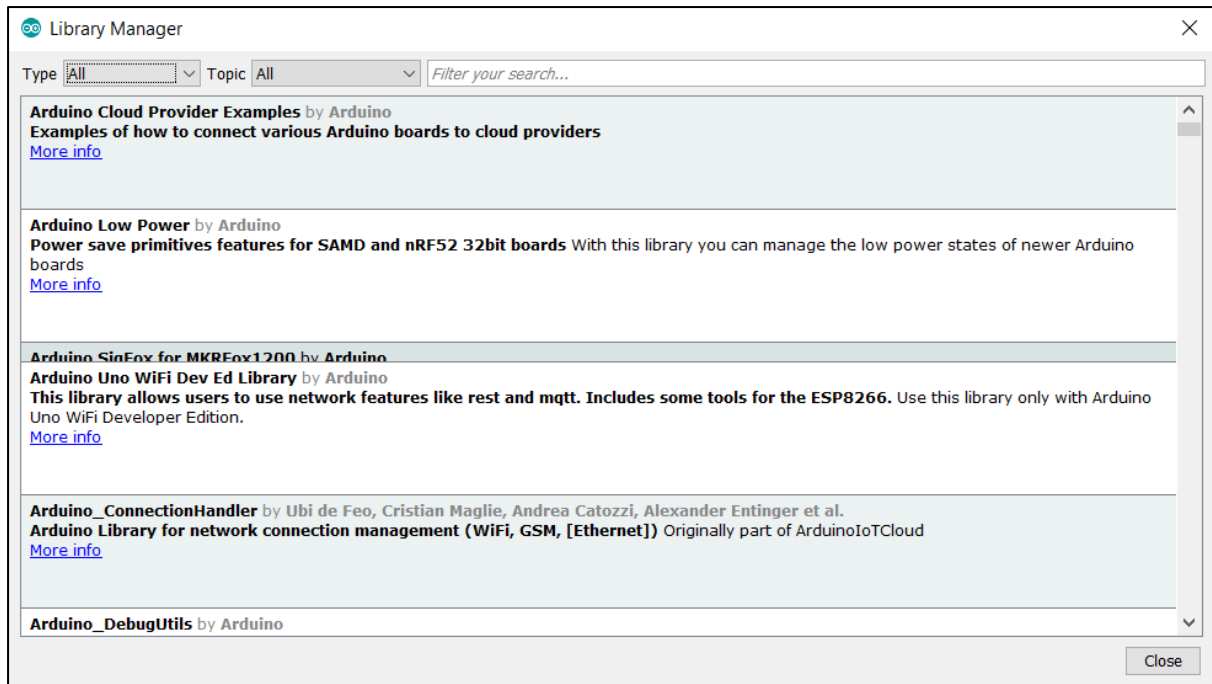
Installing new libraries in Arduino IDE:

1. Most of the libraries used in Arduino IDE can be downloaded using the library manager.
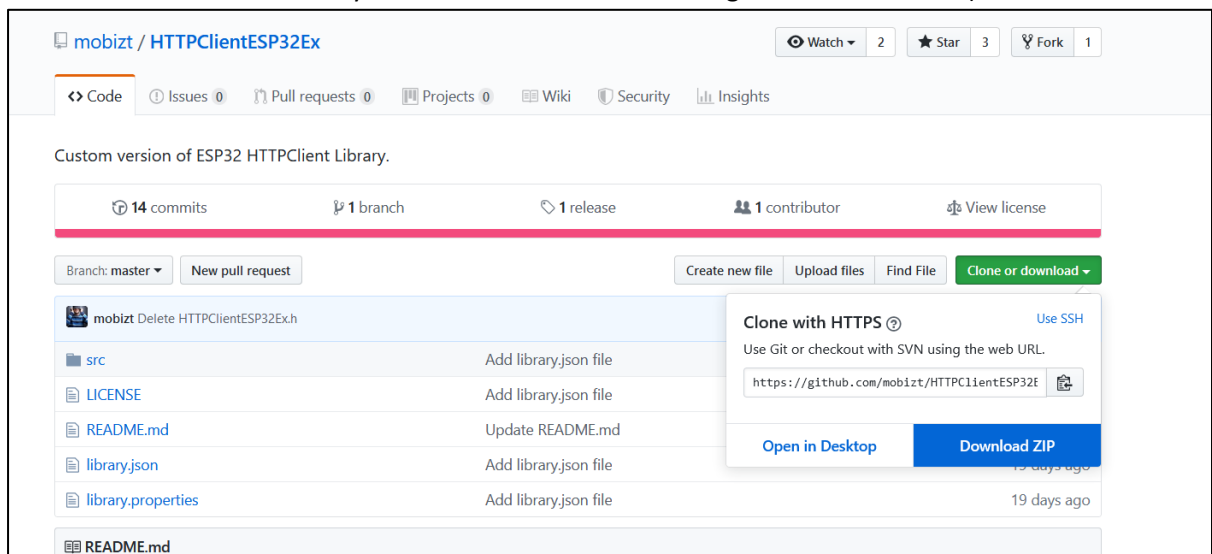
Go to: Sketch -> Include Library -> Manage Libraries

