

SOFTWARE CONFIGURATION

Java & Eclipse (Window OS)

Akshay Kumar
TekArch

INDEX

Java

- Java (**JDK**) installation
- System configuration for **JAVA_HOME**
- System configuration for JRE (**/bin** folder) in **path** variable
- Verify Java using **java -version** command

Eclipse

- Download Eclipse
- Start Eclipse
- Run first java program in Eclipse

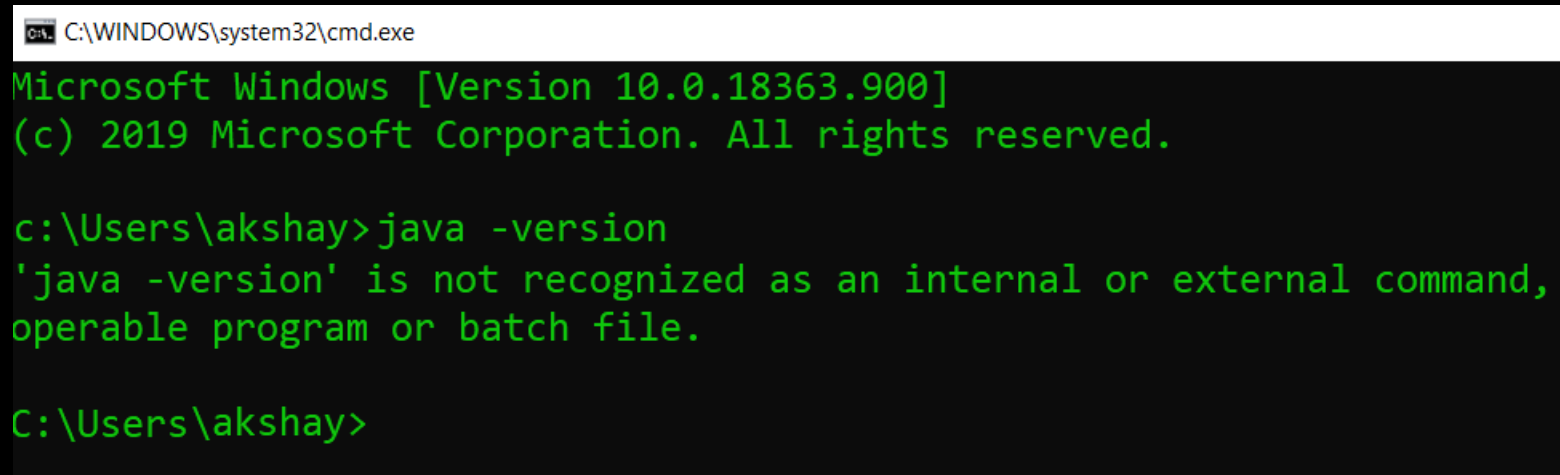
JDK Installation

Note:

- We need JDK 1.7 or above version for our training activities. If you have already installed any jdk version above 1.7, then you are good to go.
- Those who are installing jdk from scratch, they can go with jdk 1.8 (high recommendable) which is more stable version of java with all other automation tools which we are going to use in this training.

(1) Firstly check whether java is configured in your system or not :

Go to command prompt and type **java -version**



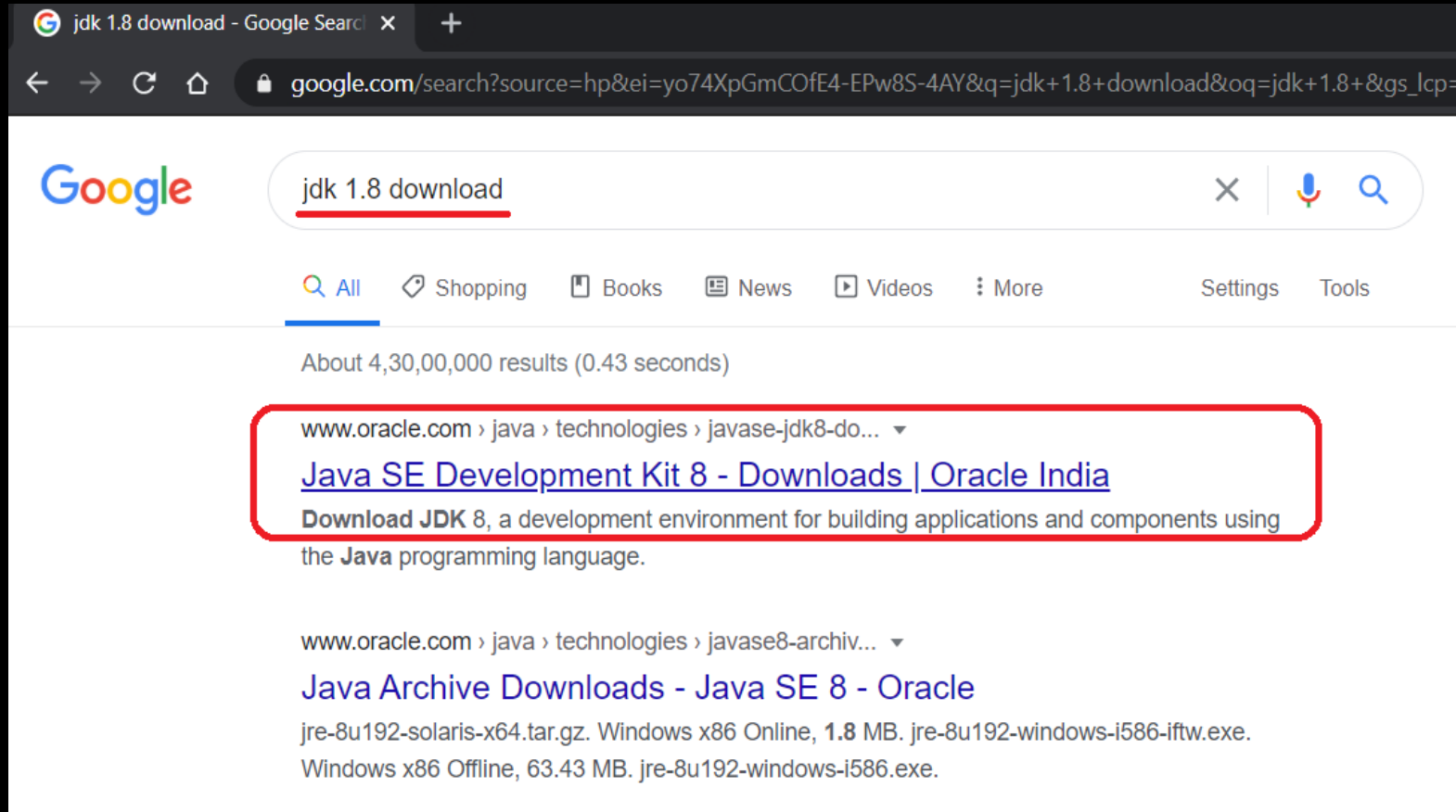
```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.18363.900]
(c) 2019 Microsoft Corporation. All rights reserved.

c:\Users\akshay>java -version
'java -version' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\akshay>
```

Note: If you get 'java -version' is not recognized command, then you need to download and configure jdk in your system.

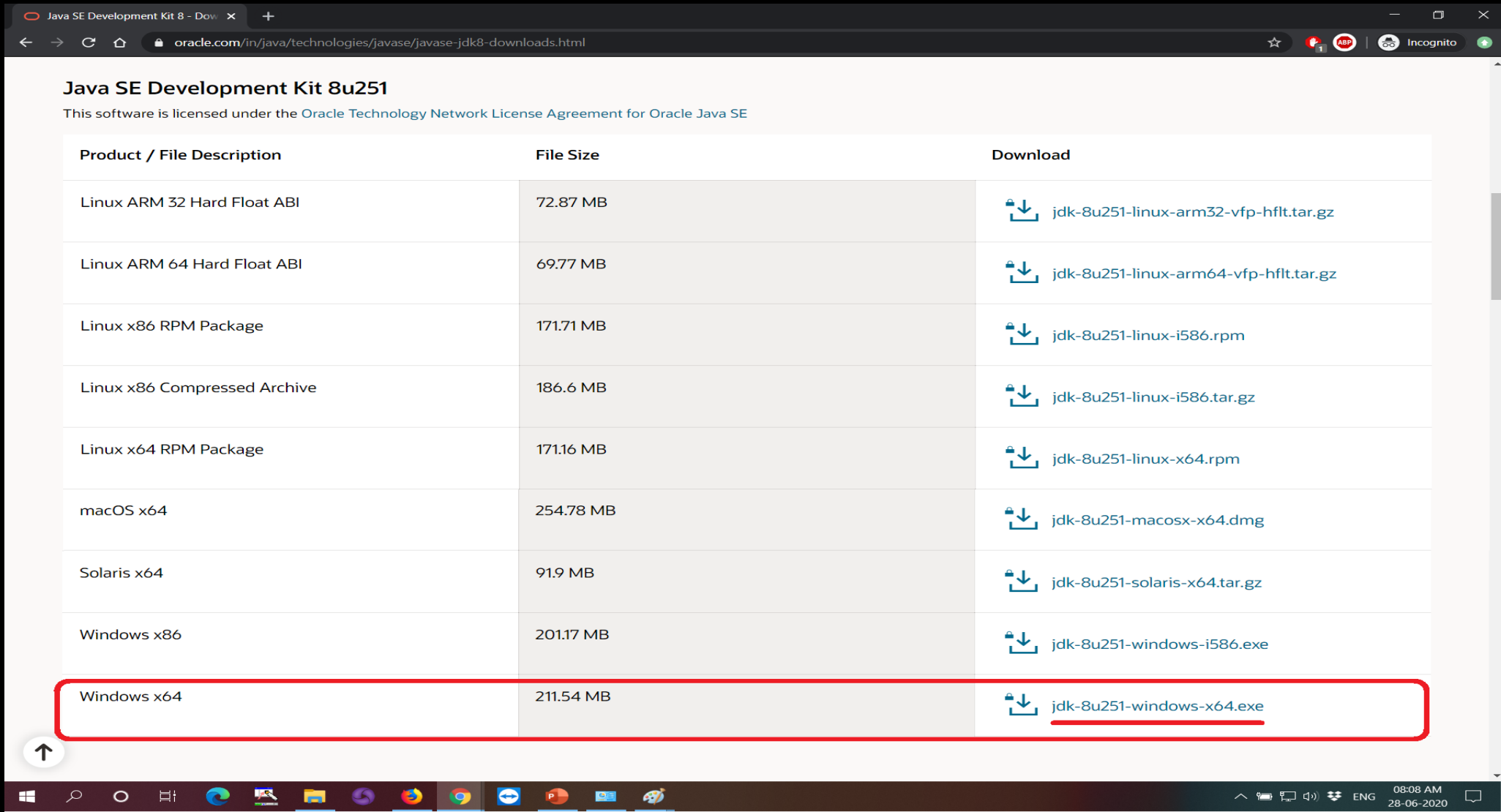
(2) Go to Google and search for **jdk 1.8 download**.



Click on first link to download jdk setup file.










(3) Based on your operating system download the jdk file from Java SE Development Kit 8u251.

Example: In my case, I am having Window 10 64 bit OS, so I have downloaded win x64 software for jdk.



Java SE Development Kit 8u251

This software is licensed under the [Oracle Technology Network License Agreement for Oracle Java SE](#)

Product / File Description	File Size	Download
Linux ARM 32 Hard Float ABI	72.87 MB	 jdk-8u251-linux-arm32-vfp-hflt.tar.gz
Linux ARM 64 Hard Float ABI	69.77 MB	 jdk-8u251-linux-arm64-vfp-hflt.tar.gz
Linux x86 RPM Package	171.71 MB	 jdk-8u251-linux-i586.rpm
Linux x86 Compressed Archive	186.6 MB	 jdk-8u251-linux-i586.tar.gz
Linux x64 RPM Package	171.16 MB	 jdk-8u251-linux-x64.rpm
macOS x64	254.78 MB	 jdk-8u251-macosx-x64.dmg
Solaris x64	91.9 MB	 jdk-8u251-solaris-x64.tar.gz
Windows x86	201.17 MB	 jdk-8u251-windows-i586.exe
Windows x64	211.54 MB	 jdk-8u251-windows-x64.exe


Once you click on the file to download, it will ask you to accept the Oracle agreement.

×

You must accept the [Oracle Technology Network License Agreement for Oracle Java SE](#) to download this software.

☒ I reviewed and accept the Oracle Technology Network License Agreement for Oracle Java SE

You will be redirected to the login screen in order to download the file.


Download jdk-8u251-windows-x64.exe 


Click on the check box and click on download button to download the file.

After clicking on download button it will redirect you to login into [oracle account](#) to download the file.

Note: If you have oracle account then get login into oracle account to download the file, and if you don't have existing oracle account then create an oracle account to download the file.

Oracle account sign in





Sign in

[Need help?](#)

Don't have an Oracle Account?

Create Account

© Oracle | [Terms of Use](#) | [Privacy Policy](#)

Use dummy details for your **Work Phone**, **Company Name** and **Address** field only.

Create Your Oracle Account

Already have an Oracle Account? [Sign In](#)

Email Address * Your email address is your username.

☒ We will email a confirmation to you

Password * Passwords must have upper and lower case letters, at least 1 number, not match or contain email, and be at least 8 characters long.

