RAJAT VERMA | SOFTWARE TESTING

SOFTWARES SETUP | OS | MAC

JAVA

What is Java JDK?

1. Java Development Kit (JDK)
   a. It is a cross-platform software development environment that
      i. offers a collection of tools and libraries necessary for
         1. developing Java-based software applications.
2. **JDK=JRE+Development Tools**

How to download Java JDK?

1. Go to URL:
   a. https://www.oracle.com/in/java/technologies/downloads/archive/
   b. Example
      i. Jdk-15.0.2_osx-x64_bin.dmg
2. MAC -
   a. .dmg file

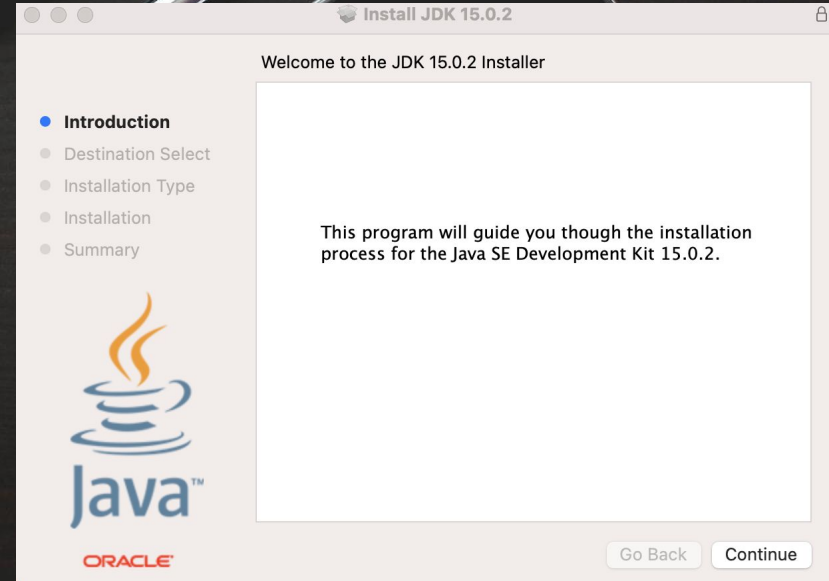| macOS Installer | 175.93 MB | ⬇ jdk-15.0.2_osx-x64_bin.dmg |

How to install Java JDK?

1. Once the dmg file is downloaded
2. Open the file and
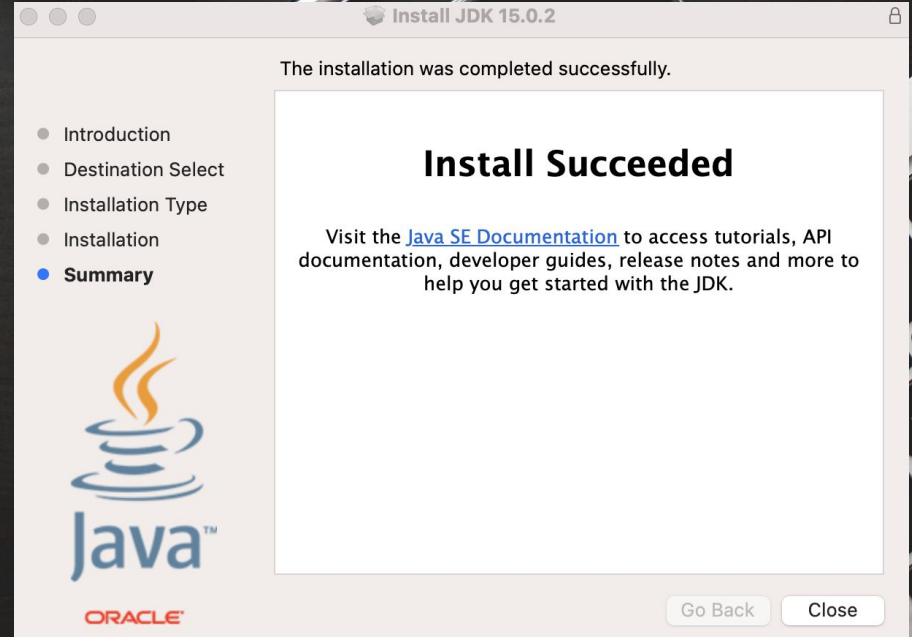   a. Setup wizard will come
   b. Install with default settings
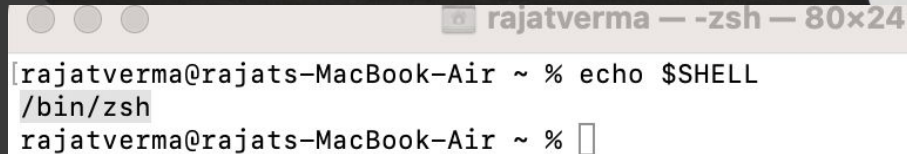
How to verify that Java JDK is installed or not?

