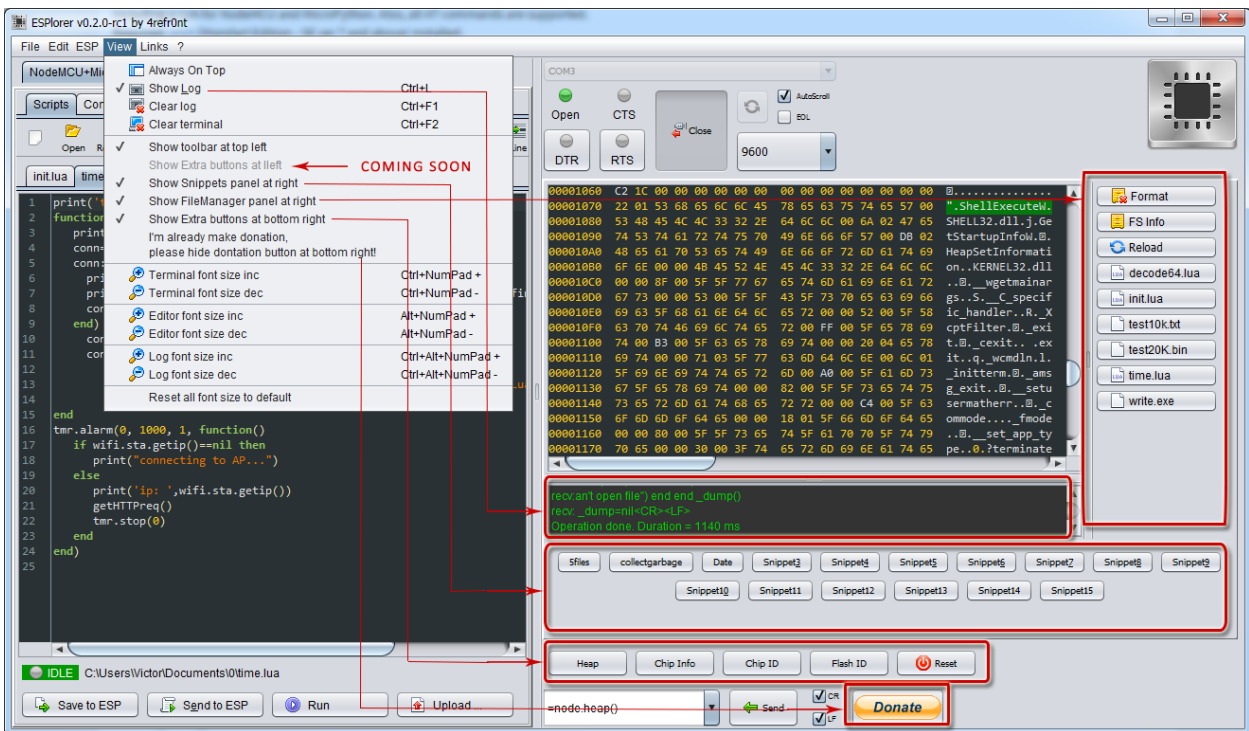


# Getting Started with the ESPlorer IDE



# Disclaimer

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This Guide has been written for information purposes only. Every effort has been made to make this Guide as complete and accurate as possible. The purpose of this Guide is to educate. The author ([Rui Santos](#)) does not warrant that the information contained in this Guide is fully complete and shall not be responsible for any errors or omissions.

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## Bug Reports and Discuss Forum

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- [esp8266.com](http://esp8266.com) on English
- [esp8266.ru](http://esp8266.ru) на русском

# Who Wrote this Guide?

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Hey There,

Thank you for downloading this free Guide:  
“Getting Started with the ESPlorer IDE”.



I'm Rui Santos, founder of the [Random Nerd Tutorials blog](#), [Blog1K.com](#), author of [BeagleBone For Dummies](#) and [Home Automation Using ESP8266](#).

This Guide contains everything you need to know on how to use the ESPlorer IDE with NodeMCU.

Thanks for being here,

-Rui



P.S. If you would like the longer version of my story, you can find it over [here](#).

# Getting Started with the ESPlorer IDE

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In this Guide you're going to learn everything you need to know about the ESPlorer IDE using NodeMCU.

The ESPlorer IDE was created by [4refront](#).

## What's the ESPlorer?

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The ESPlorer is an IDE for ESP developers. It's multiplatform, this simply means that it runs on Windows, Mac OS X or Linux (it was created in JAVA).

### Supported platforms:

- Windows(x86, x86-64)
- Linux(x86, x86-64, ARM soft & hard float)
- Solaris(x86, x86-64)
- Mac OS X(x86, x86-64, PPC, PPC64)

This software allows you to establish a serial communications with your ESP8266, send commands, upload code and much more.

## Requirements:

- You need to have JAVA installed in your computer. If you don't have, go to this website: <http://java.com/download>, download and install the latest version. It requires JAVA (SE version 7 and above) installed.
- In order to complete the sample project presented in this Guide you need to flash your ESP8266 with NodeMCU firmware, here's a blog post on how to do it: [Flashing NodeMCU Firmware on the ESP8266](#).