☒ Password meets requirements

Retype password * ☒

Country * ☒

Name * ☒ ☒

Job Title * ☒

Work Phone * ☒

Company Name * ☒

Address * ☒

City * ☒

State/Province * ☒

ZIP/Postal Code * ☒

You may opt-out of all marketing communications: [Unsubscribe](#).

By clicking on the "Create Account" button below, you understand and agree that the use of Oracle's web site is subject to the [Oracle.com Terms of Use](#). Additional details regarding Oracle's collection and use of your personal information, including information about access, retention, rectification, deletion, security, cross-border transfers and other topics, is available in the [Oracle Privacy Policy](#).

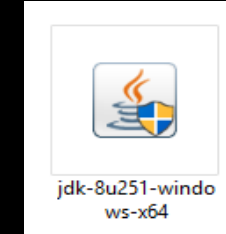
[Create Account](#)

[Account Help](#) | [Subscriptions](#) | [Unsubscribe](#) | [Terms of Use and Privacy](#) | [Cookie Preferences](#)

Once your oracle account get created, jdk file will automatically get downloaded.

(4) Install the JDK in your system:

Run (open) your jdk installer file (setup file) to install.

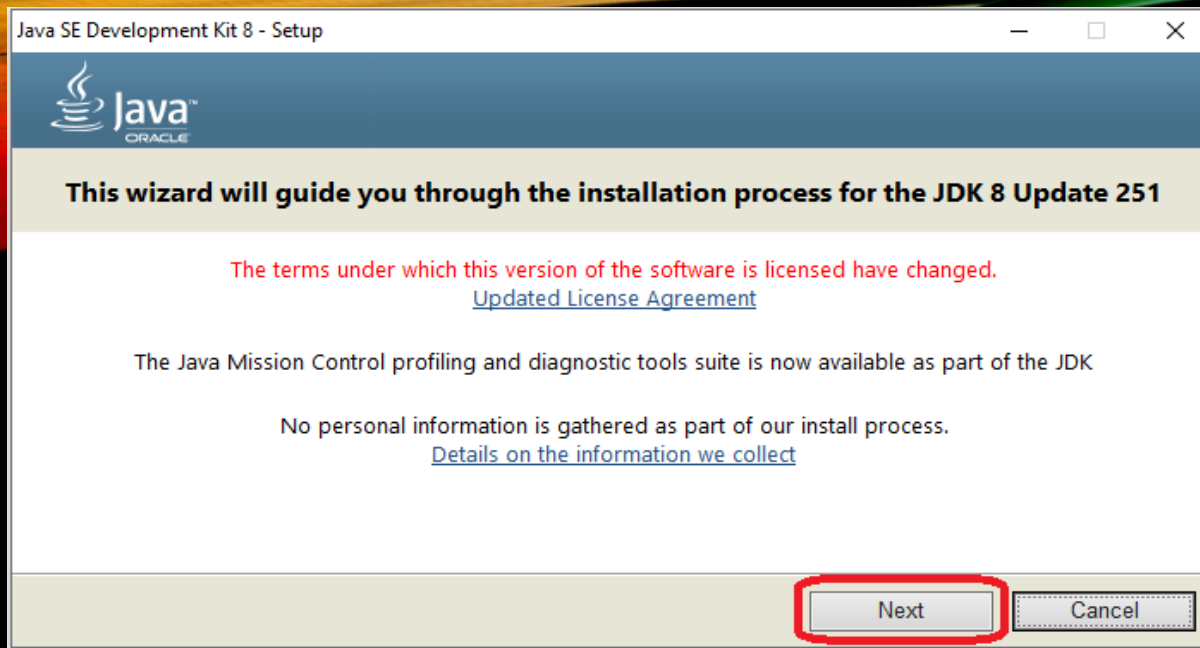


Once you run the setup file it will display the message on your screen that

Do you want to allow this app to make changes to your device?

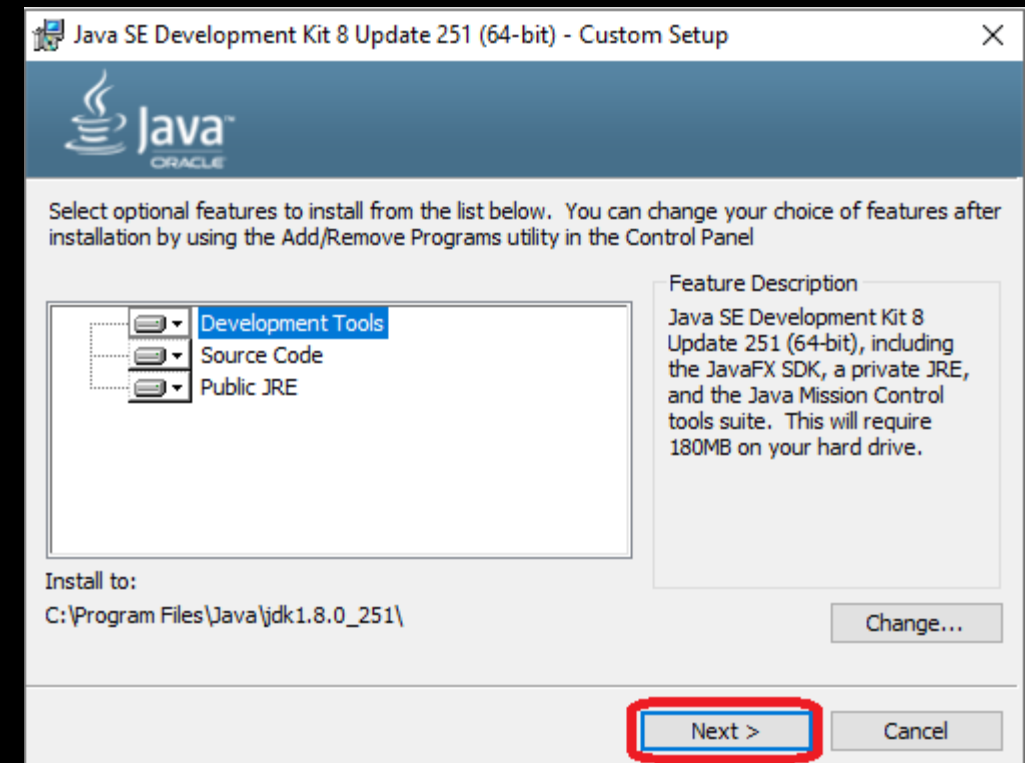
Click **Yes** to proceed with installation.

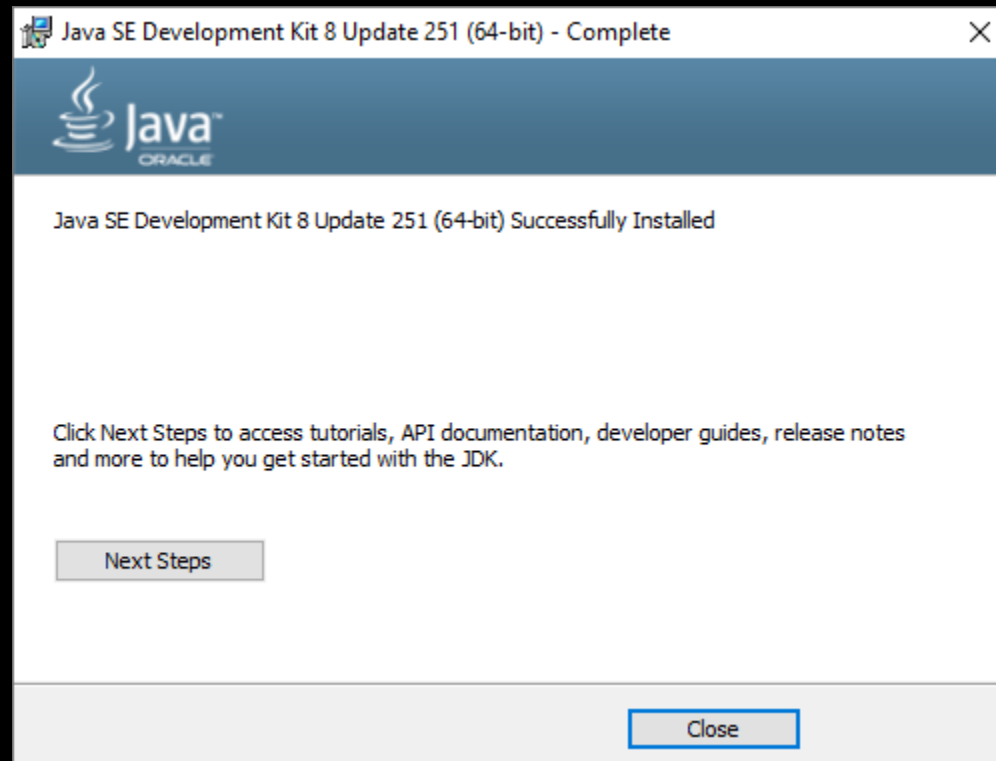
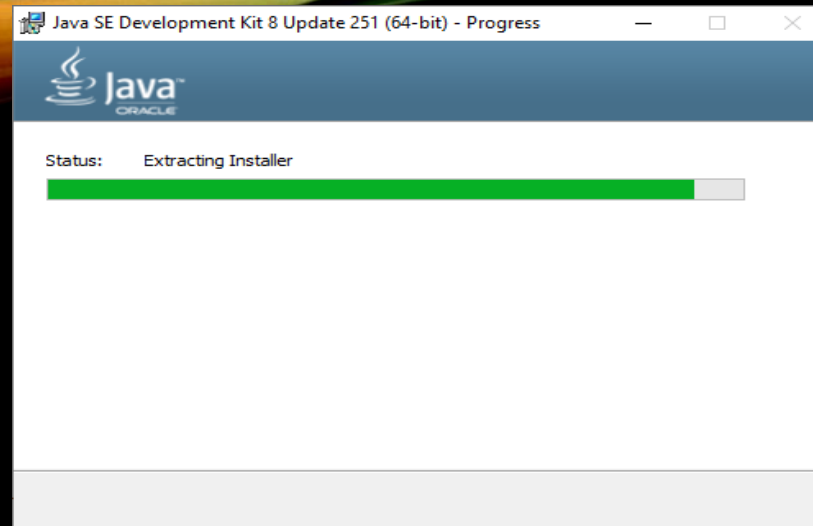




Click on **Next** to proceed.

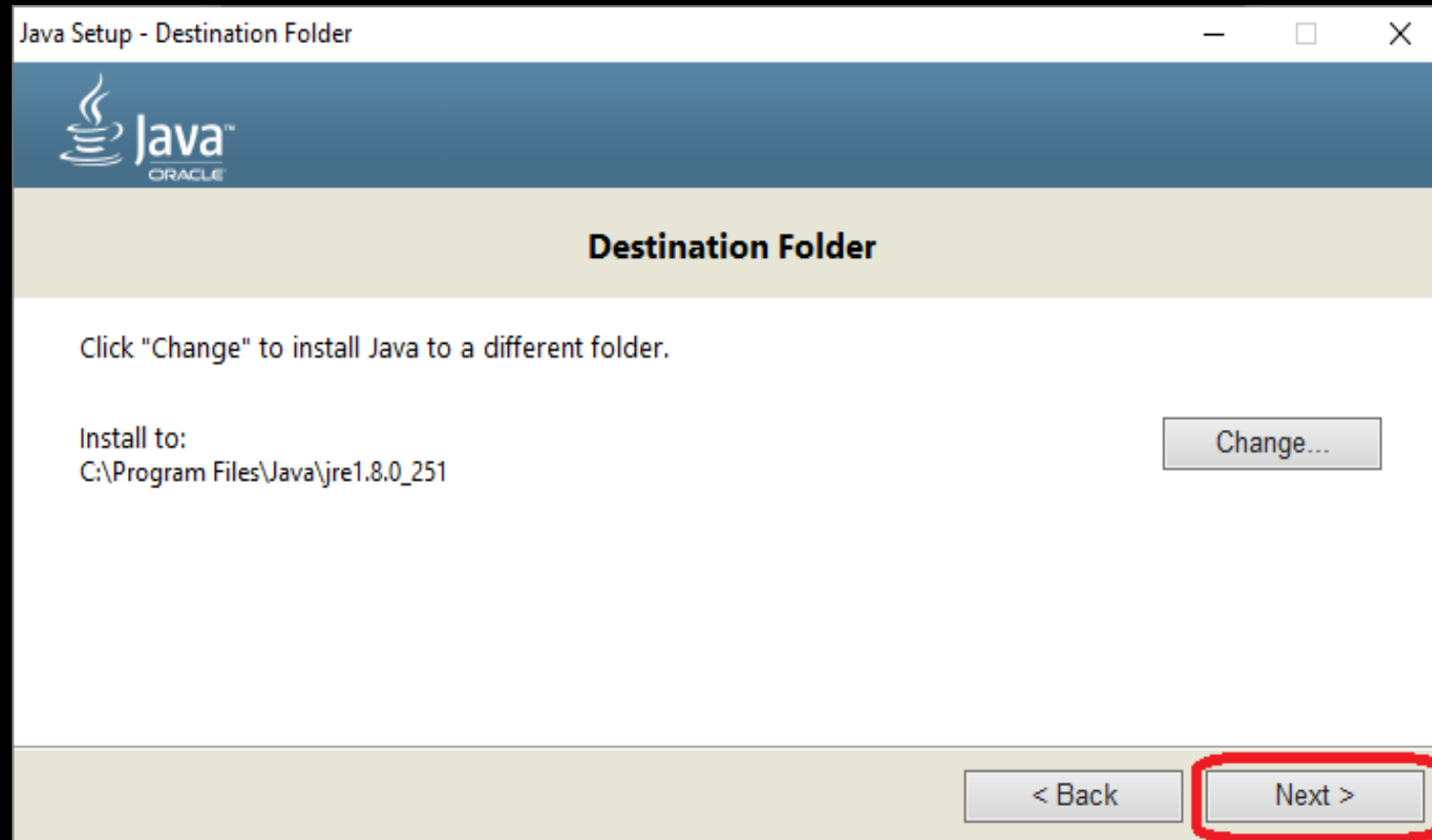
Don't make any changes, go **Next**





Click on **Close** button.