1. Open Terminal
2. To verify that Java JDK setup
3. Command
   a. **java -version**

Install JDK 15.0.2

The installation was completed successfully.

- Introduction
- Destination Select
- Installation Type
- Installation
- **Summary**

Install Succeeded

Visit the Java SE Documentation to access tutorials, API documentation, developer guides, release notes and more to help you get started with the JDK.

Go Back   Close

Setup Environment Variable

1. Open Terminal
2. Commands
   a. To find which shell your mac OS is using
      i. **echo $SHELL**

```
[rajatverma@rajats-MacBook-Air ~ % echo $SHELL
/bin/zsh
rajatverma@rajats-MacBook-Air ~ %
```

🏠 rajatverma — -zsh — 80×24

Setup Environment Variable

1. Commands
   a. To list out all the versions of Java installed in your machine
      i. **/usr/libexec/java_home -V**

```
[rajatverma@rajats-MacBook-Air ~ % /usr/libexec/java_home -V
Matching Java Virtual Machines (5):
    17.0.4 (arm64) "Amazon.com Inc." - "Amazon Corretto 17" /Users/rajatverma/Li
brary/Java/JavaVirtualMachines/corretto-17.0.4.1/Contents/Home
    15.0.2 (x86_64) "Oracle Corporation" - "Java SE 15.0.2" /Library/Java/JavaVi
rtualMachines/jdk-15.0.2.jdk/Contents/Home
    11.0.13 (x86_64) "Oracle Corporation" - "Java SE 11.0.13" /Library/Java/Java
VirtualMachines/jdk-11.0.13.jdk/Contents/Home
    1.8.341.10 (x86_64) "Oracle Corporation" - "Java" /Library/Internet Plug-Ins
/JavaAppletPlugin.plugin/Contents/Home
    1.8.0_311 (x86_64) "Oracle Corporation" - "Java SE 8" /Library/Java/JavaVirt
ualMachines/jdk1.8.0_311.jdk/Contents/Home
/Users/rajatverma/Library/Java/JavaVirtualMachines/corretto-17.0.4.1/Contents/Ho
me
rajatverma@rajats-MacBook-Air ~ % ▯
```

rajatverma — -zsh — 80×24

https://github.com/rajatt95

Setup Environment Variable .... (3)

1. Commands
   a. To run a specified JDK command
      i. **/usr/libexec/java_home -v15.0.2**

rajatverma — -zsh — 96×25

```
rajatverma@rajats-MacBook-Air ~ % /usr/libexec/java_home -v15.0.2

/Library/Java/JavaVirtualMachines/jdk-15.0.2.jdk/Contents/Home
rajatverma@rajats-MacBook-Air ~ %
```

1. Commands
   a. To go to Home Path
      i. **cd ~/**
   b. To check .zshrc file exists or not
      i. **ls -a**
   c. If it is not created
      i. **touch .zshrc**

```
[rajatverma@rajats-MacBook-Air ~ % ls -a
.                               .gradle             .zsh_history
..                              .groovy             .zsh_sessions
.DS_Store                       .jenkins            .zshrc
.Trash                          .katalon            Applications
.android                        .lemminx            Desktop
.anydesk                        .lesshst            Documents
.appium                         .m2                 Downloads
.bash_profile                   .npm                Library
.cache                          .oracle_jre_usage   Movies
.config                         .p2                 Music
.cups                           .sonarlint          OneDrive
.docker                         .swiftpm            Pictures
.eclipse                        .vmware             Postman
.emulator_console_auth_token    .vscode             Public
.gem                            .zprofile           java_error_in_idea.hprof
.gitconfig                      .zprofile.pysave
rajatverma@rajats-MacBook-Air ~ % 
```

https://github.com/rajatt95

Setup Environment Variable ……. (5)

