Spring Introduction

Spring Framework is a Java platform that provides comprehensive infrastructure support for developing Java applications. Spring handles the infrastructure so you can focus on your application.

Spring enables you to build applications from “plain old Java objects” (POJOs) and to apply enterprise services non-invasively to POJOs. This capability applies to the Java SE programming model and to full and partial Java EE.

Tomcat Installation:

Step 1: Download Tomcat
Click on the link below it will redirect to Apache Tomcat Home Page

https://tomcat.apache.org/download-90.cgi

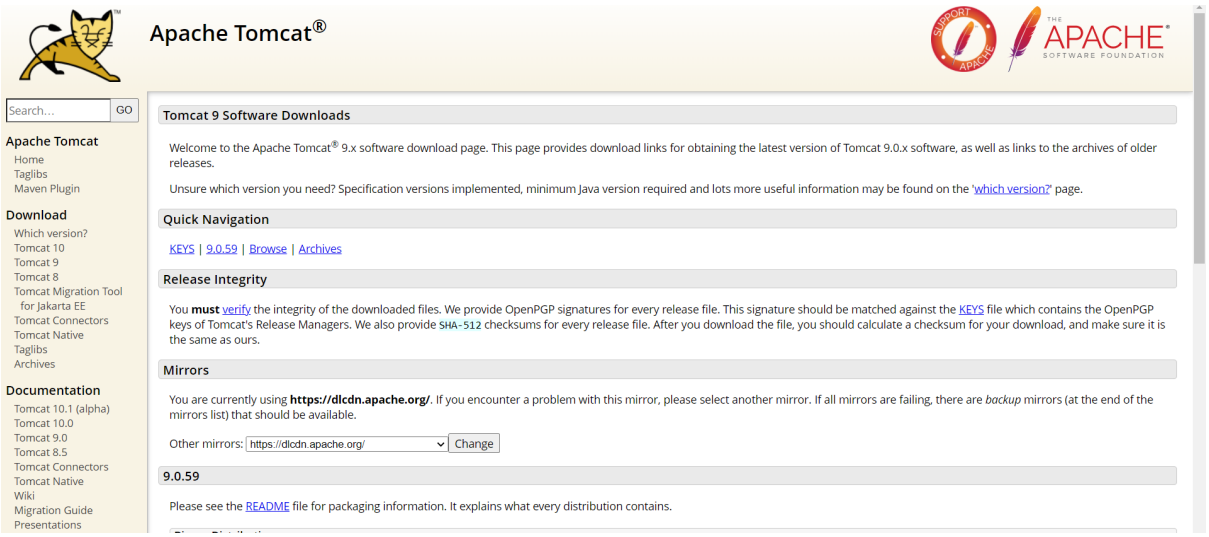
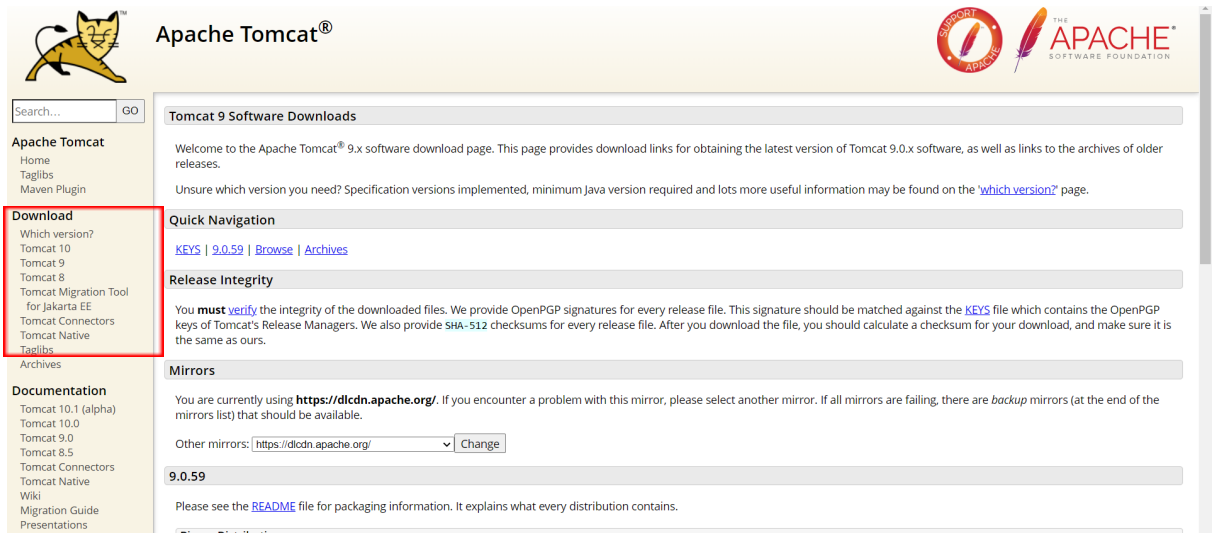
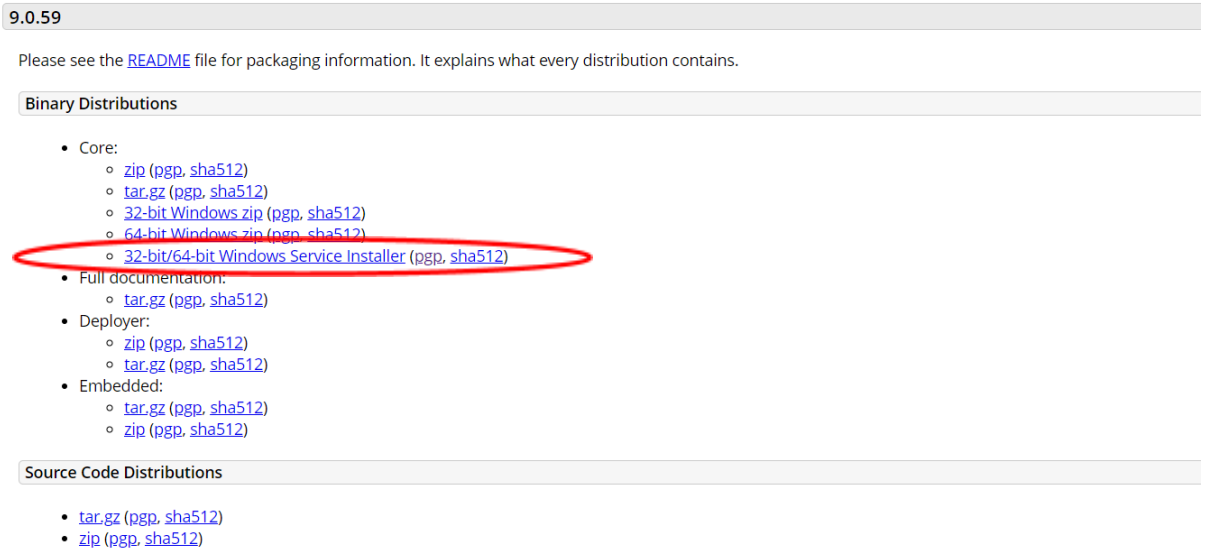