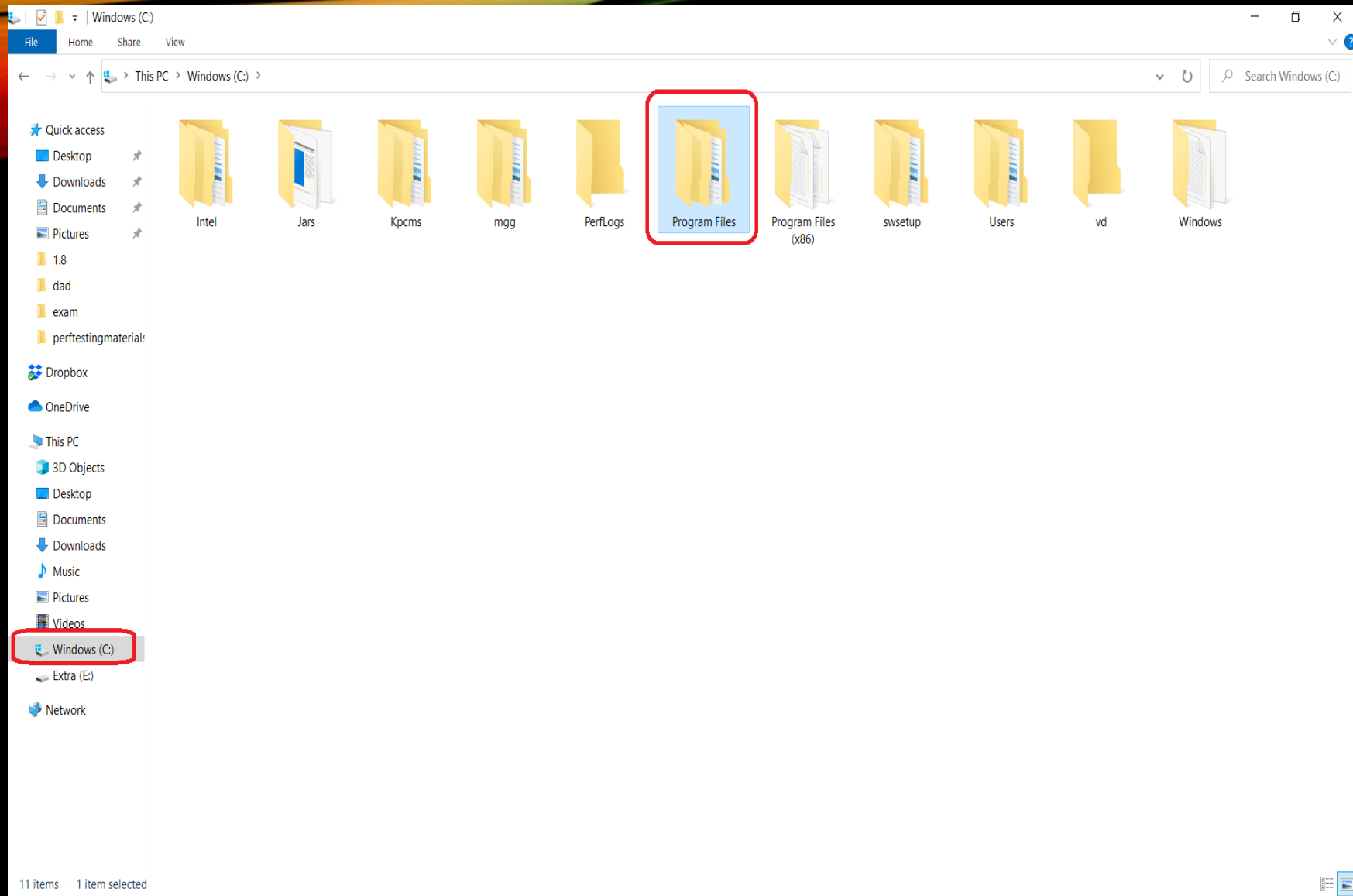
One new window will be open automatically for JRE installation.



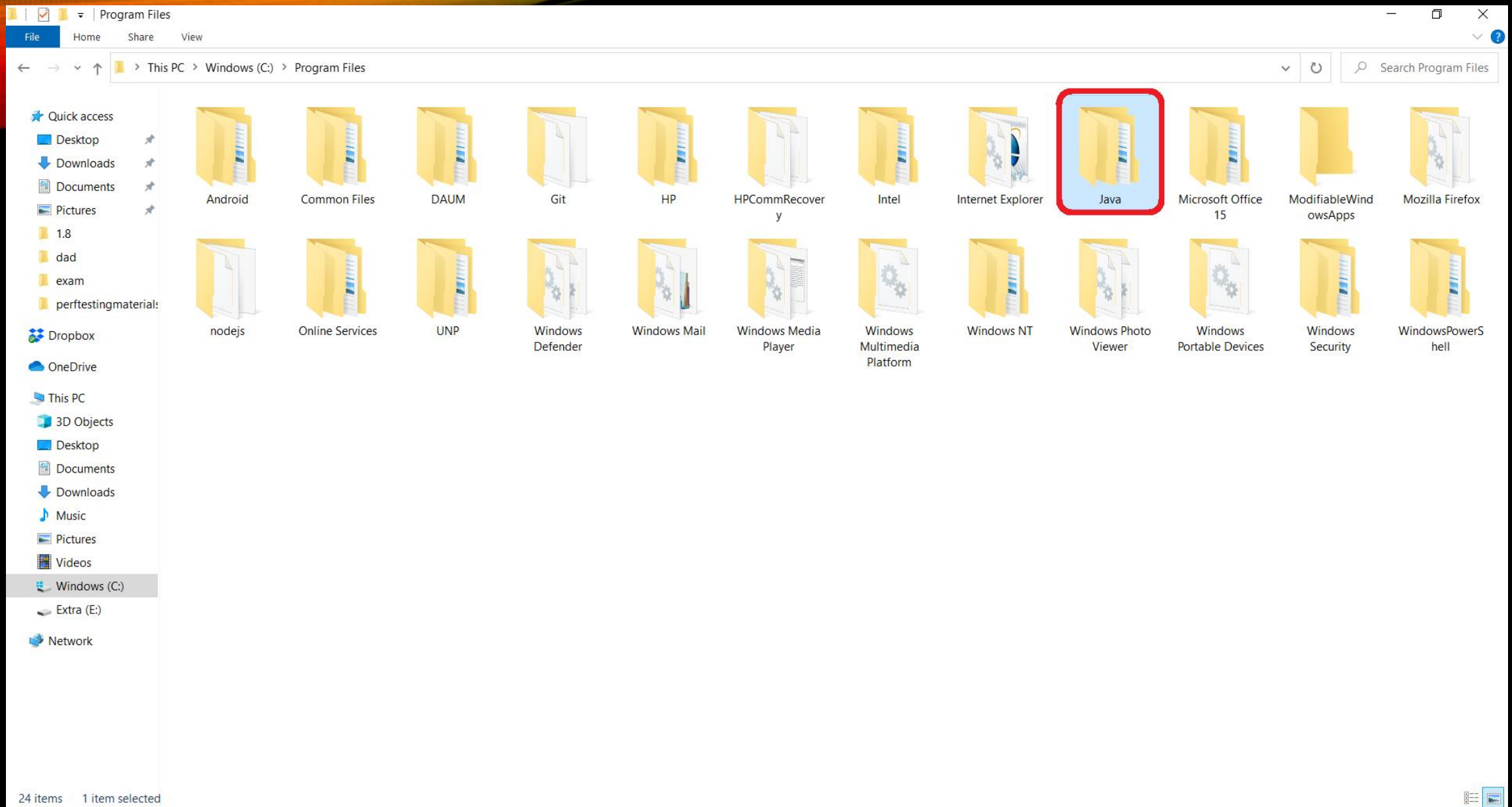
Click on **Next** button to proceed with JRE installation.



Note: Once the JDK and JRE get installed, one **Java** folder will be created inside **Program Files** in **C driver** of your system.

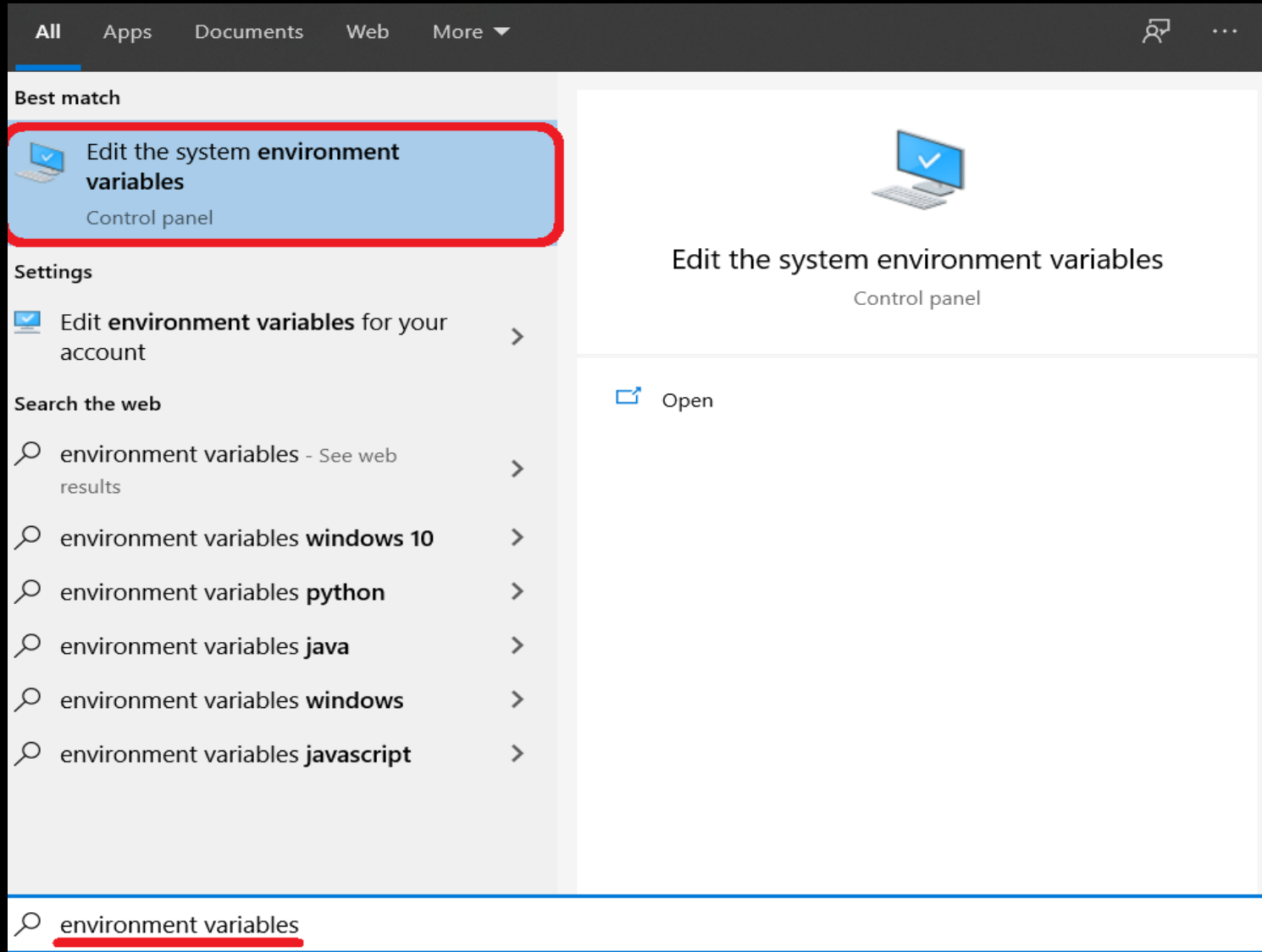


Go inside **Program Files** folder and look for **Java** folder.

