

# Set things up...

Always want to know exactly where we are? What do we do? So, in my case

- Product is Linux x64 and the system runs on Ubuntu 20.04
- Precisely, I am looking for java 8
- I need 3 things to perfectly set up the development environment

- Download java development environment-JDK
- Download Eclipse IDE, **choose the appropriate IDE name "Eclipse for java developers"**
- A text editor which might be helpful to write, solve and execute small instance of problems.

## - Download and install java from Oracle websites's download page

- Somehow I learned to use the compression tool "tar". But if I face issue then I would use an interactive GUI to understand file compression and extraction in an interactive way.
- Try to know more about the hardware information before proceeding to install software programs.

## Getting started with java 1.8

### 1 Create Java Virtual Machine folder

```
sudo mkdir /usr/lib/jvm
```

```
( mkdir->make directory )( /usr/lib/jvm->working directory )
```

### 2 Add directory to the stack

```
pushd /usr/lib/jvm
```

```
Popd to remove specified directories from the stack
```

```
popd
```

"You can also use **cd( change directory )** command, that is totally okay"

### 3 Extract the downloaded **jdk-xuxxx-linux-x64.tar.gz** in the Downloads folder

```
tar -xvzf ~/Downloads/jdk-8u271-linux-x64.tar.gz
```

Get help from **tar --help**, manual page using command **man tar**

### 4 Open the environment file using editors any of your favourite configuration editors

**nano,vi,etc.,**

```
sudo vim /etc/environment
```

Then, set-up a variable environment. It might look this

```
👉 PATH="/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/usr/lib/jvm/jdk1.8.0_271/bin"
JAVA_HOME="/usr/lib/jvm/jdk1.8.0_271"
```

Good, keep going! Basic vi command

i -> insert

visual mode-> For cut,copy and paste.

wq! -> to save and exit

w -> to save and continue editing

q! -> quit

escape -> switch from insertion mode to other operations.

Example: Press escape key

Then shift+semicolon(:) and type wq!

### 5 Set java location

```
sudo update-alternatives --install "/usr/bin/java" "java" "/usr/lib/jvm/jdk1.8.0_271/bin/java" 0
sudo update-alternatives --install "/usr/bin/javac" "javac" "/usr/lib/jvm/jdk1.8.0_271/bin/javac" 0
sudo update-alternatives --set java /usr/lib/jvm/jdk1.8.0_271/bin/java
sudo update-alternatives --set javac /usr/lib/jvm/jdk1.8.0_271/bin/javac
```

### 6 Verify the configuration

```
update-alternatives --list java
update-alternatives --list javac
```

### 7 Open the bashrc with vi-editor

```
sudo vi ~/.bashrc
```

And add the following at the bottom of the file

```
☞ JAVA_HOME="/usr/lib/jvm/jdk1.8.0_271"
MAVEN_HOME="/usr/share/maven"
PATH=$PATH:$HOME/bin:$JAVA_HOME/bin:$MAVEN_HOME/bin
export JAVA_HOME
export MAVEN_HOME
export PATH
```

**"Please, make sure you save the content."**

"I think, maven home can be excluded in case it is not needed at this moment. Well, programmer decision"

### 8 Verify the java version and java\_home path

```
☞ java -version && echo $JAVA_HOME
```