

Installing JDK (Java Development Kit):

- Download JDK:
- Go to the Oracle JDK download page: Oracle JDK Downloads
- <https://www.oracle.com/java/technologies/downloads/#java8>
- Accept the license agreement.
- Download the appropriate JDK installer for your Windows system (32-bit or 64-bit).

Run JDK Installer:

- Locate the downloaded installer file (e.g., [jdk-8u411-windows-x64.exe](#)) and double-click to run it.

Install JDK:

- Follow the installation wizard instructions.
- Choose the installation directory (default is usually C:\Program Files\Java\jdk-8).
- Click "Next" through the installation process.
- Once installation is complete, click "Close".

Set JAVA_HOME Environment Variable:

- Right-click on "This PC" or "My Computer" and select "Properties".
- Click on "Advanced system settings".
- In the System Properties window, click on the "Environment Variables" button.
- Under "System Variables", click "New" and add a new variable named JAVA_HOME with the value set to the JDK installation directory (e.g., C:\Program Files\Java\jdk-16).
- Click "OK" to save the changes.
- Update PATH Environment Variable:
- Find the "Path" variable under "System Variables" in the Environment Variables window and select it.
- Click "Edit" and add %JAVA_HOME%\bin to the list of paths.
- Click "OK" to save the changes.

Verify Installation:

- Open Command Prompt and type `java -version` to verify that Java is installed correctly.
- It should display the version of Java installed (e.g., Java 17).

Installing STS (Spring Tool Suite):

Download STS:

- Go to the Spring Tool Suite download page: Spring Tool Suite Downloads.
- <https://spring.io/tools>
- Choose the appropriate version of STS for your Windows system.
- Click on the download link to save the installer file (e.g., spring-tool-suite-4-11.1.0.RELEASE-e4.21.0-win32.win32.x86_64.zip).

Extract STS Zip File:

- Locate the downloaded zip file and extract its contents to a directory of your choice (e.g., C:\Program Files\sts).

Launch STS:

- Navigate to the directory where you extracted STS.
- Double-click on the SpringToolSuite4.exe executable to launch STS.

Configure STS Workspace:

- When STS starts, it will prompt you to choose a workspace location. You can use the default location or choose a different one.
- Click "Launch" to proceed.

Verify Installation:

- Once STS is fully loaded, you can create a new Spring project or import existing ones to verify that STS is installed and working correctly.

Project Creation:

Launch Spring Tool Suite (STS):

- Open the Spring Tool Suite by double-clicking on the SpringToolSuite4.exe executable.

Choose Workspace:

- When STS starts, it will prompt you to choose a workspace location. You can use the default location or choose a different one.
- Click "Launch" to proceed.

Create New Java Project:

- In the menu bar, go to "File" -> "New" -> "Other..."
- In the "Select a wizard" dialog, expand the "Java" folder, select "Java Project", and click "Next".
- Enter a name for your project (e.g., "MyJavaProject") and click "Finish".

Create Package:

- In the Package Explorer view (usually located on the left side of the STS window), right-click on the "src" folder within your project.
- Select "New" -> "Package".
- Enter a name for your package (e.g., "com.example") and click "Finish".

Create Java Class:

- Right-click on the package you just created.
- Select "New" -> "Class".
- Enter a name for your class (e.g., "MainClass") and check the box next to "public static void main(String[] args)" to create a main() method.
- Click "Finish".

Write Java Code:

- In the editor window that opens, you'll see your newly created class with the main() method.
- Write your Java code within the main() method. For example:

```
package com.example;

public class MainClass {

    public static void main(String[] args) {

        System.out.println("Hello, world!");

    }

}
```

Run the Java Application:

- Right-click anywhere in the editor window of your MainClass.
- Select "Run As" -> "Java Application".
- You should see the output "Hello, world!" printed in the Console view at the bottom of the STS window.