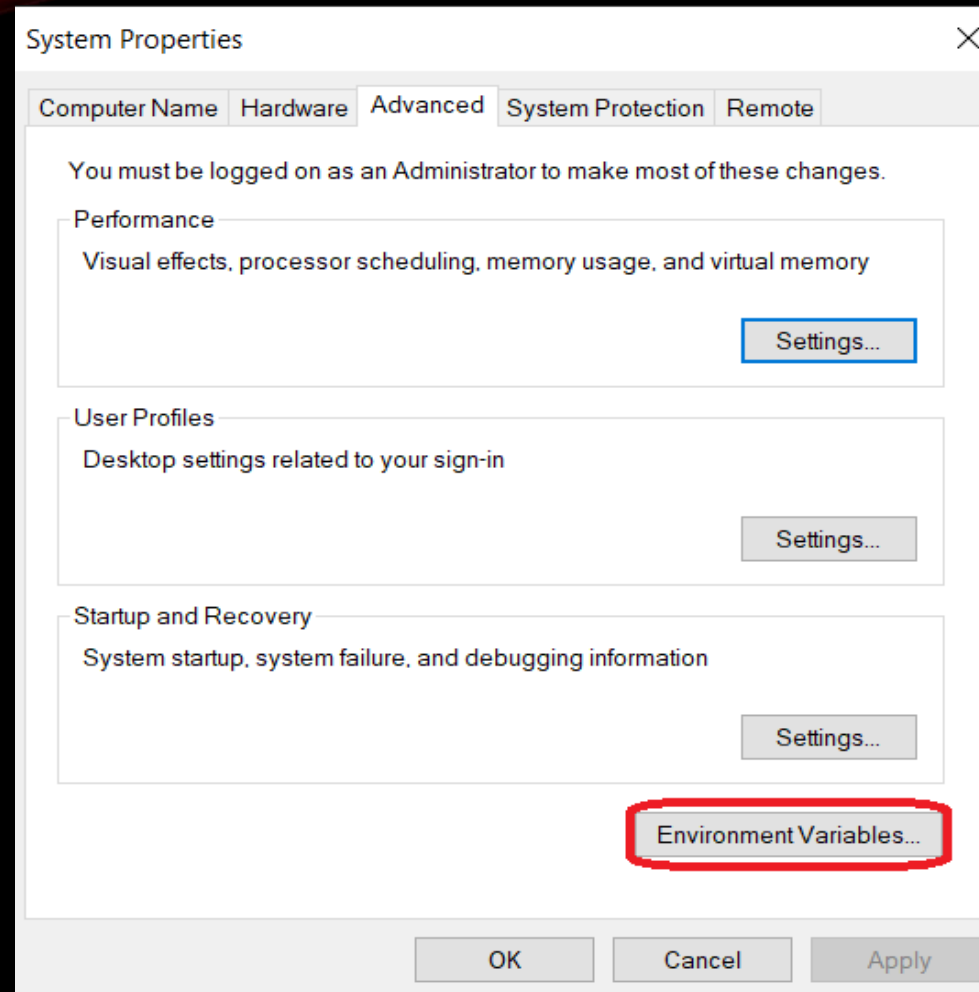


(5) System configuration for Java:

Press Window button from your Keyword and search for **environment variables**.

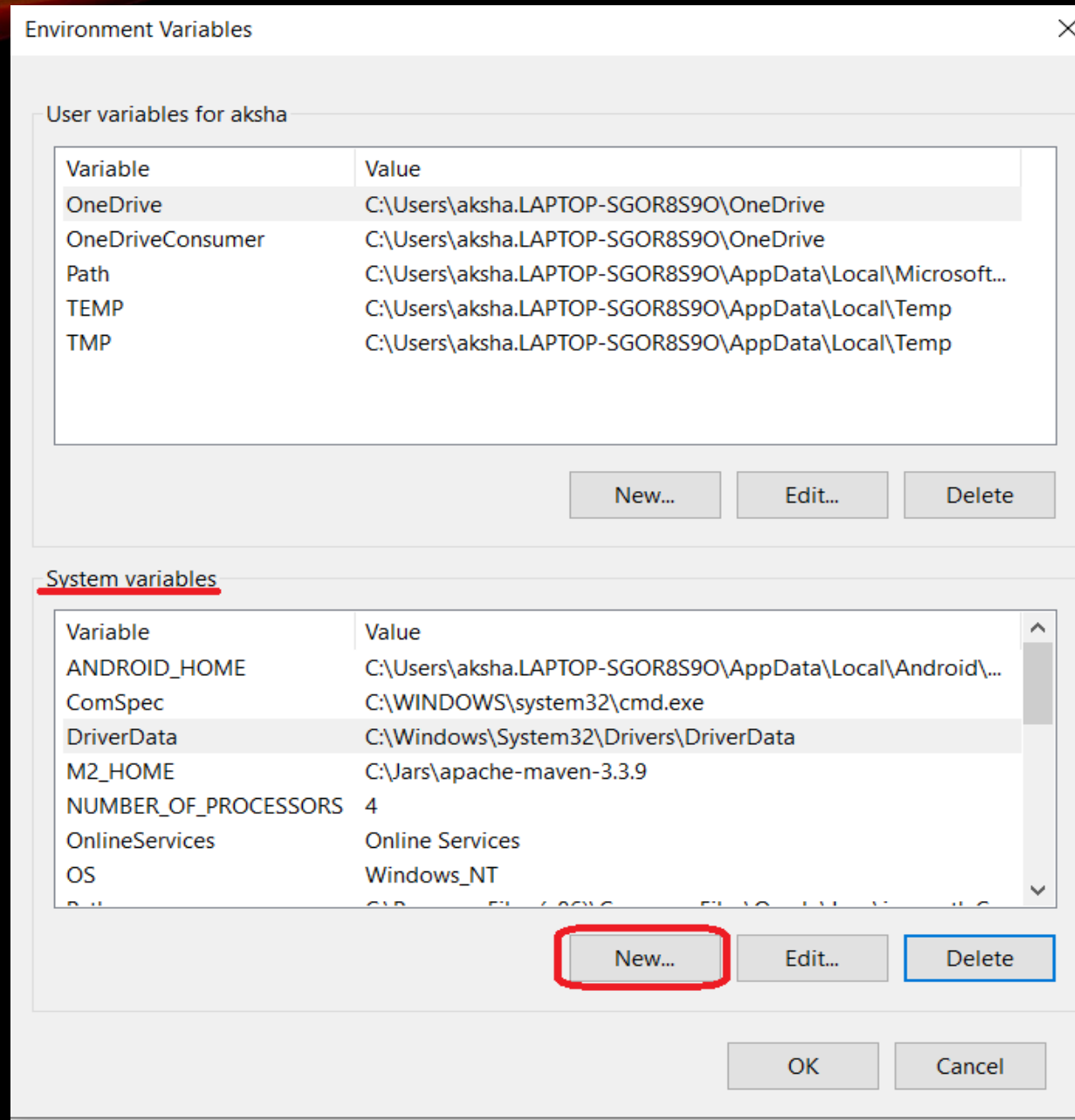


Open **Edit the system environment variables.**

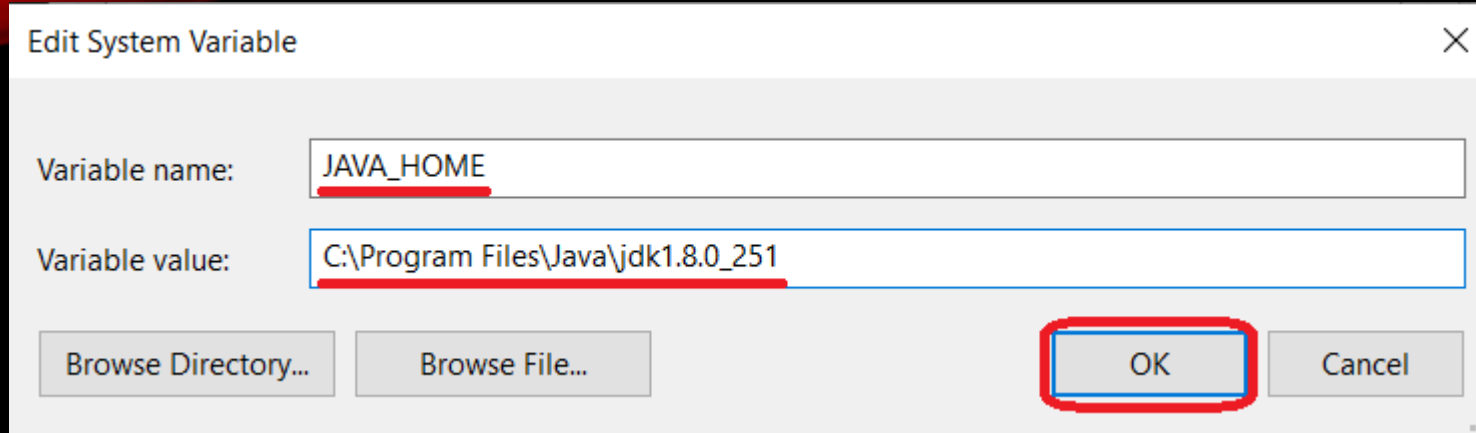


Click on **Environment Variables....**

Click on **New** button in **System Variables**.

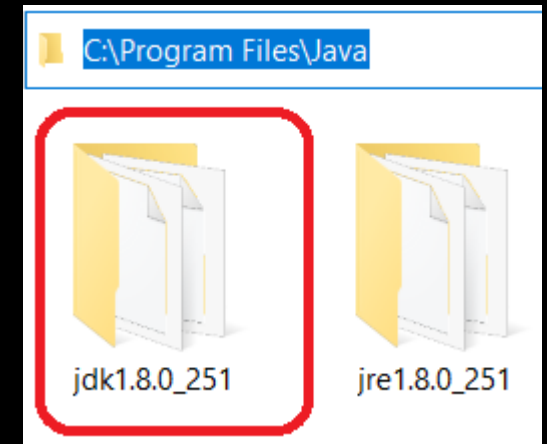


Type variable name as **JAVA_HOME** in **Variable name** field.

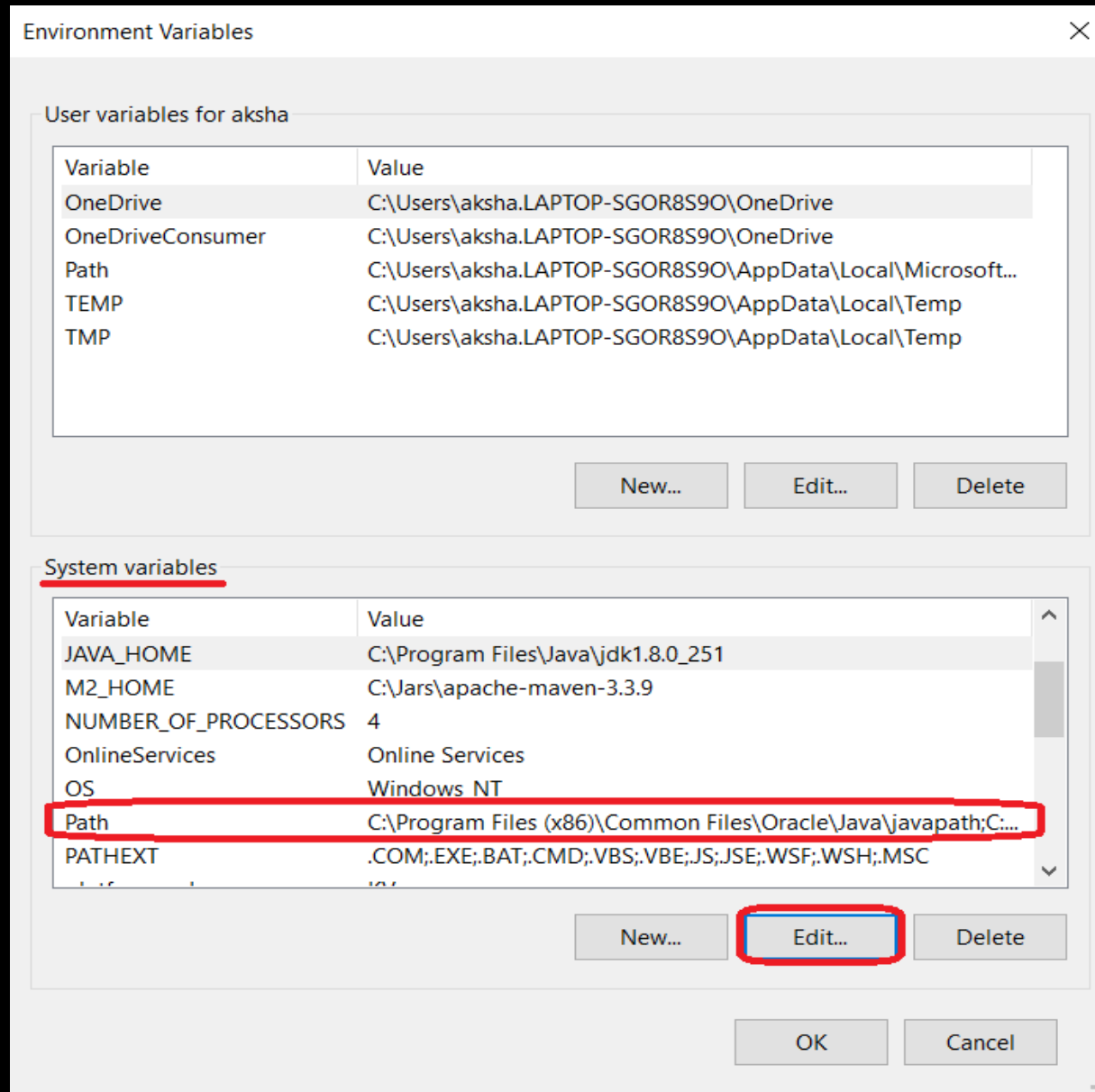


And, copy the path of **jdk1.8.0_251** folder from Java folder to pass the value for **Variable value** field.