## Main Resources:

- ESPlorer Homepage: <http://esp8266.ru/esplorer/>
- GitHub Repository: <https://github.com/4refront/ESPlorer>

## Downloading ESPlorer

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Now let's download the ESPlorer IDE, visit the following URL:  
<http://esp8266.ru/esplorer/#download>

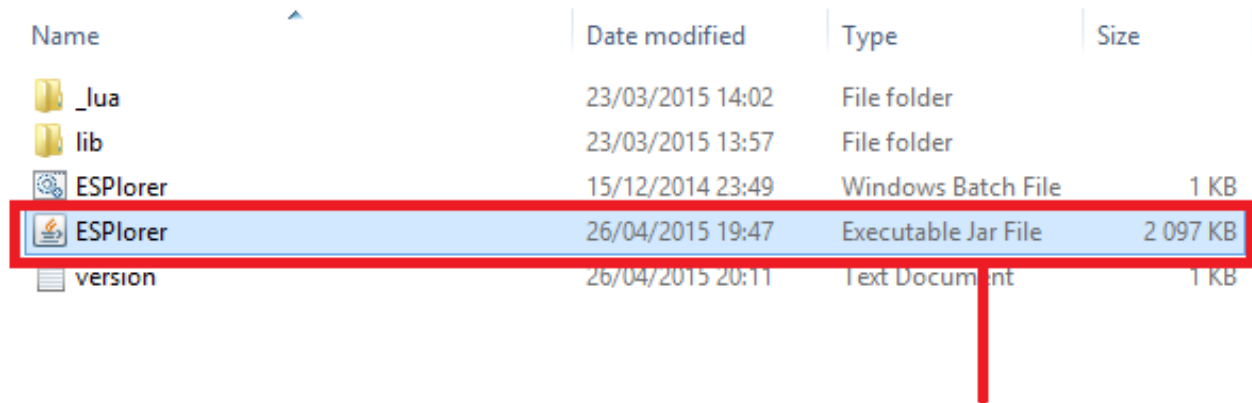
Then click that link “Download ESPlorer latest” (as shown below).



# Installing ESPlorer

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Grab the folder that you just downloaded. It should be named “ESPlorer.zip” and unzip it. Inside that folder you should see the following files:



| Name     | Date modified    | Type                | Size     |
|----------|------------------|---------------------|----------|
| _lua     | 23/03/2015 14:02 | File folder         |          |
| lib      | 23/03/2015 13:57 | File folder         |          |
| ESPlorer | 15/12/2014 23:49 | Windows Batch File  | 1 KB     |
| ESPlorer | 26/04/2015 19:47 | Executable Jar File | 2 097 KB |
| version  | 26/04/2015 20:11 | Text Document       | 1 KB     |

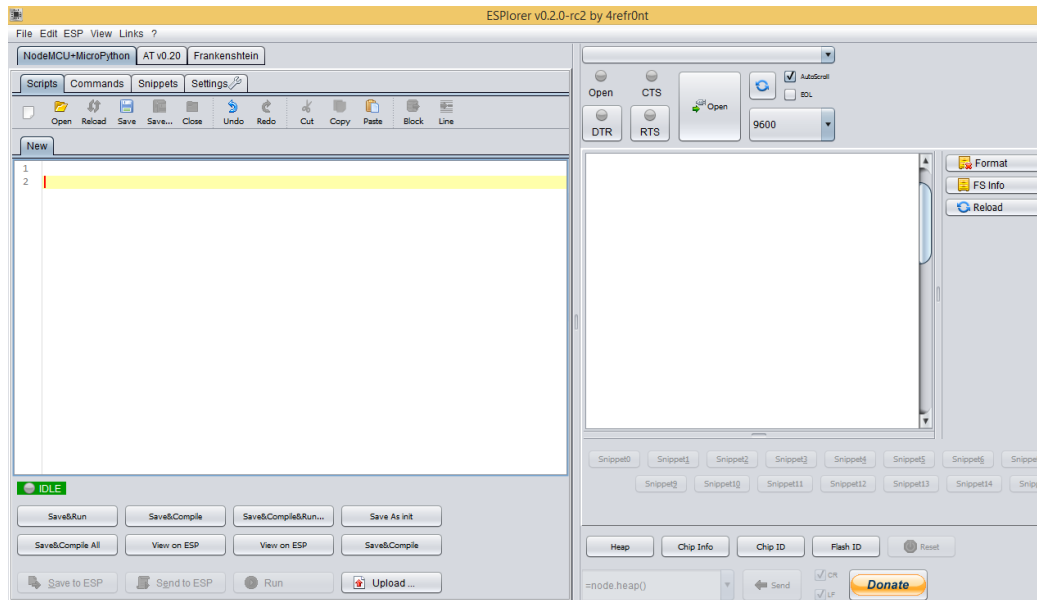
Execute the “ESPlorer.jar” file and the ESPlorer IDE should open after a few seconds (the “ESPlorer.jar” file is what you need to open every time you want to work with the ESPlorer IDE).

**Note:** If you’re on Mac OS X or Linux you simply use this command line in your terminal to run the ESPlorer: *sudo java -jar ESPlorer.jar*.

# ESPlorer IDE

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When the ESPlorer first opens, that's what you should see:



Here's a rundown of the features the ESPlorer IDE includes:

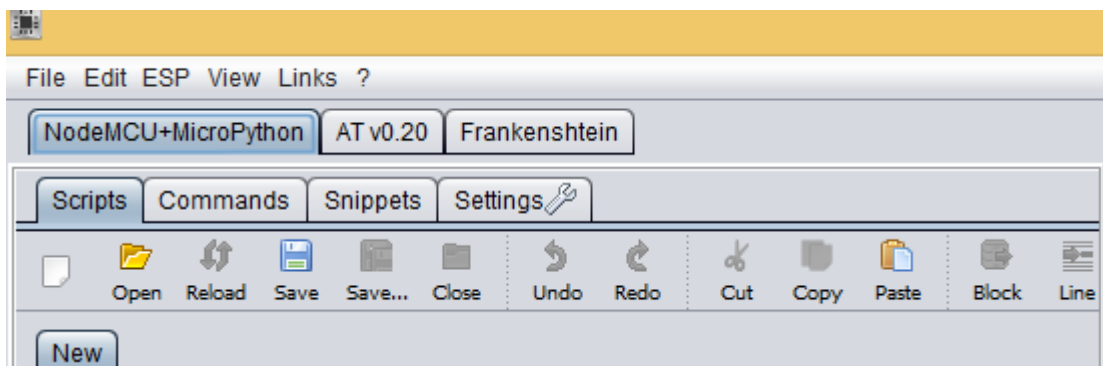
- Syntax highlighting LUA and Python code
- Code editor color themes: default, dark, Eclipse, IDEA, Visual Studio
- Undo/Redo editors features
- Code Autocomplete (Ctrl+Space)
- Smart send data to ESP8266 (without dumb send with fixed line delay), check correct answer from ESP8266 after every lines.
- Code snippets
- Detailed logging
- And a lot more

# ESPlorer IDE Overview

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The ESPlorer IDE has a couple of main sections, let's break it down each one.

In the top left corner you can see all the regular options that you find in any software. Create a New file, Open a new file, Save file, Save file as, Undo, Redo, etc.

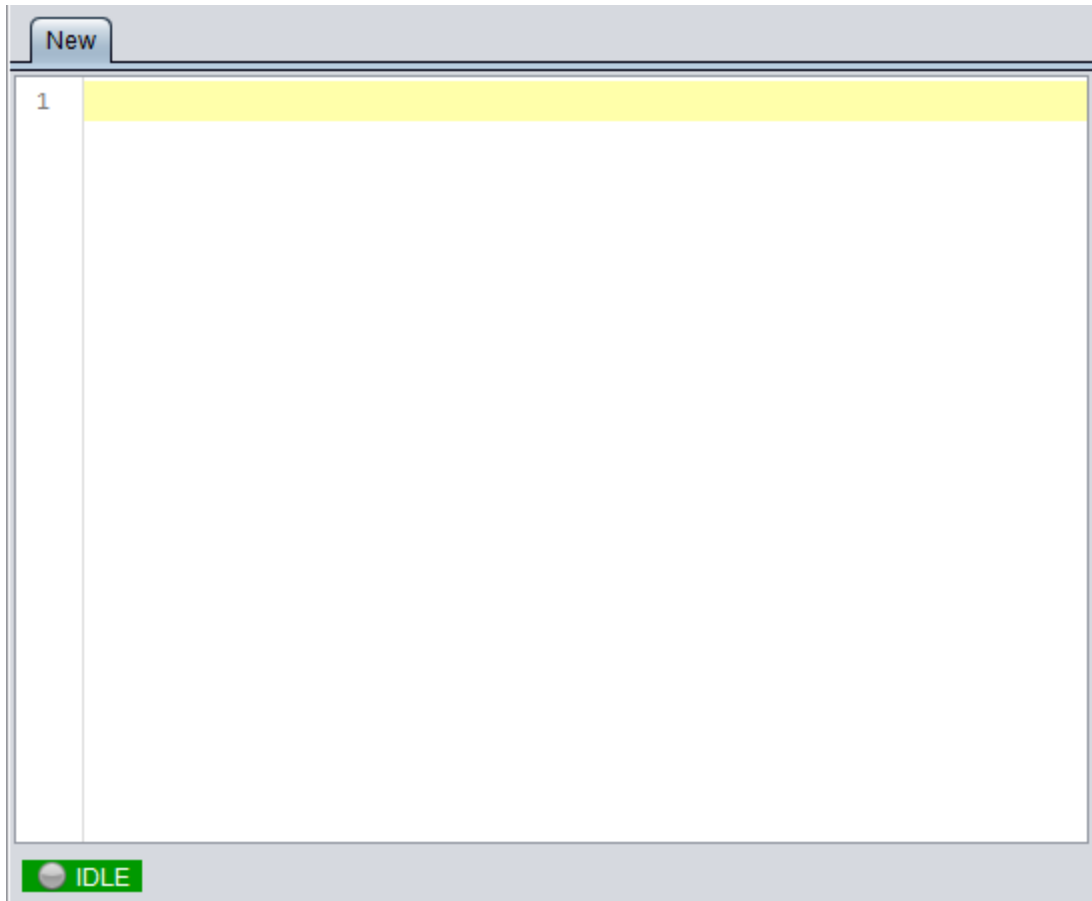


In the top right corner you have all the options you need to establish a serial communication (you're going to learn how to use them later in this Guide).