2. You will see a window like shown in the image below. In the filter search type the name of the library you want to use and then install it by clicking on the install button.

3. Sometimes the library cannot be installed using the Library Manager, but it is available on the GitHub. In that case download the zip file of the library from GitHub. (Note: To file the library Google search the name of the library and add GitHub at the end to get the result faster.)

4. After downloading the ZIP file, go to: Sketch -> Include Library -> Add .ZIP Library
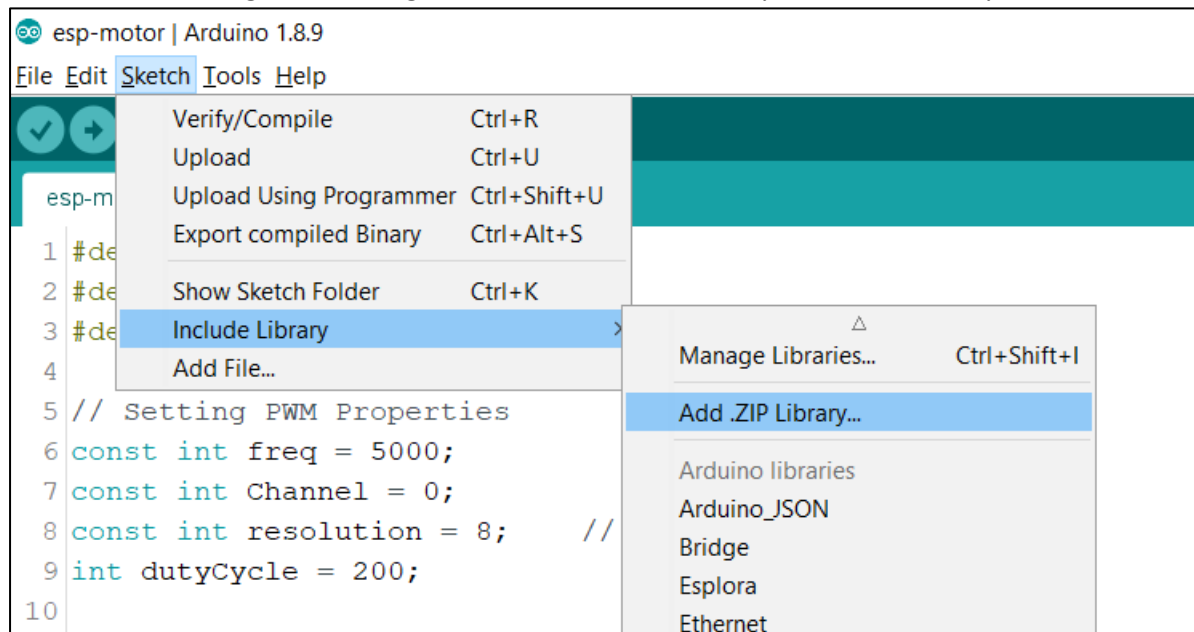
A new window will pop up which will ask you to select the .zip file of the library. Select the file and you are ready to use the library.