

# Preparing a macOS machine for the Labs

This document provides the steps for installing the software required to begin the exercises on a Mac computer. The sequence is as follows:

1. Install curl
2. Install the IBM Cloud Developer Tools
3. Install Java 1.8
4. Create JAVA\_HOME environment variable
5. Install Xcode
6. Install Gradle
7. Install node.js
8. Install the MYSQL client

## Step 1: Install curl

1. In your browser, go to <http://macappstore.org/curl/> . Follow the installation instructions on the web site.
2. Verify curl is installed by typing the following into a terminal window:  
`curl http://www.google.com`
3. Verify that the response is the HTML for the Google page.  
**NOTE:** If the response is **The document has moved**, then curl was successfully installed, but the url is not correct. According to your geography, you need to change the extension.
4. If you do not have curl installed, you can get it from the Mac App Store (<http://macappstore.org/curl>), or you can find various version binaries and source code at <https://curl.haxx.se/download.html>.

## Step 2: Install the IBM Cloud Developer Tools

1. Follow the instructions at:  
<https://console.bluemix.net/docs/cli/index.html#overview>  
to install the IBM Cloud Developer Tools.

## Step 3: Install Java JDK 1.8

1. In a browser, open <https://www.oracle.com>
2. In the list of menu options, click **Downloads and Trials**.
3. Click **Java for Developers**.

4. In the list, look for the newest version that starts with **Java SE 8**. At the time of writing, the newest version was Java SE 8u171. In that section, click the **DOWNLOAD** button under **JDK** (Note: your minor version may be different)
5. In the section that lists installation files for the various operating systems, click the **Accept License Agreement** radio button at the top.
6. Select the **Mac OS X x64** file (jdk-8u171-macosx-x64.dmg or newer).
7. Double-click the downloaded file to open it.
8. Double-click the package to unpack it. Follow the default installation instructions.
9. Verify that the installation was successful by typing `java` in a terminal window.  
You should see a list of usage options.

## Step 4: Create JAVA\_HOME environment variable

1. Open `bash_profile` in an editor:  
`$ vi ~/.bash_profile`
2. Add the following line to the bottom of the file:  
`export JAVA_HOME=$(/usr/libexec/java_home)`
3. **Save** and **close** the file.
4. In the terminal window, type  
`$ source ~/.bash_profile`
5. Verify that it is set correctly by typing  
`$ echo $JAVA_HOME`  
You should see the full path to the jdk.
6. Verify that your installation of Java is recognized. Type:  
`java -version`  
You should see information about the java version, the runtime environment, and Java HotSpot.

## Step 5: Install Xcode

1. In a browser search engine, type `xcode` and select [Xcode on the Mac App Store - iTunes Apple](#).
2. Click the link **View in Mac App Store**.
3. Click the **Get** button.
4. It changes to an **Install App** button. Click it again.  
NOTE: The download is approximately 4.5GB. It may take a long time.
5. Verify the installation. Open **Xcode**, select **File > New > Playground**.

Create the playground and verify that you see the string **Hello, playground.**

## Step 6: Install Gradle

1. Type

```
brew install gradle
```

## Step 7: Install node.js

1. Type

```
brew install node
```

2. Verify the installation:

```
node -v
```

The response is the version number (for example, v4.2.6).

3. Type

```
npm -v
```

Again, the response is the version number.

## Step 8: Install the MYSQL client

The easiest way to do this is to just install the full MYSQL product, then use the client from it. You should install MYSQL version 5.7.

1. Type

```
brew install mysql@5.7
```