SCHOOL OF COMPUTING

ST0523 Fundamentals of Programming

Practical 0: Node.js & VS Code

What you will learn / do in this lab

- Download and install node.js & Visual Studio Code (VS Code)
- Configure Visual Studio Code to work with node.js
- Write the first computer program using JavaScript
- Execute the program to display the output on the integrated console of VS Code

1) Download node.js & Visual Studio Code

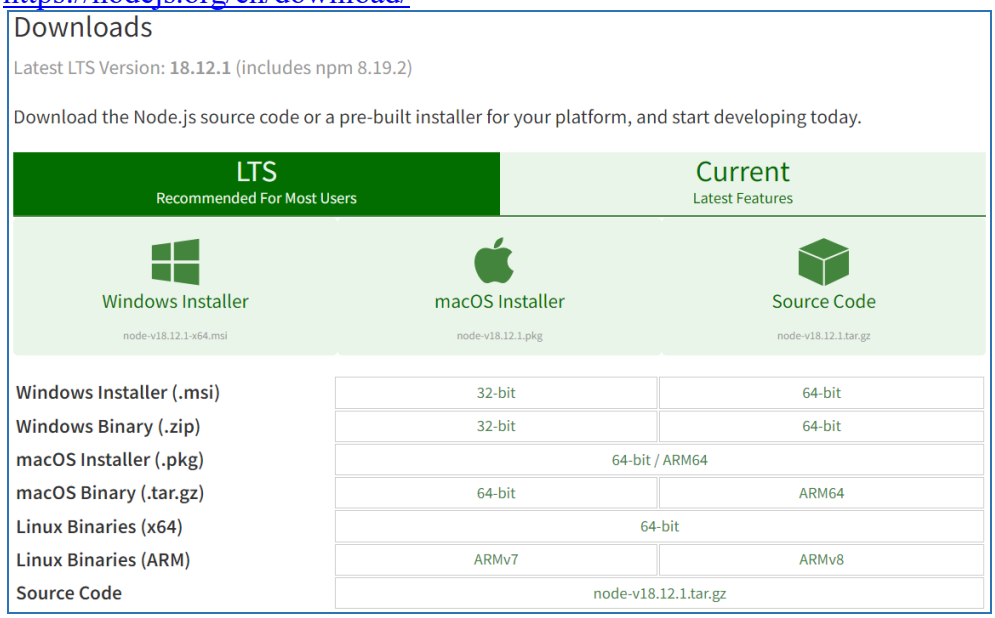
a) Search and view any node.js installation video in Youtube to see how installation can be easiy done.

Sample Youtube videos:

(265) What is Node.js || Node.js Installation || Coders Arcade - YouTube

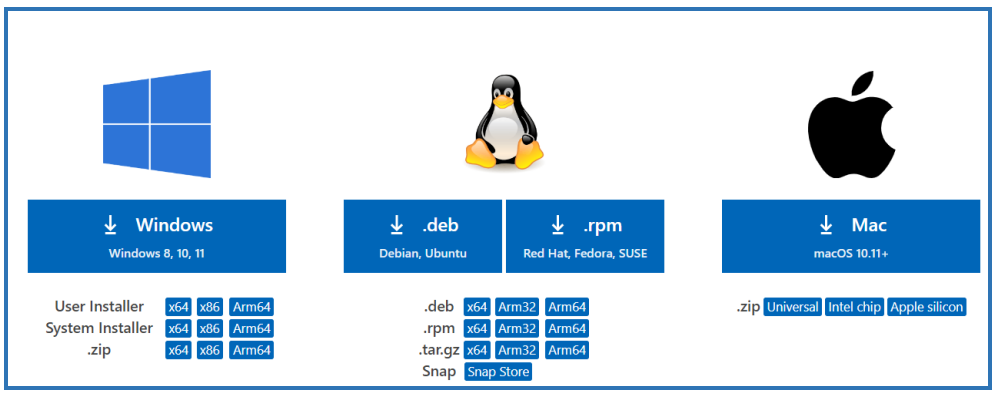
(265) #02 Installing NODE JS | Fundamentals of NODE JS | A Complete NODE JS Course - YouTube

b) Access this URL to download node.js (choose the version that is compatible with your laptop):
https://nodejs.org/en/download/