1. Commands
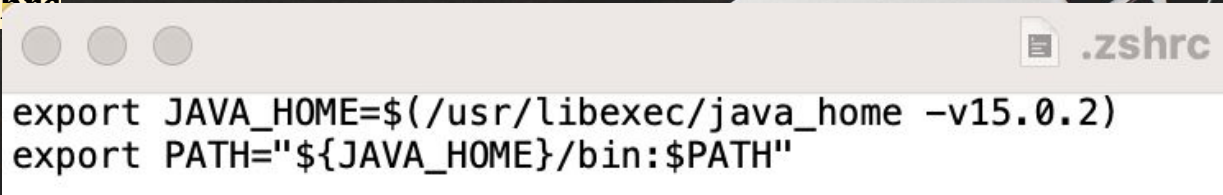
   a. To open **.zshrc** file

      i. **cd ~/**

      ii. **open -e** .zshrc

      iii. **export JAVA_HOME=$(/usr/libexec/java_home -v15.0.2)**

      export PATH="${JAVA_HOME}/bin:$PATH"

      iv. **source** .zshrc

```
📄 .zshrc

export JAVA_HOME=$(/usr/libexec/java_home -v15.0.2)
export PATH="${JAVA_HOME}/bin:$PATH"
```

1. Commands
   a. To open file- **Other way**
      i. **nano .zshrc**
         1. **export JAVA_HOME=$(/usr/libexec/java_home)**
            a. **Ctrl+O**
            b. **Press RETURN key**
            c. **Ctrl+X**
      ii. **export JAVA_HOME=$(/usr/libexec/java_home -v15.0.2)**
      iii. **source ~/.zshenv**

```
● ● ●          🖿 rajatverma — nano ~/.zshenv — 96×25

  UW PICO 5.09                        File: /Users/rajatverma/.zshenv

export JAVA_HOME=$(/usr/libexec/java_home -v15.0.2)
```

Setup Environment Variable

1. Commands
   a. To verify the setup
      i. **echo $JAVA_HOME**
      ii. **echo $PATH**

   b. Java version
      i. **java -version**

```
[rajatverma@rajats-MacBook-Air ~ % open -e .zshrc
[rajatverma@rajats-MacBook-Air ~ % source .zshrc
[rajatverma@rajats-MacBook-Air ~ % echo $JAVA_HOME
/Library/Java/JavaVirtualMachines/jdk-15.0.2.jdk/Contents/Home
[rajatverma@rajats-MacBook-Air ~ % echo $PATH
/Library/Java/JavaVirtualMachines/jdk-15.0.2.jdk/Contents/Home/bin:/Users/rajatverma/Library/Jav
a/JavaVirtualMachines/corretto-17.0.4.1/Contents/Home/bin:/Users/rajatverma/Library/Android/sdk/
tools:/Users/rajatverma/Library/Android/sdk/platform-tools:/bin:/Users/rajatverma/Library/Androi
d/sdk/tools:/Users/rajatverma/Library/Android/sdk/platform-tools:/Users/rajatverma/Library/Andro
id/sdk/tools:/Users/rajatverma/Library/Android/sdk/platform-tools:/bin:/Users/rajatverma/Library
/Java/JavaVirtualMachines/corretto-17.0.4.1/Contents/Home/bin:/Users/rajatverma/Library/Android/
sdk/tools:/Users/rajatverma/Library/Android/sdk/platform-tools:/usr/local/bin:/System/Cryptexes/
App/usr/bin:/usr/bin:/bin:/usr/sbin:/sbin:/Library/Apple/usr/binevalevalevaleval
rajatverma@rajats-MacBook-Air ~ % 
```

```
[rajatverma@rajats-MacBook-Air ~ % java -version
java version "15.0.2" 2021-01-19
Java(TM) SE Runtime Environment (build 15.0.2+7-27)
Java HotSpot(TM) 64-Bit Server VM (build 15.0.2+7-27, mixed mode, sharing)
rajatverma@rajats-MacBook-Air ~ % 
```