jdk1.8.0_251 path= **C:\Program Files\Java\jdk1.8.0_251**

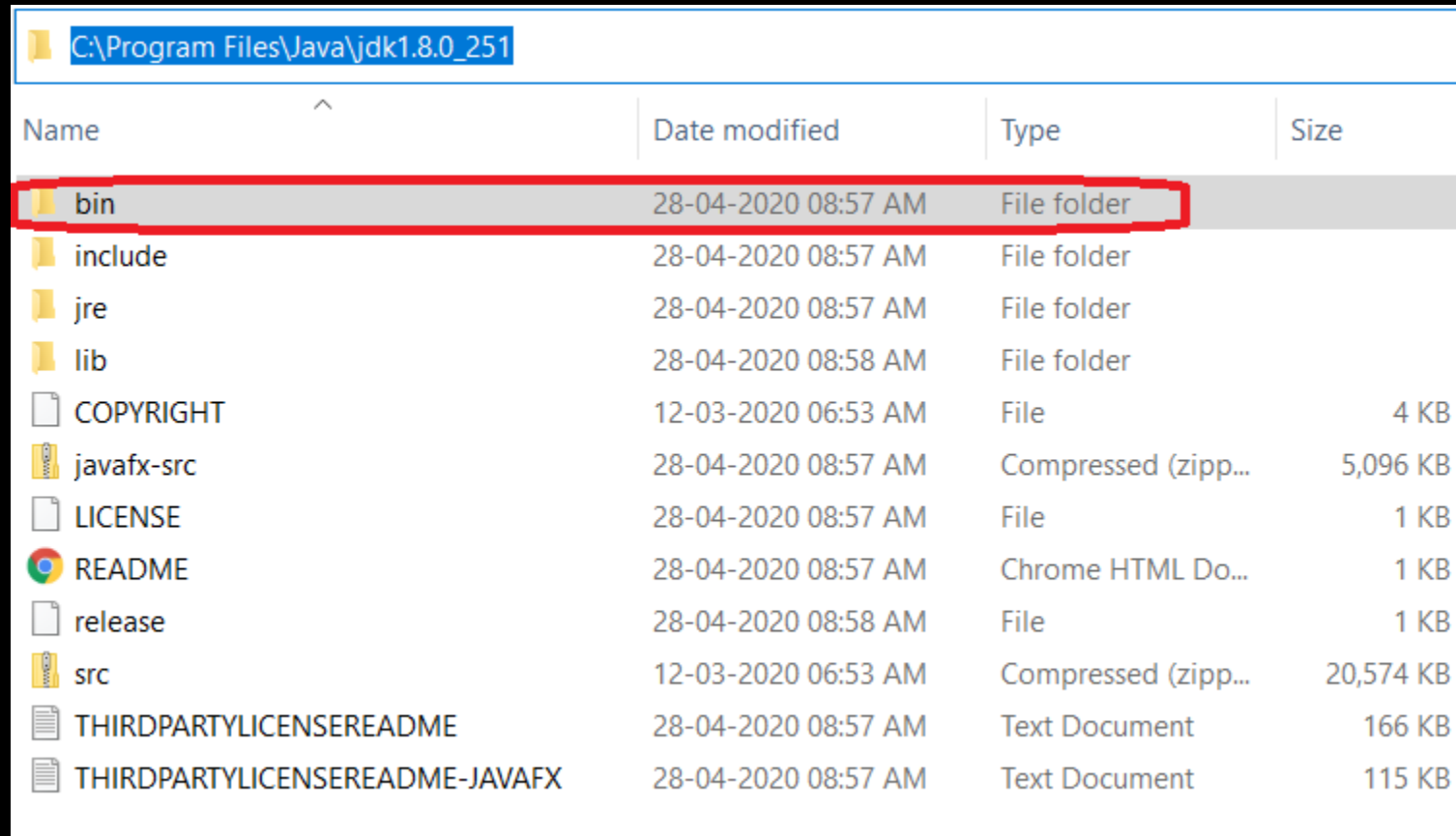


select **Path** variable (scroll down to find) inside **System variables**, and click on **Edit....**



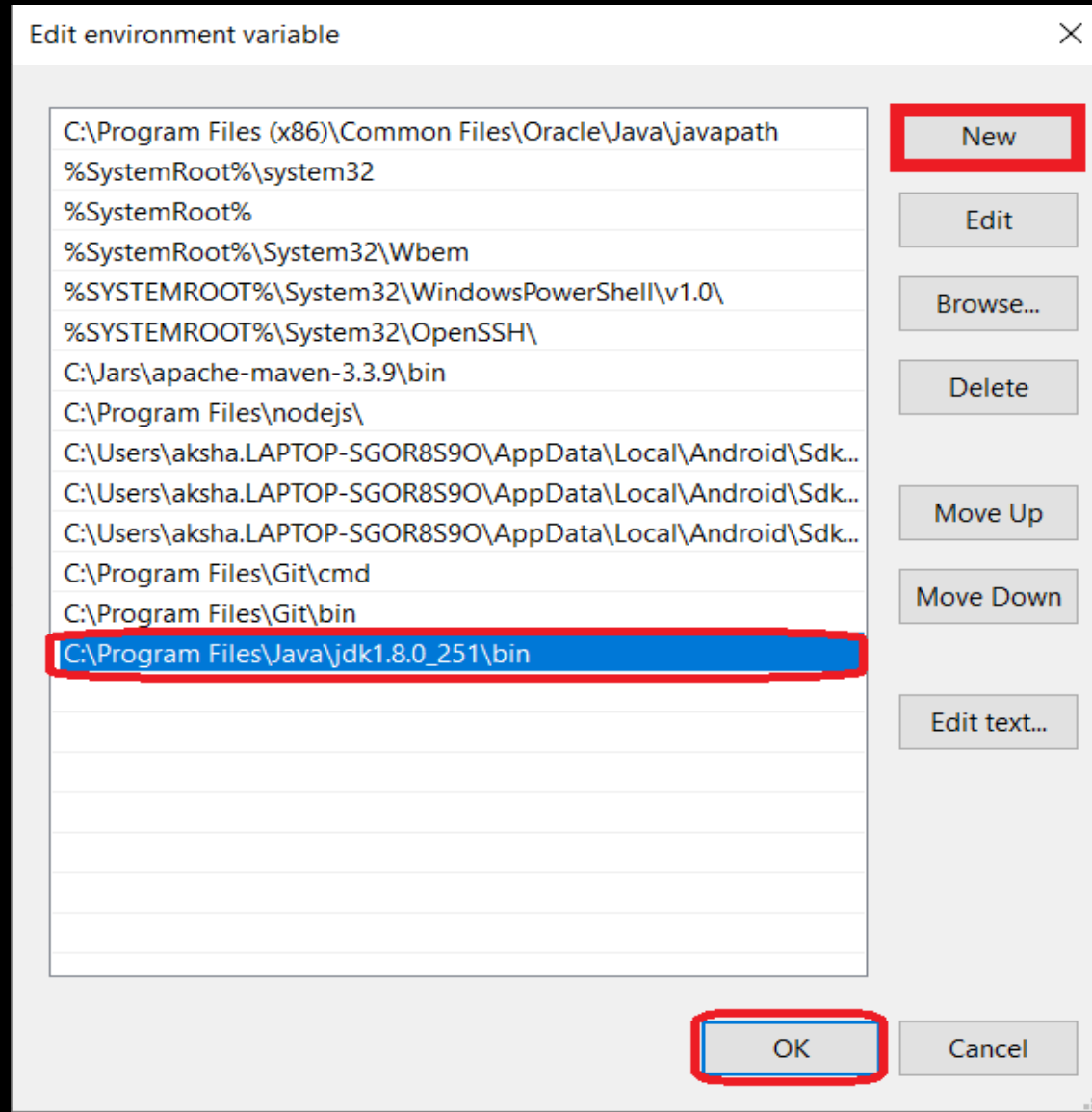
Copy the path of **bin** folder from **jdk1.8.0_251**.

bin path = **C:\Program Files\Java\jdk1.8.0_251\bin**



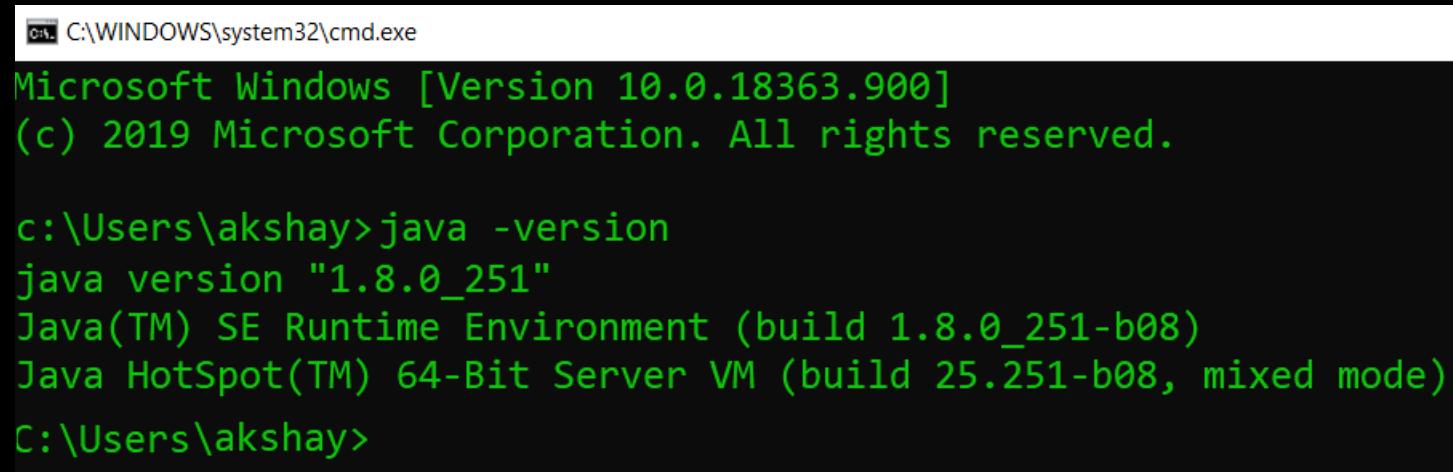
C:\Program Files\Java\jdk1.8.0_251				
Name	^	Date modified	Type	Size
bin		28-04-2020 08:57 AM	File folder	
include		28-04-2020 08:57 AM	File folder	
jre		28-04-2020 08:57 AM	File folder	
lib		28-04-2020 08:58 AM	File folder	
COPYRIGHT		12-03-2020 06:53 AM	File	4 KB
javafx-src		28-04-2020 08:57 AM	Compressed (zipp...	5,096 KB
LICENSE		28-04-2020 08:57 AM	File	1 KB
README		28-04-2020 08:57 AM	Chrome HTML Do...	1 KB
release		28-04-2020 08:58 AM	File	1 KB
src		12-03-2020 06:53 AM	Compressed (zipp...	20,574 KB
THIRDPARTYLICENSEREADME		28-04-2020 08:57 AM	Text Document	166 KB
THIRDPARTYLICENSEREADME-JAVAFX		28-04-2020 08:57 AM	Text Document	115 KB

Click on **New** button and paste the value (path) which you have copied from **bin** folder inside **jdk1.8.0_251** and click on OK for all three opened screen (window).



(6) Verify java configuration in your system

Open command prompt (**cmd**) and type **java -version** command to verify the java version which you have configured in your system.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.18363.900]
(c) 2019 Microsoft Corporation. All rights reserved.