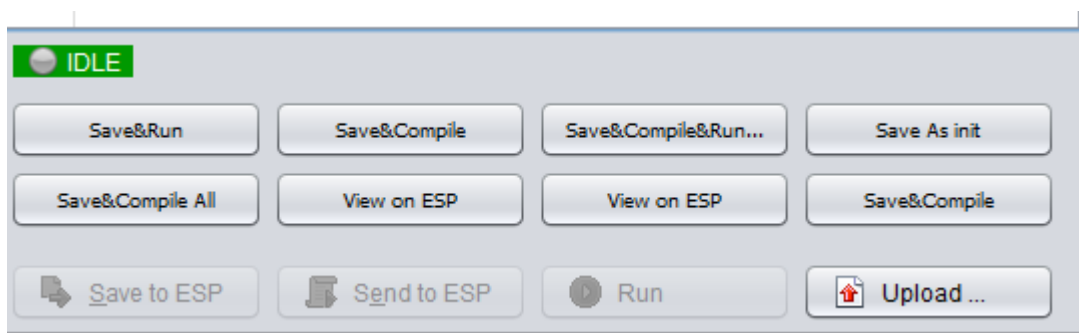




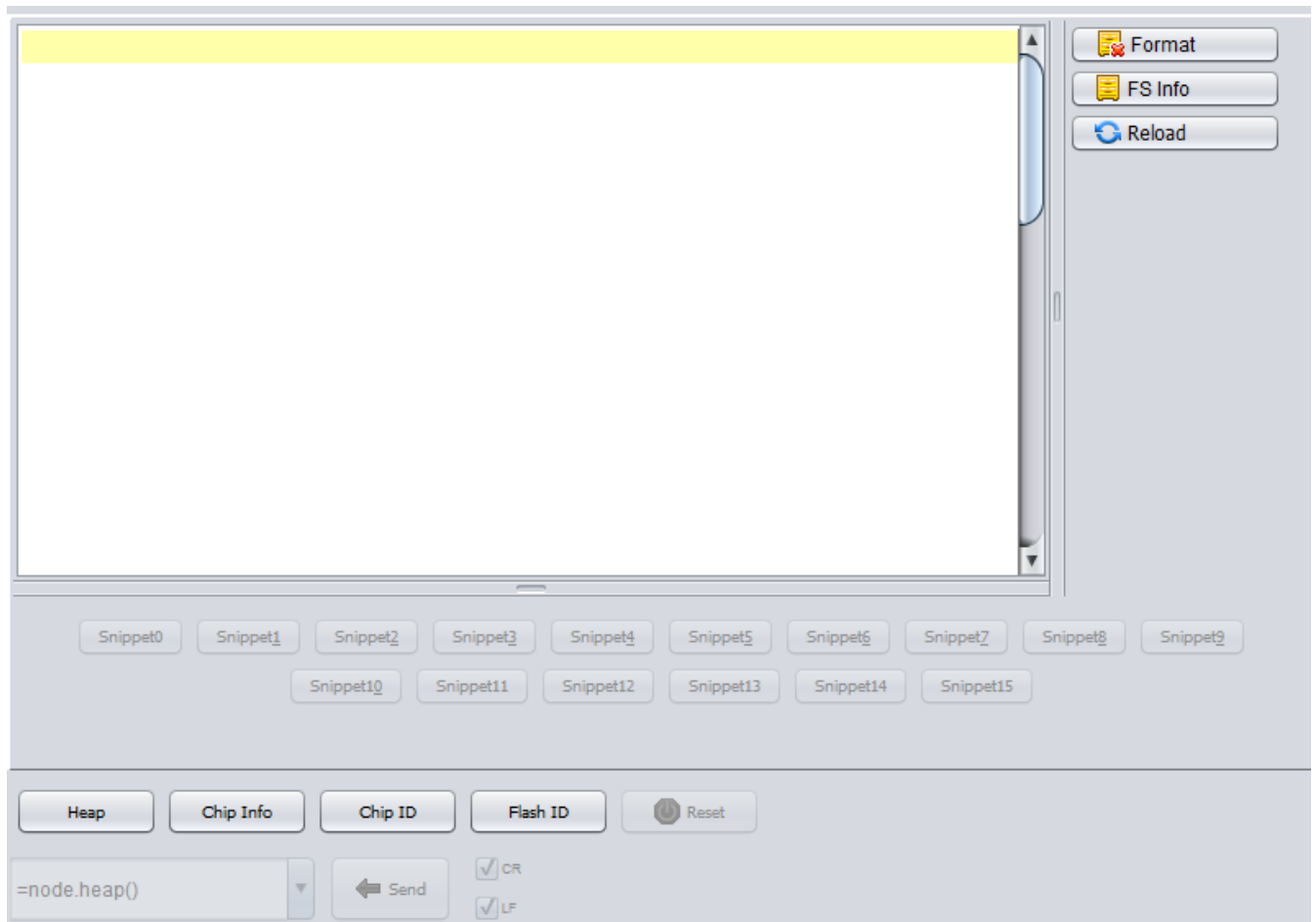
This next screenshot shows your Code Window, that's where you write your scripts (your scripts are highlighted with your code syntax).



Below the Code Window, you have 12 buttons that offer you all the functions you could possibly need to interact with your ESP8266. Here's the ones you'll use most: "Save to ESP" and "Send to ESP".



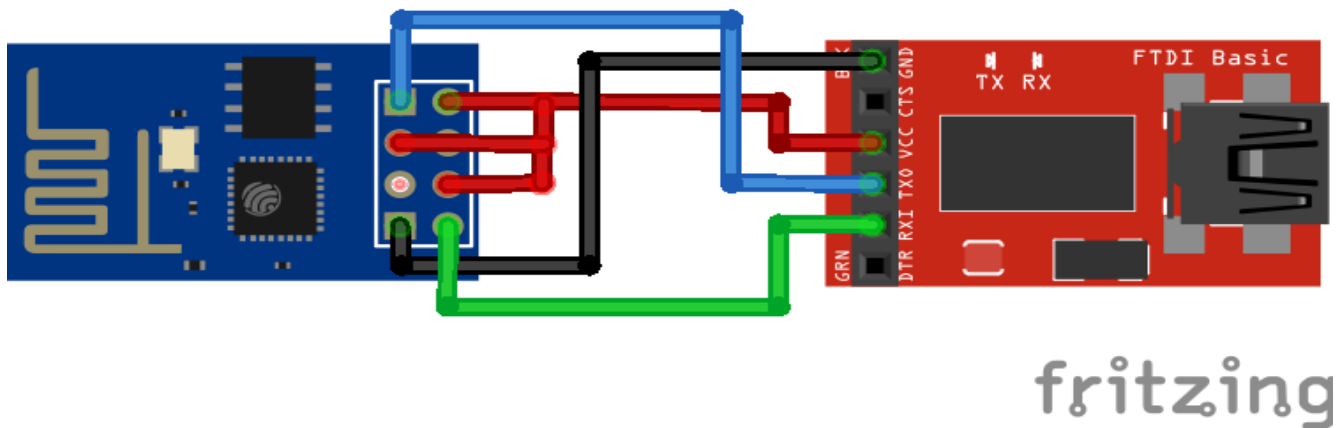
This screenshot shows the Output Window which tells you exactly what's going on in your ESP8266. You can see errors and use prints in your code to debug your projects.