Fig 1: Apache Tomcat Home Page

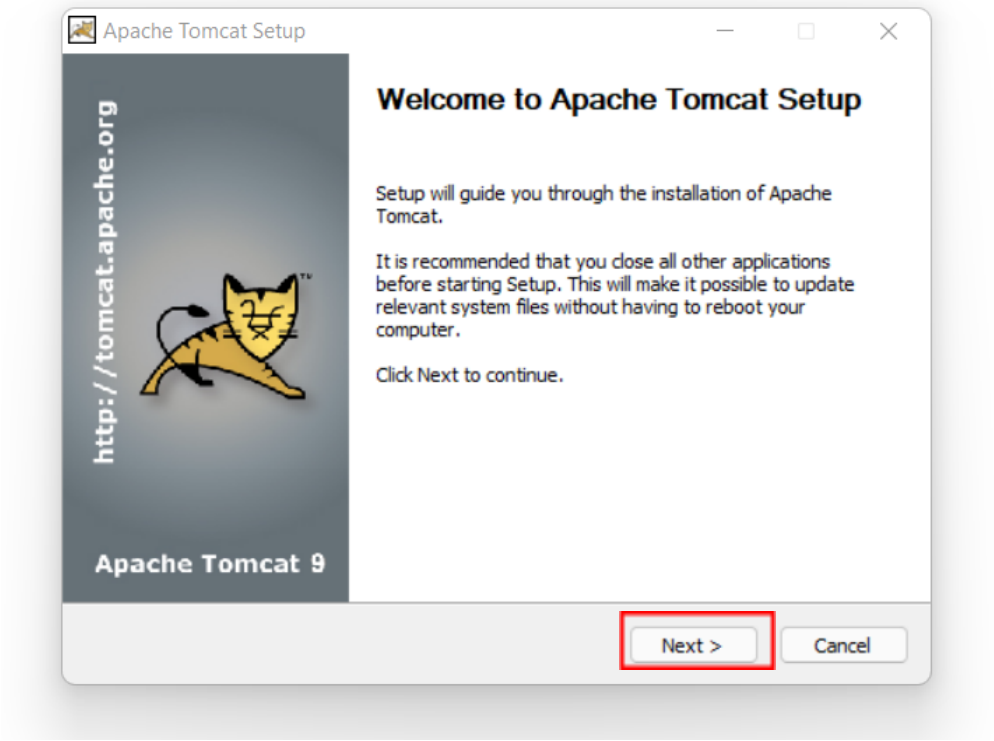
Step 2: In this you will find many version of tomcat in Download section shown below