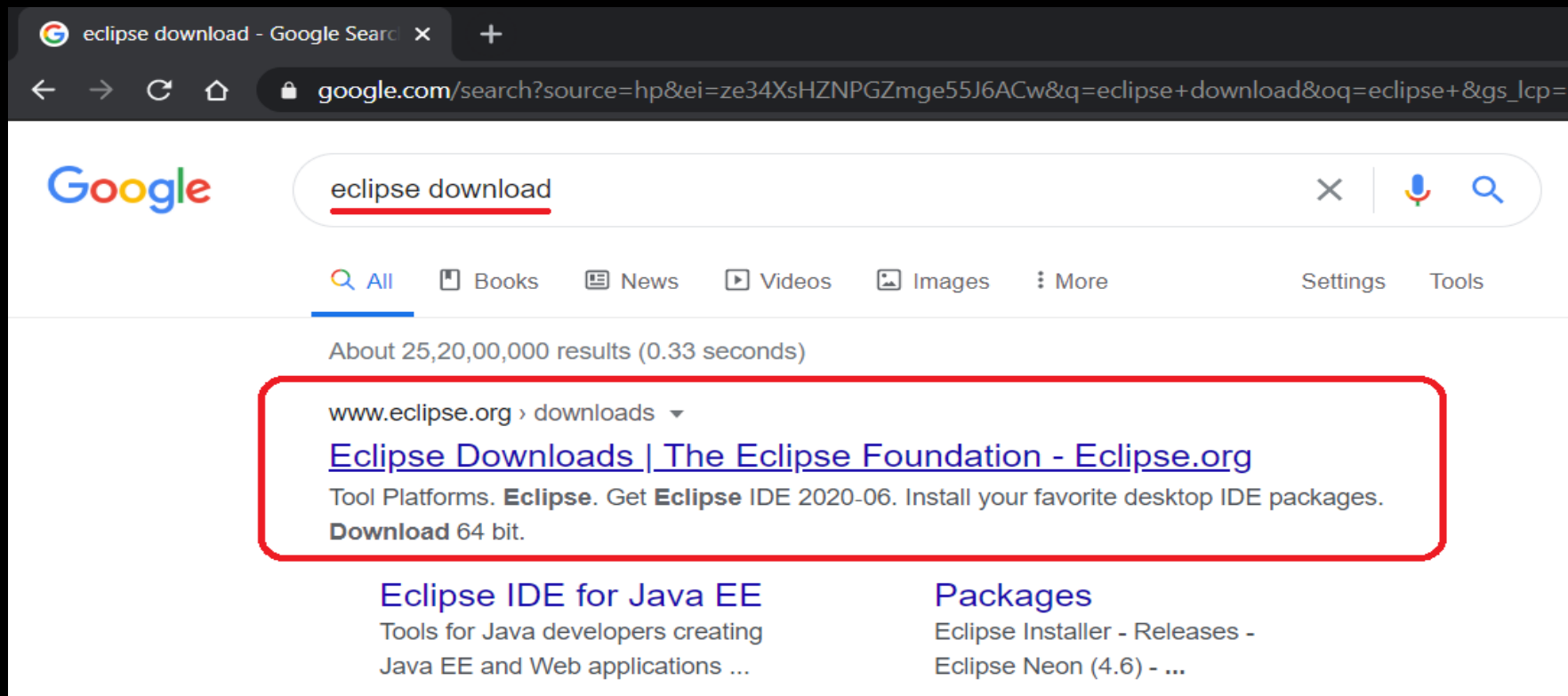
c:\Users\akshay>java -version
java version "1.8.0_251"
Java(TM) SE Runtime Environment (build 1.8.0_251-b08)
Java HotSpot(TM) 64-Bit Server VM (build 25.251-b08, mixed mode)
C:\Users\akshay>
```

It will display the java version which you have configured in your system.

[Click here..](#) to watch the tutorial for Java configuration for Window OS.

ECLIPSE DOWNLOAD

Go to Google and search for **Eclipse download**.



The screenshot shows a Google search interface with the query "eclipse download". The search results indicate approximately 25,200,000 results found in 0.33 seconds. The top result is from the Eclipse Foundation website, specifically the "downloads" section. This result is highlighted with a red rectangular box. Below the main result, there are two columns of related links: "Eclipse IDE for Java EE" and "Packages".

Browser tabs: eclipse download - Google Search

Address bar: google.com/search?source=hp&ei=ze34XsHZNPGZmge55J6ACw&q=eclipse+download&oq=eclipse+&gs_lcp=

Google logo

Search bar: eclipse download

Navigation links: All, Books, News, Videos, Images, More, Settings, Tools

About 25,200,000 results (0.33 seconds)

www.eclipse.org > downloads ▾

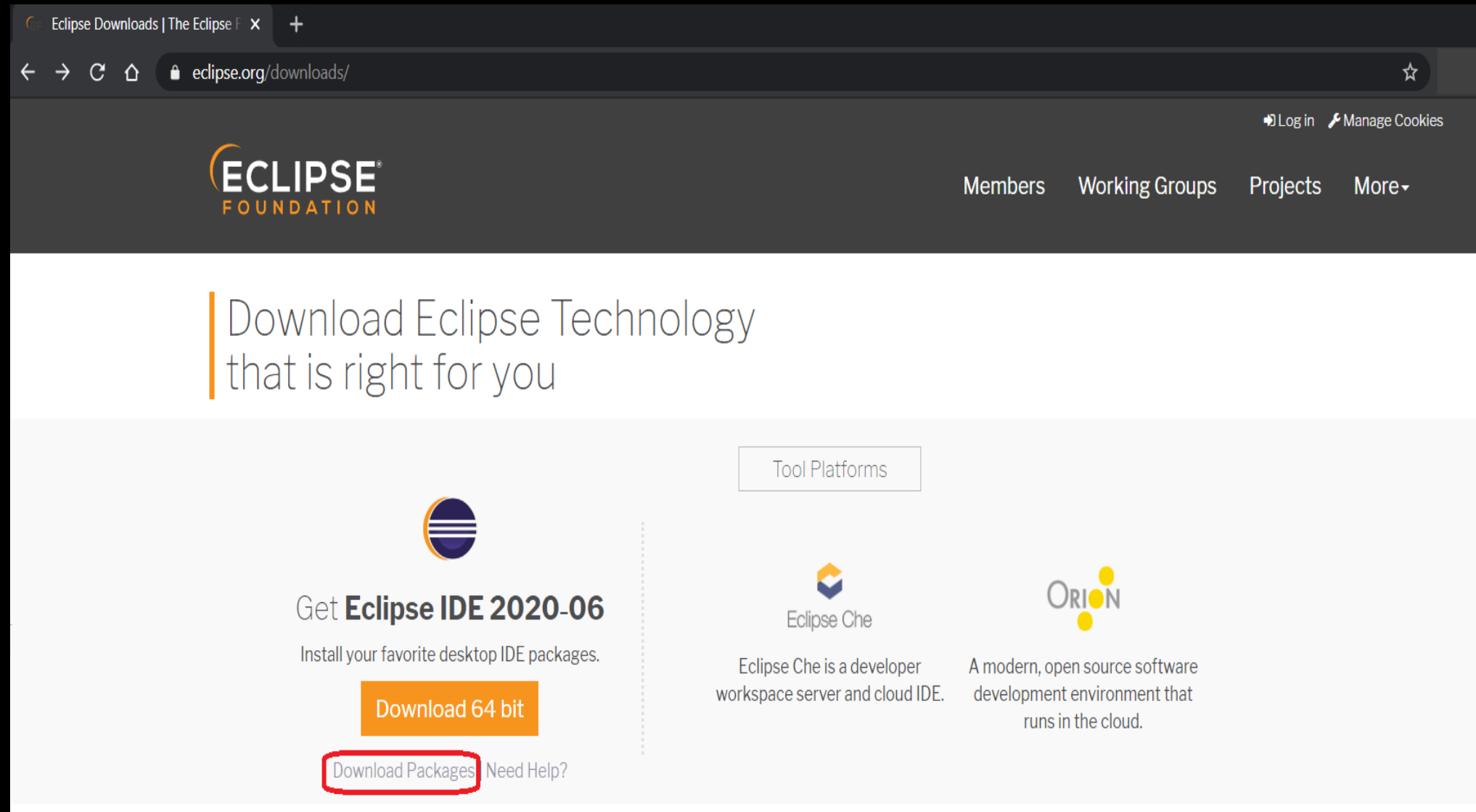
[Eclipse Downloads | The Eclipse Foundation - Eclipse.org](#)

Tool Platforms. **Eclipse**. Get **Eclipse IDE 2020-06**. Install your favorite desktop IDE packages.
Download 64 bit.

Eclipse IDE for Java EE
Tools for Java developers creating
Java EE and Web applications ...

Packages
Eclipse Installer - Releases -
Eclipse Neon (4.6) - ...

Go with the first link from the google search and click on Download Packages.



The screenshot shows a web browser window with the address bar displaying "eclipse.org/downloads/". The page header includes the Eclipse Foundation logo and navigation links: "Members", "Working Groups", "Projects", and "More". In the top right corner, there are links for "Log in" and "Manage Cookies". The main heading reads "Download Eclipse Technology that is right for you". Below this, the page is divided into two columns. The left column features the Eclipse IDE logo and the text "Get Eclipse IDE 2020-06" followed by "Install your favorite desktop IDE packages." There is an orange button labeled "Download 64 bit" and a link labeled "Download Packages" which is circled in red, followed by "Need Help?". The right column is titled "Tool Platforms" and contains two items: "Eclipse Che" with its logo and description "Eclipse Che is a developer workspace server and cloud IDE.", and "ORION" with its logo and description "A modern, open source software development environment that runs in the cloud."

Eclipse Downloads | The Eclipse F x +


← → ↻ ⌂ eclipse.org/downloads/ ☆

Log in Manage Cookies

ECLIPSE
FOUNDATION

Members Working Groups Projects More ▾

Download Eclipse Technology
that is right for you




Get **Eclipse IDE 2020-06**

Install your favorite desktop IDE packages.


[Download 64 bit](#)

[Download Packages](#) Need Help?

Tool Platforms


Eclipse Che

Eclipse Che is a developer workspace server and cloud IDE.










ORION


A modern, open source software development environment that runs in the cloud.

Based on your Operating System download the file from **Eclipse IDE for Enterprise Java Developers**.