# Schematics

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To upload code to your ESP8266, you should connect your ESP8266 to your FTDI Programmer like the figure below:



# Writing Your Lua Script

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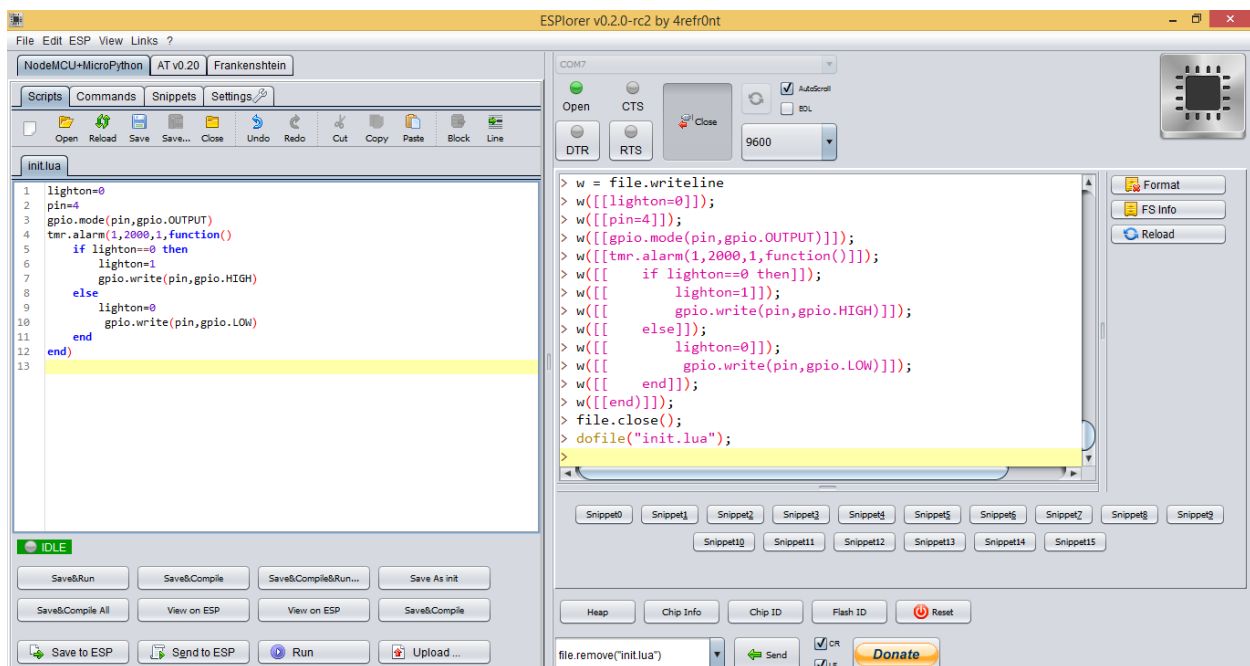
Below is your script to blink an LED. You can download the Lua Script in the following link: <http://bit.ly/1HqaAms>

```
init.lua
1 lighton=0
2 pin=4
3 gpio.mode(pin,gpio.OUTPUT)
4 tmr.alarm(1,2000,1,function()
5     if lighton==0 then
6         lighton=1
7         gpio.write(pin,gpio.HIGH)
8     else
9         lighton=0
10        gpio.write(pin,gpio.LOW)
11    end
12 end)
```

Right now you don't need to worry how this code works, but how you can upload it to your ESP8266.