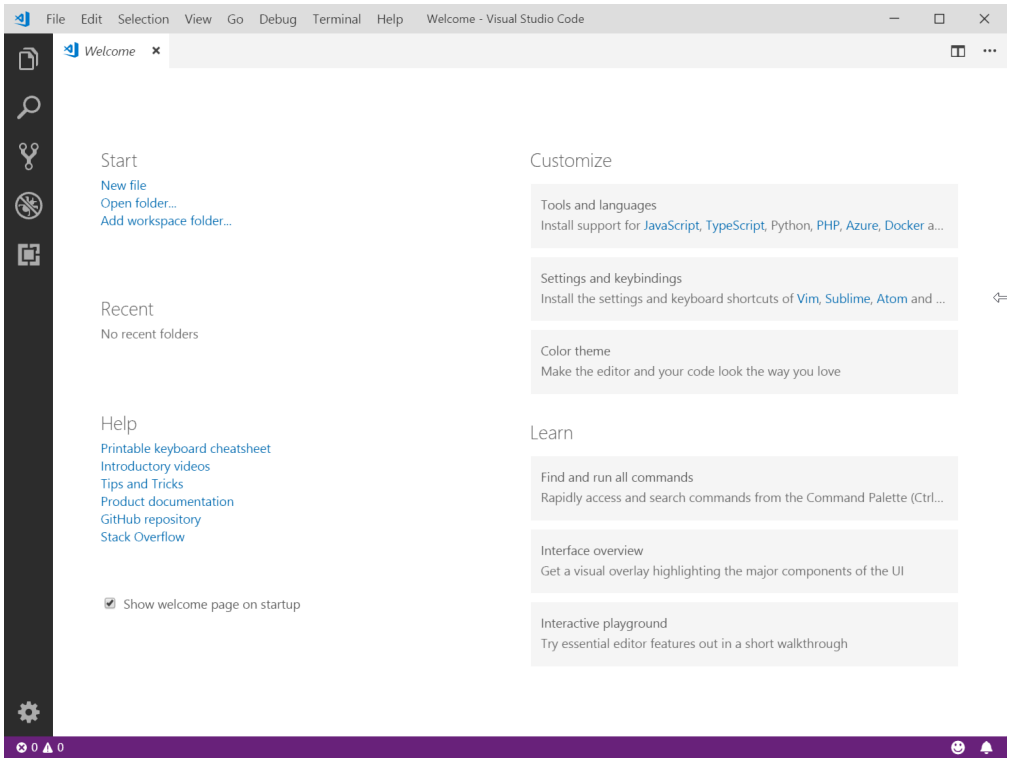
c) Install node.js. You can accept all default options during the installation process.

d) Access this URL to download Visual Studio Code (choose the one that is compatible with your notebook): https://code.visualstudio.com/download

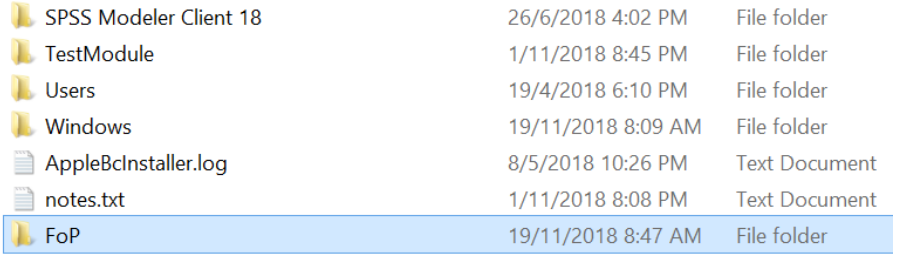


e) Install VS Code. You can accept all default options during the installation process. For windows user, note that 'System Installer' is for the users who has full administrative right to their PC, whereas 'User Installer' is for those without.

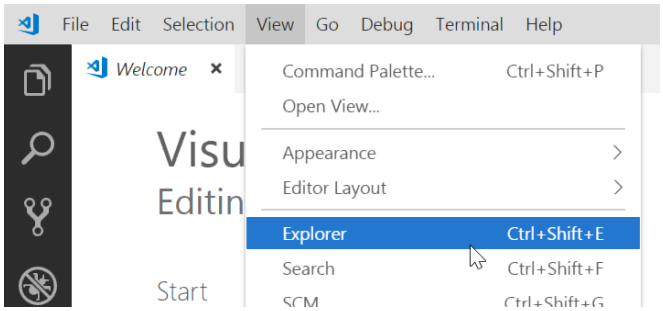
2) Launch Visual Studio Code:



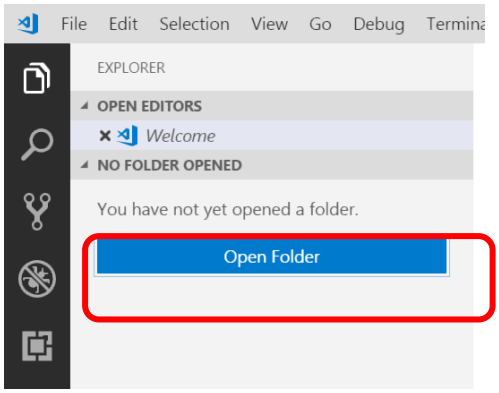
a) Create a new folder in your hard drive, called "FoP" e.g. C:\FoP\

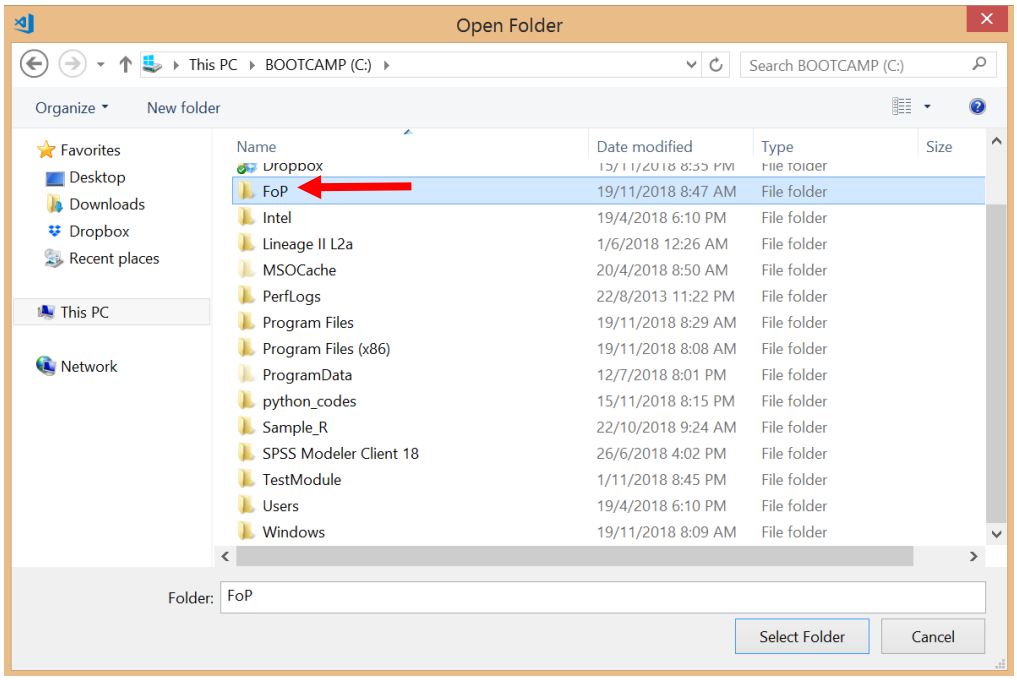


b) In VS Code, From the menu, choose View → Explorer to show the Explore side bar:

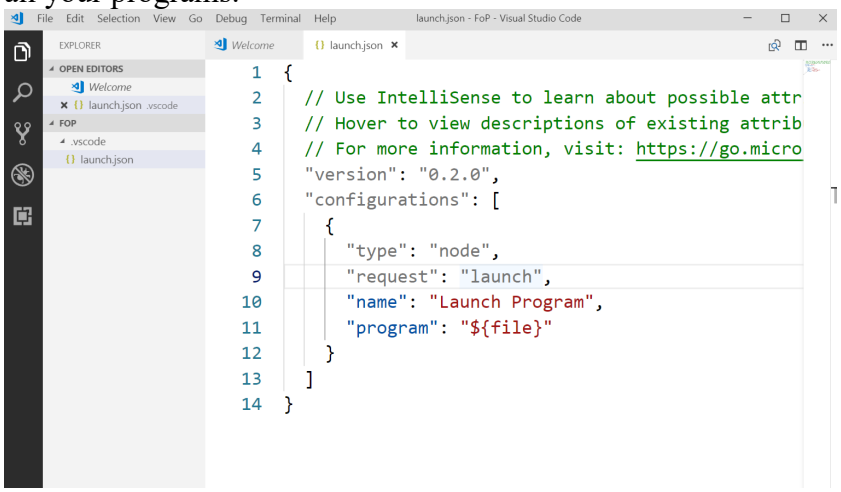


c) Click "Open Folder " button on the left pane of the screen. Choose FoP folder that you have just created in the previous step.