Example: In my case, I am having Window 64 bit OS, so I will click on **windows:64 bit** for Eclipse to download.

Eclipse IDE 2020-06 R Packages

 <h4>Eclipse IDE for Enterprise Java Developers</h4> <p>391 MB 151,724 DOWNLOADS</p> <p>Tools for developers creating Java Enterprise and Web applications, including a Java IDE, tools for Web Services, JPA and Data Tools, JSF, Mylyn, Maven and Gradle, Git, and more.</p> <p>Click here to file a bug against Eclipse Web Tools Platform. Click here to file a bug against Eclipse Platform. Click here to file a bug against Maven integration for web projects. Click here to report an issue against Eclipse Wild Web Developer (incubating).</p> <p>Installation of stable release of node.js is strongly recommended.</p>	 <div>Windows 64-bit Mac Cocoa 64-bit Linux 64-bit</div>
 <h4>Eclipse IDE for Java Developers</h4> <p>208 MB 148,477 DOWNLOADS</p> <p>The essential tools for any Java developer, including a Java IDE, a Git client, XML Editor, Maven and Gradle integration</p>	 <div>Windows 64-bit Mac Cocoa 64-bit Linux 64-bit</div>
 <h4>Eclipse IDE for C/C++ Developers</h4> <p>239 MB 30,625 DOWNLOADS</p> <p>An IDE for C/C++ developers.</p>	 <div>Windows 64-bit Mac Cocoa 64-bit Linux 64-bit</div>
 <h4>Eclipse IDE for PHP Developers</h4> <p>242 MB 8,186 DOWNLOADS</p> <p>The essential tools for any PHP developer, including PHP language support, Git client, Mylyn and editors for JavaScript, TypeScript, HTML, CSS and XML. Click here to report an issue against Eclipse PHP Development Tools.</p>	 <div>Windows 64-bit Mac Cocoa 64-bit Linux 64-bit</div>



Get Eclipse IDE 2020-06

Install your favorite desktop IDE packages.

[Download 64 bit](#)

[Download Packages](#) | [Need Help?](#)

RELATED LINKS

- [Compare & Combine Packages](#)
- [New and Noteworthy](#)
- [Install Guide](#)
- [Documentation](#)
- [Updating Eclipse](#)
- [Forums](#)
- [Simultaneous Release](#)

MORE DOWNLOADS

- [Other builds](#)
- [Eclipse 2020-03 \(4.15\)](#)
- [Eclipse 2019-12 \(4.14\)](#)
- [Eclipse 2019-09 \(4.13\)](#)
- [Eclipse 2019-06 \(4.12\)](#)
- [Eclipse 2019-03 \(4.11\)](#)
- [Eclipse 2018-12 \(4.10\)](#)
- [Eclipse 2018-09 \(4.9\)](#)

Click on zip file to download the Eclipse.



[Members](#)

[Working Groups](#)

[Home](#) / [Downloads](#) / Eclipse downloads - Select a mirror

All downloads are provided under the terms and conditions of the [Eclipse Foundation Software User Agreement](#) unless otherwise specified.

 [Download](#)

Download from: China - Dalian Neusoft University of Information (大连东软信息学院) ([http](#))

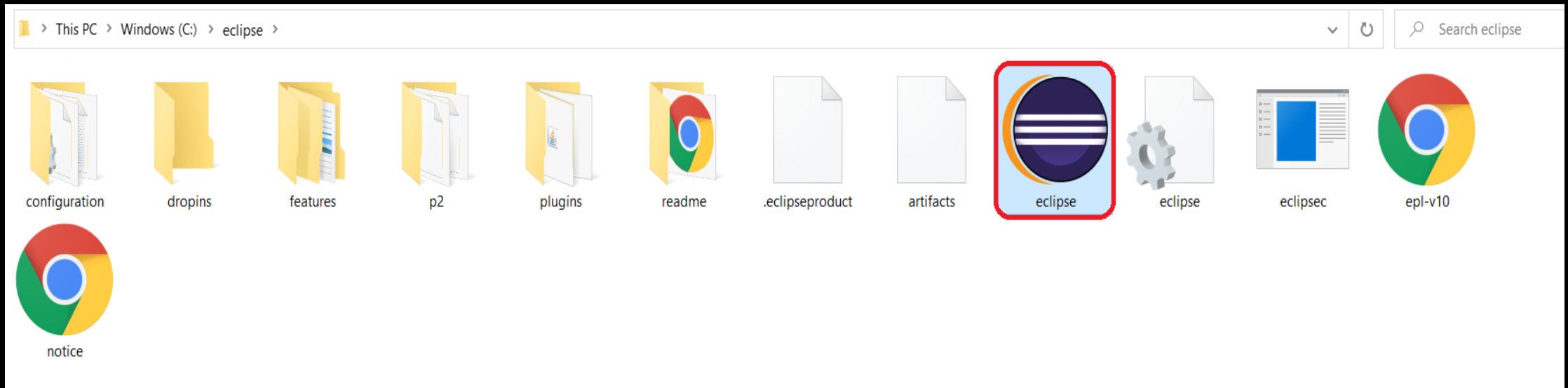
File [eclipse-jee-2020-06-R-win32-x86_64.zip](#) **SHA-512**

[>> Select Another Mirror](#)

Once zip file for Eclipse get downloaded, you need to un-zip (Extract All..) it to launch (open) the Eclipse.

Click on Eclipse icon from Eclipse folder (un-zipped folder of Eclipse) to launch the Eclipse.

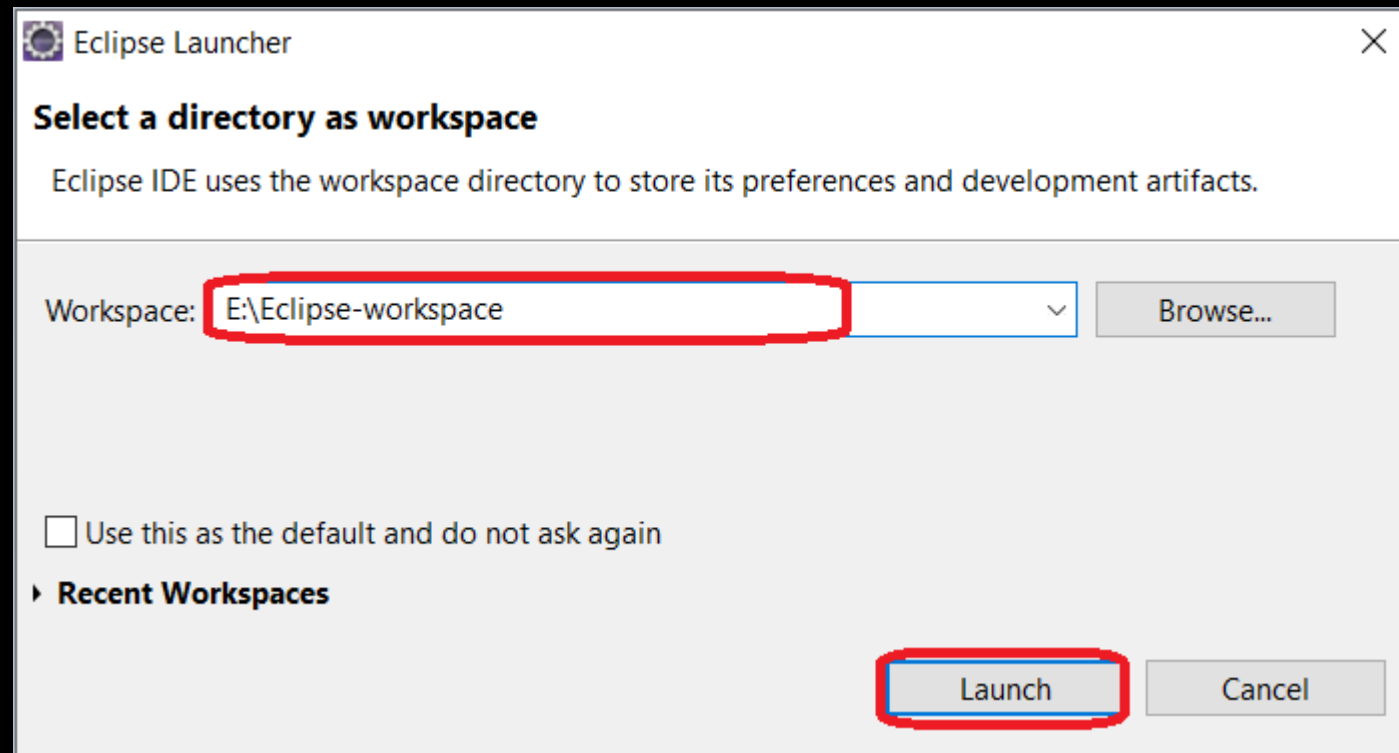
Note: Using zip file we don't have to install the Eclipse, we can simply launch the Eclipse from the Un-Zip (Extract All..) file.



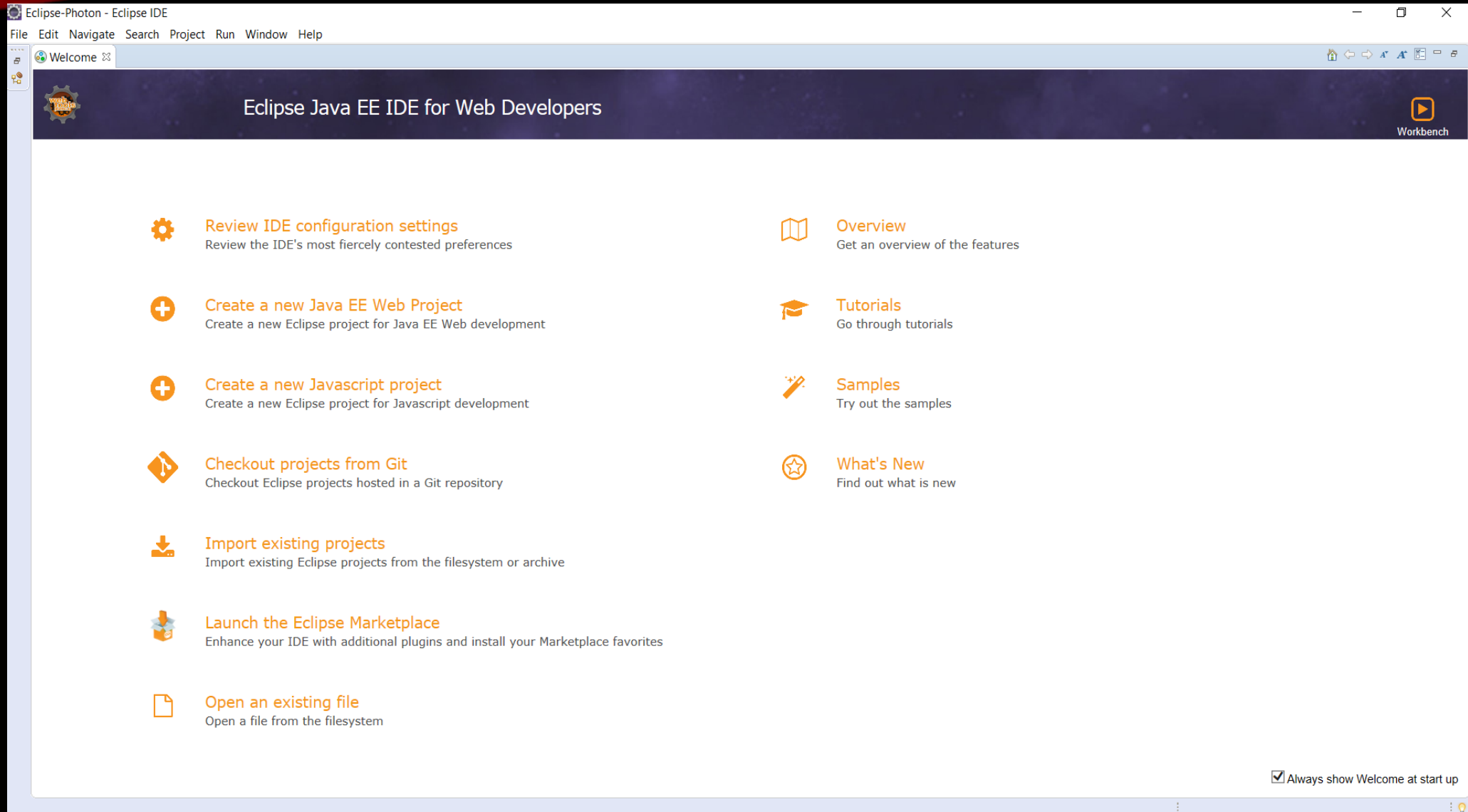
It will ask to set the workspace for your Eclipse.

Note: Workspace is space where all your projects is going to store for Eclipse.

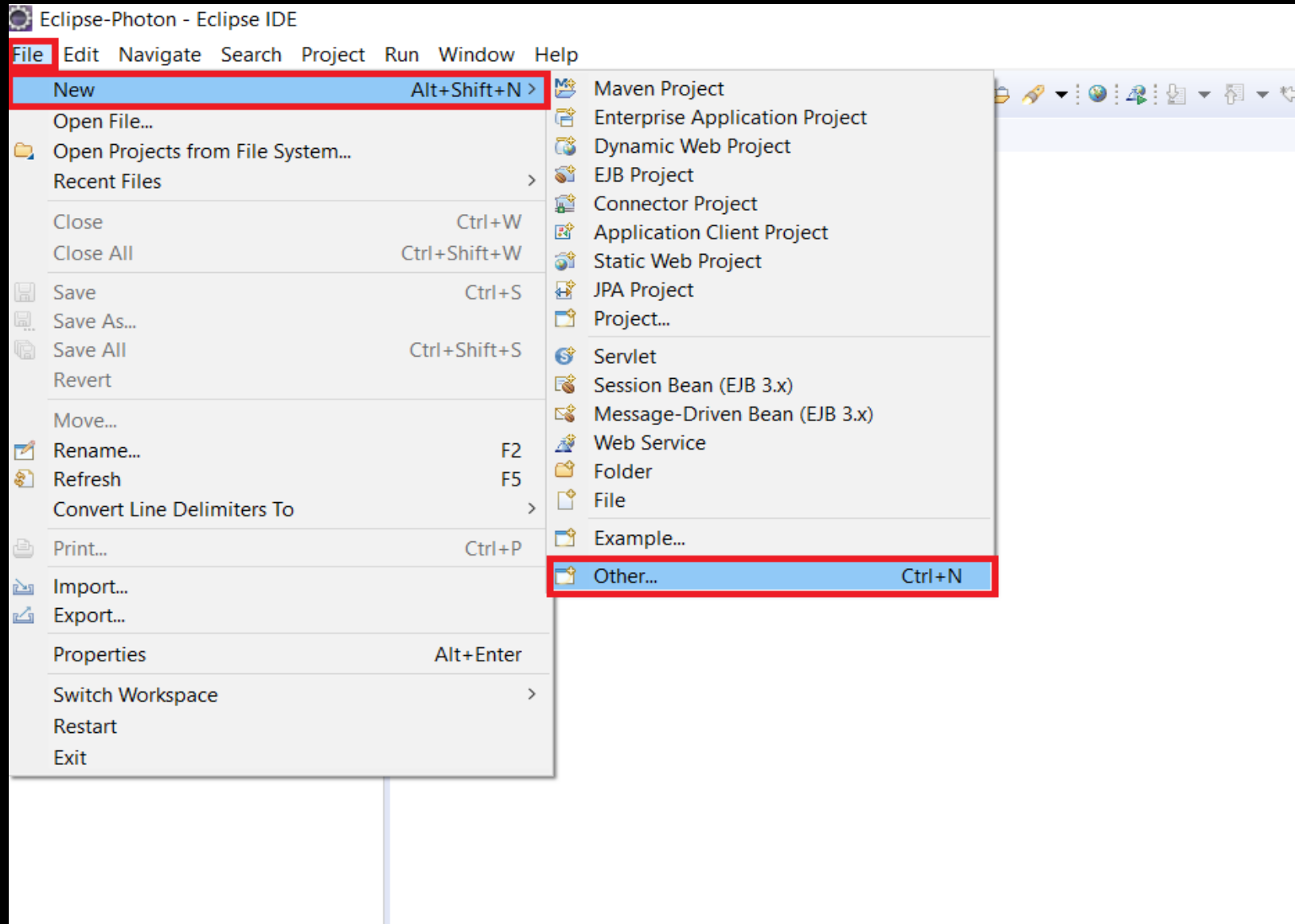
Provide any folder from your system to store (locate/keep) your Eclipse projects.