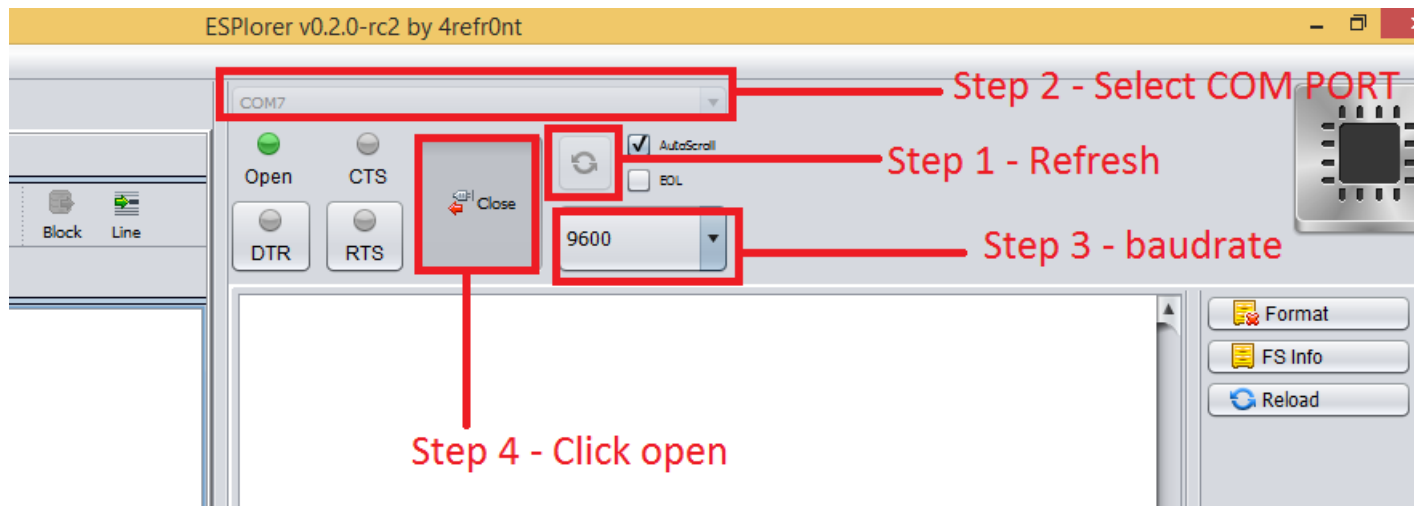
## Uploading Code

Having your ESP8266+FTDI Programmer connected to your computer, go to the ESPlorer IDE:



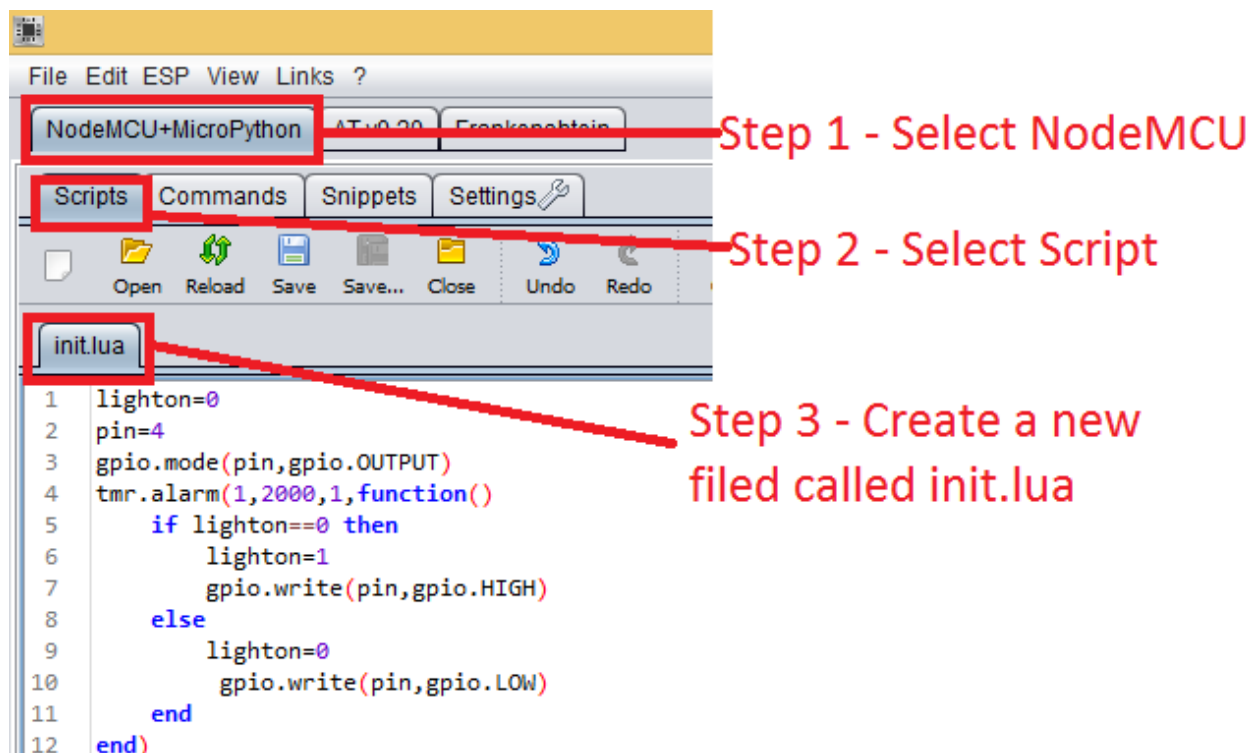
Look at the top right corner of your ESPlorer IDE and follow these instructions:

1. Press the Refresh button
2. Select the COM port for your FTDI programmer
3. Select your baudrate
4. Click Open

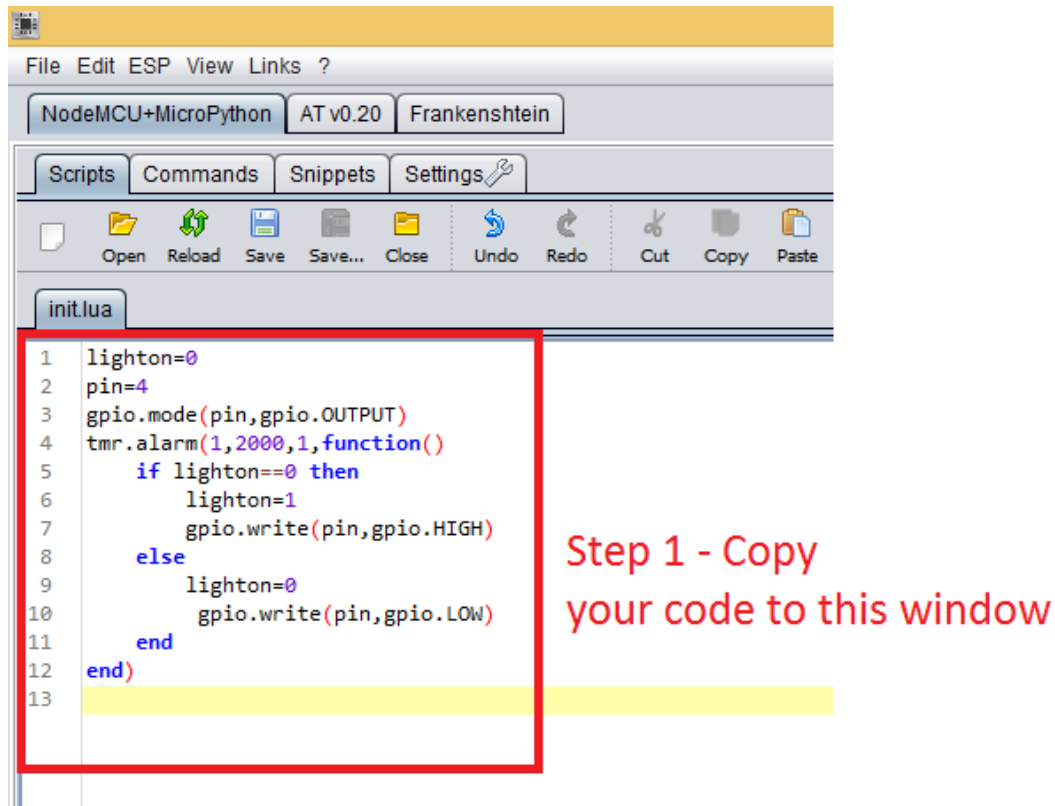


Then in the top left corner of your ESPlorer IDE, follow these instructions:

1. Select NodeMCU
2. Select Scripts
3. Create a new file called "init.lua"



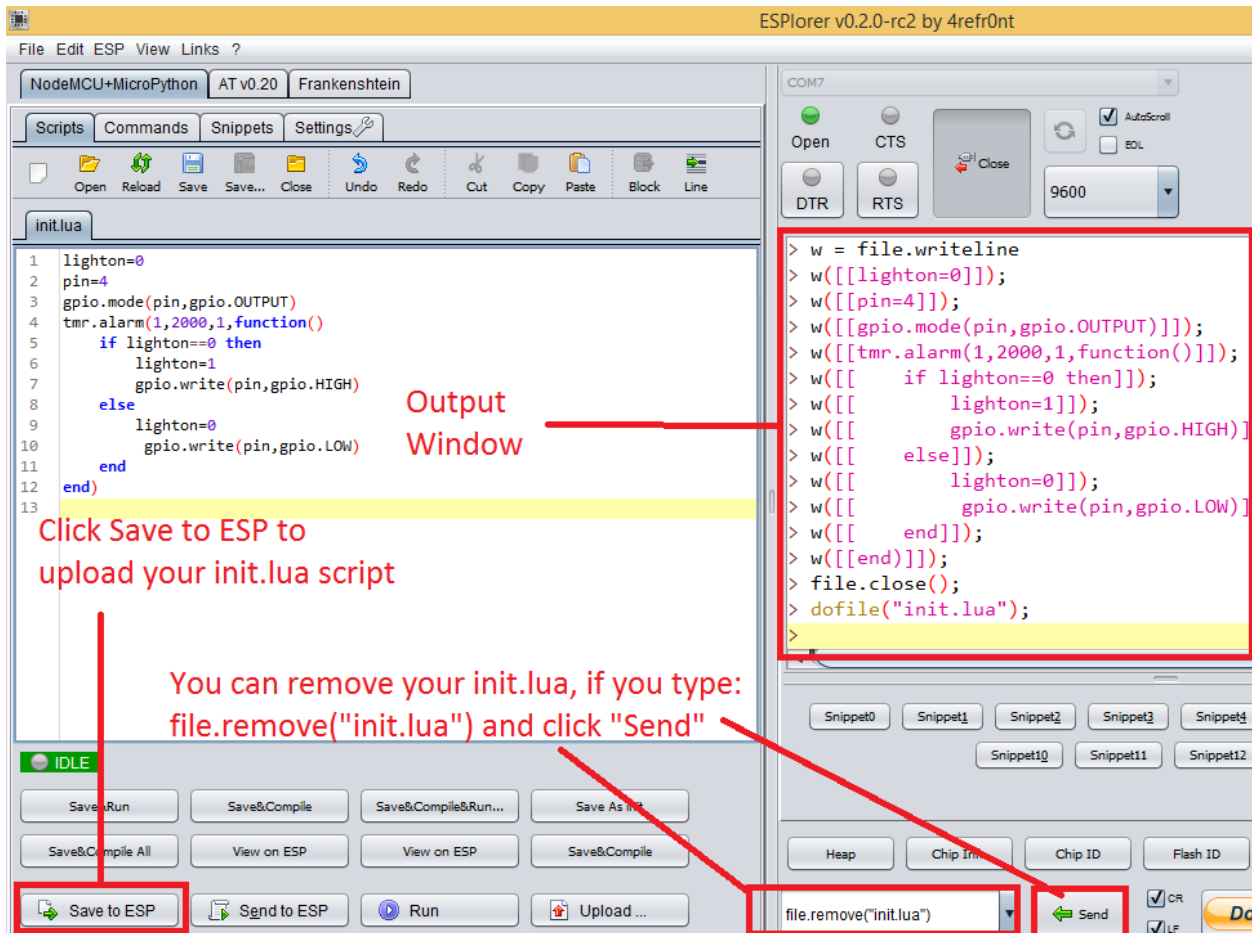
Copy your Lua script (which you created in the previous section) to the code window (as you can see in the Figure below):



The next step is to save your code to your ESP8266!