d) From the menu, choose Debug → Open Configuration, then select "node.js". Visual Studio Code will then open launch.json, which is the configuration file for all your programs.



e) Add in the following configuration command:

```
"console": "integratedTerminal"
```

Your launch.json should look like this:

```
{
  // Use IntelliSense to learn about pos
  // Hover to view descriptions of exist
  // For more information, visit: https
  "version": "0.2.0",
  "configurations": [
    {
      "type": "node",
      "request": "launch",
      "name": "Launch Program",
      "program": "${file}",
      "console": "integratedTerminal"

    }
  ]
}
```

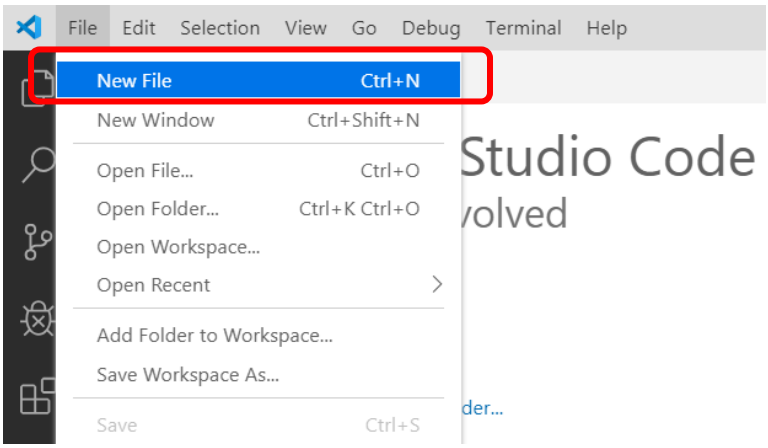
Remember to put in a 'comma' here

This is the line you type in

Save the file (File → Save or CTRL + S). This will enable your VS Code to use its integrated terminal to run the programs.

3) Create a simple program and execute the code to display an output into the terminal.

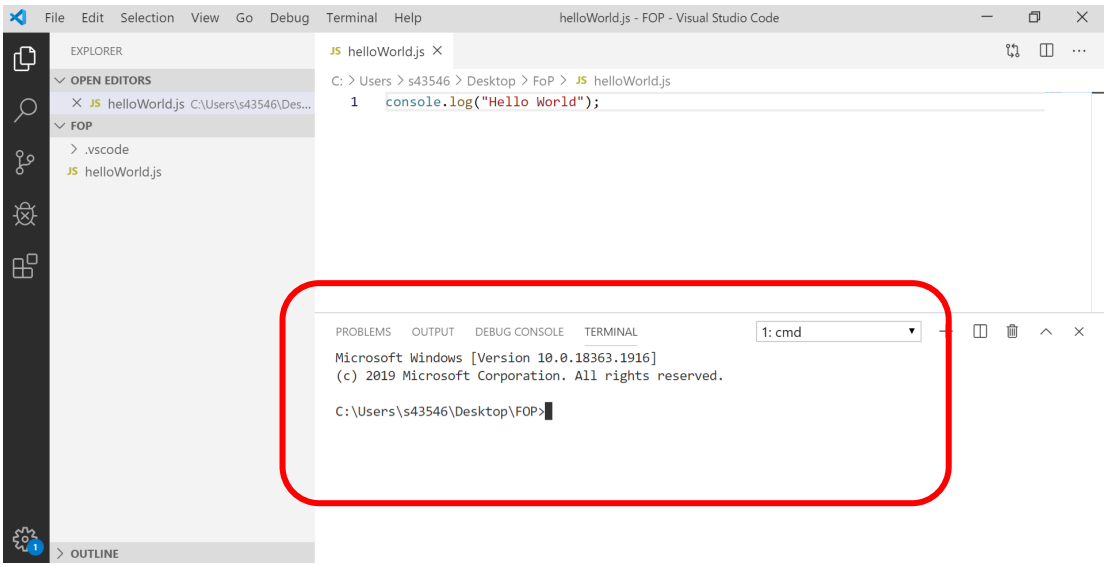
a) From main menu, select File → New File.



b) Type the following console.log statement and save the file as “helloWorld.js”.

Node hell

c) From main menu, choose View → Terminal. A terminal window will be displayed at the bottom area of the screen as shown here:



d) In order to execute the program, we will type the command “node ”, followed by the file name. So enter the following command into the terminal and press the “Enter” button.

e) You should be able to see the output “Hello World” printed out in the terminal.

f) Now that you are able to execute the program, open up next Practical and continue the exercises over there!

-- End --