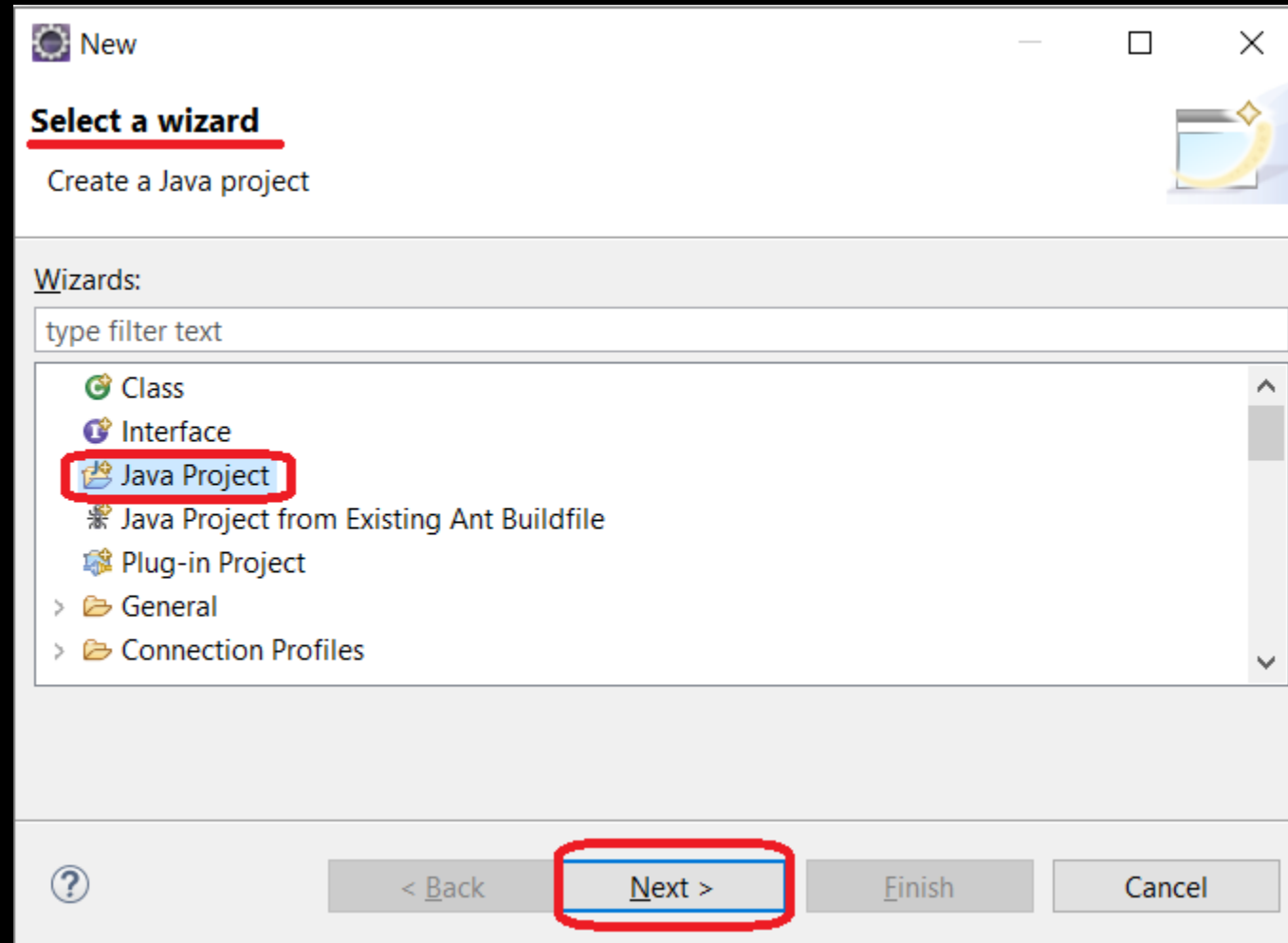
Click on Launch button to launch the Eclipse, once it get opened it will display welcome window from Eclipse.



Close the welcome window (tab) and create java project.
Click on **File** from Menu, go to **New** tab and click on **Other....**



Select a Wizard window will get open, you need to select **Java Project** from the open wizard and click on **Next**.



New Java Project

Create a Java Project

Create a Java project in the workspace or in an external location.

Project name:

☒ Use default location

Location: [Browse...](#)

JRE

☒ Use an execution environment JRE: [Configure JREs...](#)

☐ Use a project specific JRE:

☐ Use default JRE (currently 'jre1.8.0_251')

Project layout

☐ Use project folder as root for sources and class files

☒ Create separate folders for sources and class files [Configure default...](#)

Working sets

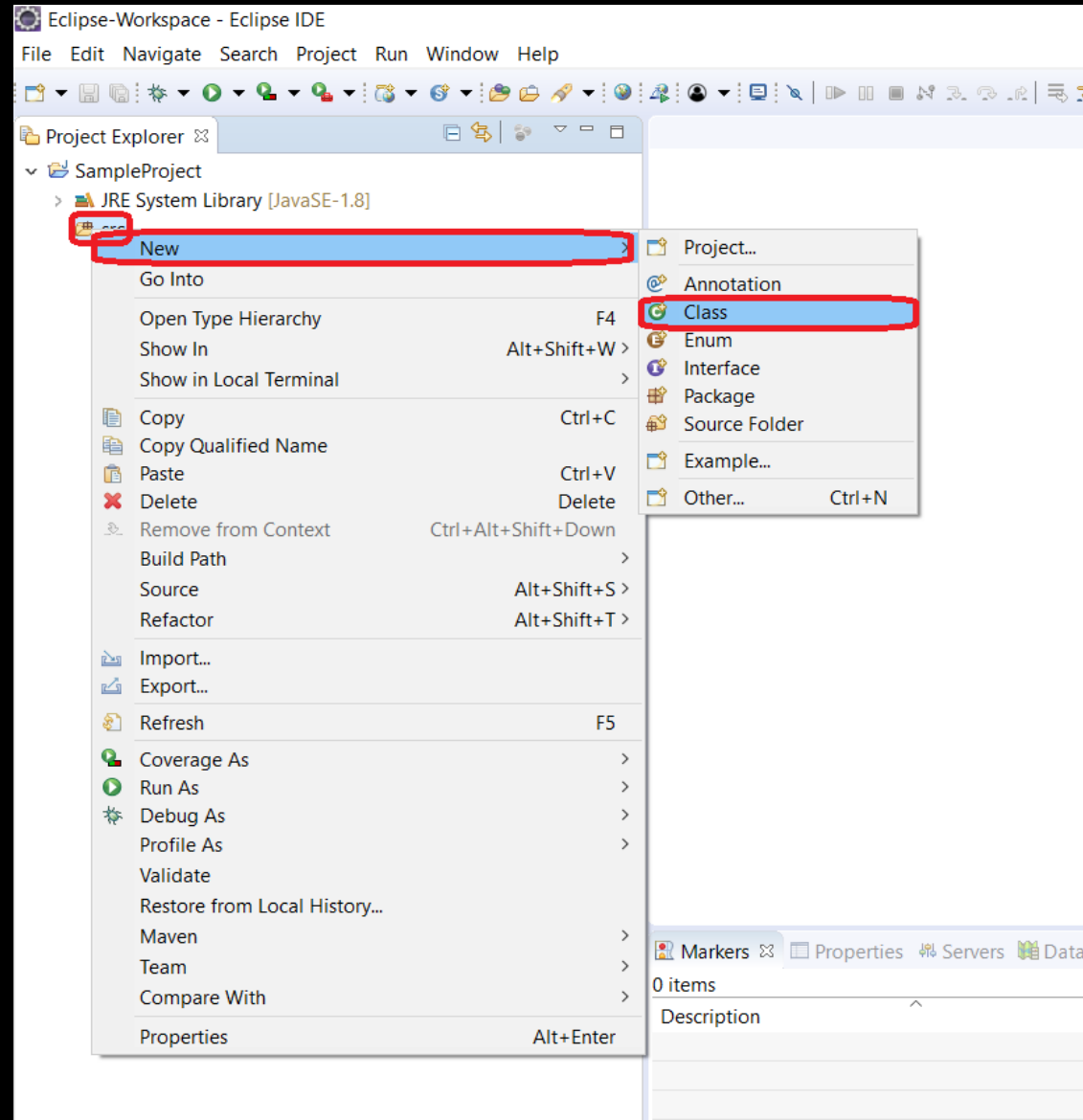
☐ Add project to working sets [New...](#)

Working sets: [Select...](#)

[?](#) [< Back](#) [Next >](#) [Finish](#) [Cancel](#)

Enter your **Project Name**, and verify for **JRE** version, it should be same as your java version, click on **Finish** to create the java project.

Expand your project and select your **src** folder, then right click on **src** and go to **New**, and select **class** to create a class file.



Enter your class **Name** and select check box for **main** and click on **Finish**.

New Java Class

Java Class

⚠ The use of the default package is discouraged.

Source folder: SampleProject/src Browse...

Package: (default) Browse...

☐ Enclosing type: Browse...

Name: HelloWorld

Modifiers: ☒ public ☐ package ☐ private ☐ protected
☐ abstract ☐ final ☐ static

Superclass: java.lang.Object Browse...

Interfaces: Add...
Remove

Which method stubs would you like to create?

☒ public static void main(String[] args)

☐ Constructors from superclass

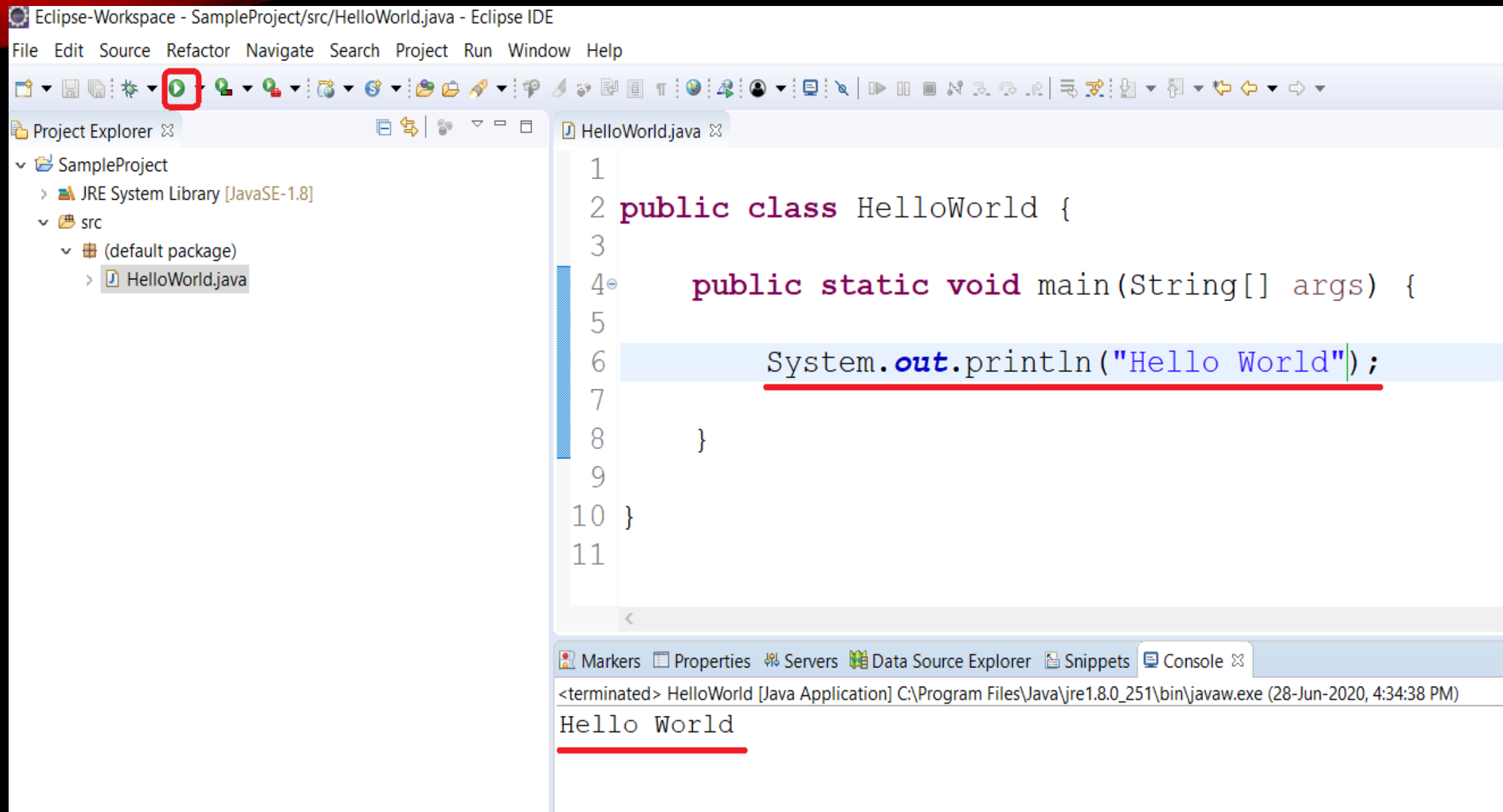
☒ Inherited abstract methods

Do you want to add comments? (Configure templates and default value [here](#))

☐ Generate comments

? Finish Cancel

Type printing statement as shown in **line 6** to print **Hello World** as output. Now, click on **play** button to run your code.



The screenshot shows the Eclipse IDE interface. The top menu bar includes File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. The toolbar contains various icons, with the Run button (a green play icon) highlighted by a red square. The Project Explorer on the left shows the project structure: SampleProject, JRE System Library [JavaSE-1.8], src, (default package), and HelloWorld.java. The main editor window displays the code for HelloWorld.java, with line numbers 1 through 11 on the left. The code is as follows:

```
1
2 public class HelloWorld {
3
4     public static void main(String[] args) {
5
6         System.out.println("Hello World");
7
8     }
9
10 }
11
```

The line containing `System.out.println("Hello World");` is highlighted with a blue background and underlined with a red line. The bottom of the IDE shows the Console tab, which displays the output: `<terminated> HelloWorld [Java Application] C:\Program Files\Java\jre1.8.0_251\bin\javaw.exe (28-Jun-2020, 4:34:38 PM)` followed by `Hello World`, which is also underlined with a red line.



[Click here..](#) to watch the tutorial for Eclipse for Window OS.

Thanks..