At the left bottom corner click the button “Save to ESP”.

In your output window, it should start showing exactly which commands are being sent to your ESP8266 and it should look similar to the Figure below.

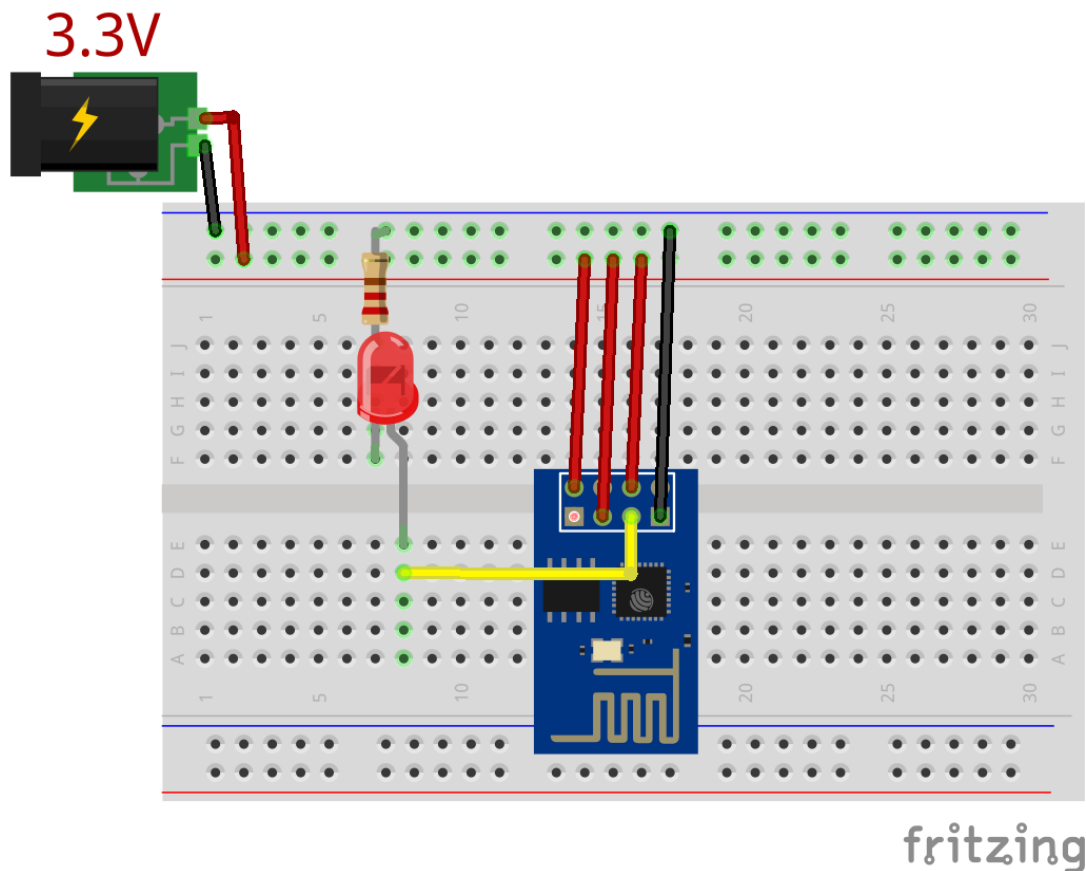


**Note:** If you want to delete your “init.lua” file, you can do that easily. Simply type `file.remove(“init.lua”)`  and press the button “Send” (see Figure above). Or you can type the command `file.format()` to remove all the files saved in your ESP8266. You can type any commands and send them to your ESP8266 through that window.

# Here's Your Final Circuit

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After uploading your code to your ESP8266, unplug your ESP8266 from your computer and follow the next schematics.



Restart your ESP8266!

Congratulations, you've made it! Your LED should be blinking every 2 seconds!



# Final Thoughts

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**Thank you for reading.**

**Now you know how to use the ESPlorer IDE with your ESP8266!**

If you got value from this software you can support to the ESPlorer IDE creator (4refront) in the ESPlorer page: <http://esp8266.ru/esplorer/>. There's a PayPal button on that page, that's how you can ensure that he keeps adding more features to ESPlorer.

If you have questions or you want to report bugs make sure you visit one of the links below:

- [esp8266.com](http://esp8266.com) on English
- [esp8266.ru](http://esp8266.ru) на русском

Good luck with all your projects,

-Rui

P.S. You can download a FREE eBook with All my Arduino Projects by visiting -> <http://randomnerdtutorials.com/download/>.

# Time Sensitive Offer

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I've wrote an eBook called [Home Automation Using ESP8266](http://randomnerdtutorials.com/esp8266-ebook) which is my step-by-step guide designed to help you get started with this amazing \$4 WiFi module called ESP8266.

If you're new to the world of ESP8266, this eBook is perfect for you! If you already used the ESP8266 before, I'm sure you'll also learn something new.

This eBook contains the information you need to get up to speed quickly and start your own venture with the ESP8266 applied to Home Automation!

This eBook is available with a discount price for a *limited time*. This offer ends in just a few days. Click the *image below* to download today your copy of Home Automation Using ESP8266 [eBook](http://randomnerdtutorials.com/esp8266-ebook)!

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