Installation

Before we can get started we need to install some more software, mainly Node.js and Visual Studio Code. We suggest using Visual Studio code because of the out-of-the-box experience. You can also use other editors if you want to.

Installing Ubuntu for Windows

The instructions for installing Bash on Ubuntu can be found on the following link. We are installing Ubuntu (Linux) onto a windows machine.

After installation, open Ubuntu:
On Windows, the drives are mounted in a special location `/mnt/` . For example , C Drive is mounted on `/mnt/c` and D drive is mounted on `/mnt/d` . You can access the your windows files in C Drive by using the following commands:

```
# Change Directory to C Drive
cd /mnt/c

# List all the files.
ls -al
```

Optional: if you don't want to access your C-Drive every time by the path `/mnt/c` . You can run the following commands to create a symbolic link in your home directory.

```
cd ~
ln -s /mnt/c
cd ~/c
# Now in the path of /mnt/c
```

Installing Node.js

What is Node.js

Node.js is a very fast and lightweight JavaScript engine, which means it can run JavaScript code. It is mainly used to develop on servers, but can come in very handy when developing on your computer.

Go to Node and download the latest stable version(LTS), install it and you are set. We'll get back to that soon.

For Mac User

you can just click on the button to install the latest version

Non-Mac User

For Windows/Ubuntu users, before installing Node JS, you should upgrade your system with the latest version of the packages.

```
sudo apt-get update && sudo apt-get -y upgrade
```

You can install Node by running the following two lines of code in your ubuntu shell:

```
# Run this line to add new nodejs to be available to install
curl -sL https://deb.nodesource.com/setup_10.x | sudo -E bash -

# Run this line to installt nodejs.
sudo apt-get install -y nodejs
```

The above instructions can be found on this link.

Installing Jest

Because we are using Exercism as our source for daily problem solving questions, you have to install `jest` to run the test cases provided by Exercism:

```
sudo npm install jest
```

Installing Exercism

As mentioned above, please install exercism cli. We are going to do JavaScript problems every week.

We recommend using the following the instructions on the official website

For Mac OS X

Follow installation [here](), follow Mac

For Linux on Windows

Follow installation [here](), follow Linux installation instructions (you will need Bash on Ubuntu on Windows installed to do this)

Sign up to Exercism [here]() and then configure your token and follow instructions [here]()

You can run the following command every morning on a weekday to fetch the next JavaScript problem. Use append the 'sudo' keyword if there are permission errors.

```
exercism download --exercise=hello-world --track=javascript
```

After you have solved the problem and passed all the test cases, run the following `submit` command to submit your code.

```
exercism submit /path/to/file [/path/to/file2 ...]
```

Let's finish and submit the solution for the first toy-problem of JavaScript!

Special for Windows

Try to configure the Exercism to fetch the JavaScript problem to your C Drive. Please note that Exercism submits any symbolic link which means that if you configure the Exercism directory to be /mnt/c/exercism. You have to be in the exact same path in order to submit the Exercism problem

```
cd ~/c/exercism/javascript/hello-world
# The symbolic link created in terminal section.
exercism submit hello-world.js # This line will fail

cd /mnt/c/exercism/javascript/hello-world
# The real physical path
exercism submit hello-world.js # This line works
```

Visual Studio Code

In case you haven't done so already, please go to [Visual Studio Code]() and download the editor. Visual Studio Code is a cool open source text editor that makes writing code a lot more fun. You can easily customize Code to make it unique to your taste. To help us get the most of Visual Studio Code and this bootcamp, let's pimp out the software a bit using extensions.

Check out these short videos to gain some insight for what you can do with Visual Studio Code:

Introduction to Visual Studio code: Watch Here.

Opening files with Visual Studio Code

In your console navigate to your project folder, let's use an example folder called demo.

```
cd ~/code/demo
code .
```

Command Line

You can also open the Integrated Terminal in Visual Studio code
by `View -> Integrated Terminal`

If you see a shell starting with PS, that means you are running Windows PowerShell instead of bash. You have run the command `bash` to go back to bash as a result.

```
PS C:\Users\some\path> bash
```

Third Party Extension

There are two third party extension we found good.

1. ESLint (You have to run `sudo npm install -g eslint` in the command line before installing this extension)
2. Git History extension

Git

Git is the source versioning control software. We are going to use it to track our files.

For Mac User, goes to the Git offical site to download the latest version and install it.

For Ubuntu/Windows users,

```
sudo apt-get install git
```