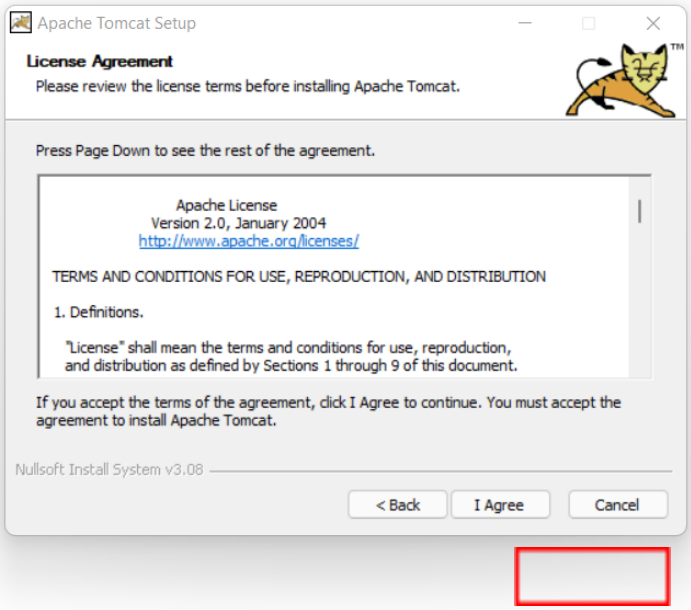
Step 3: Here we are going with version 9,once you click on that you will get the page shown below.
Then click on 32-bit/64-bit windows service installer



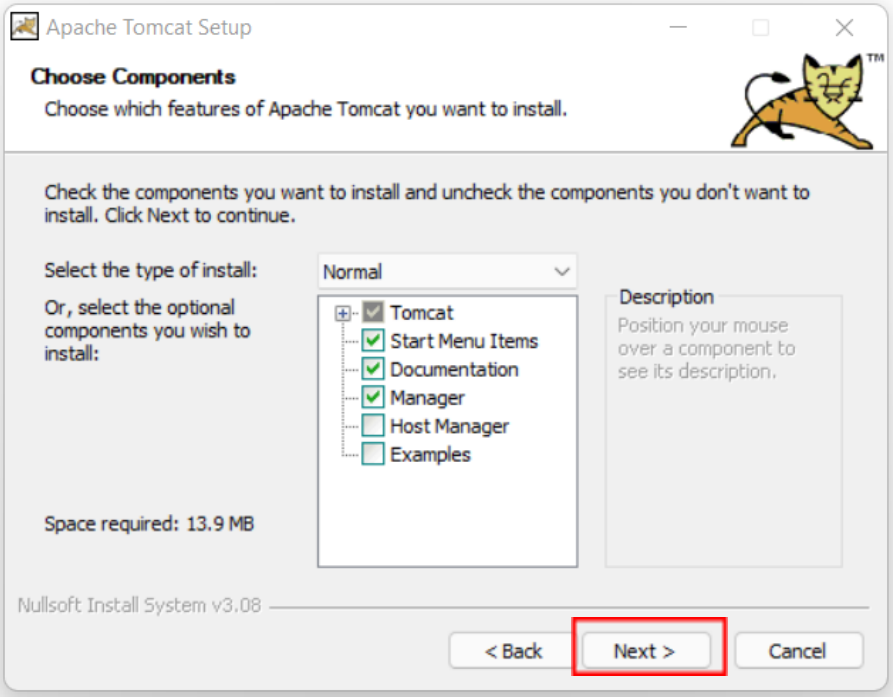
Step 4: Once the tomcat is downloaded, to install click on tomcat, you will get the page below click on next



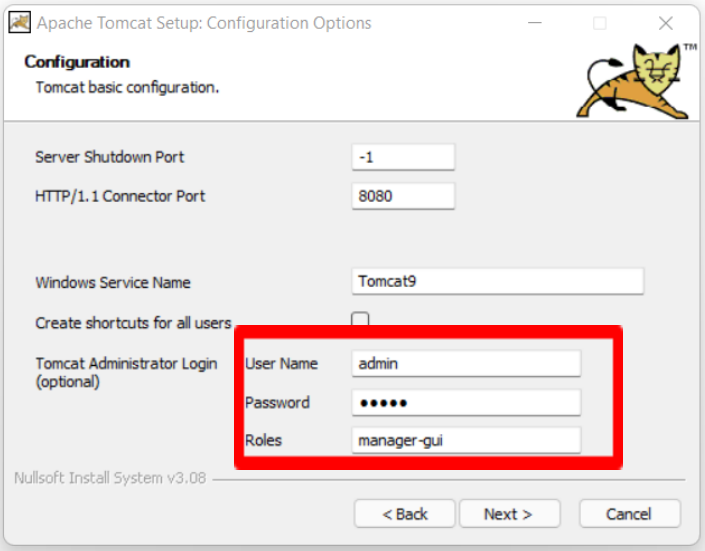
Step 5: Next click on I Agree



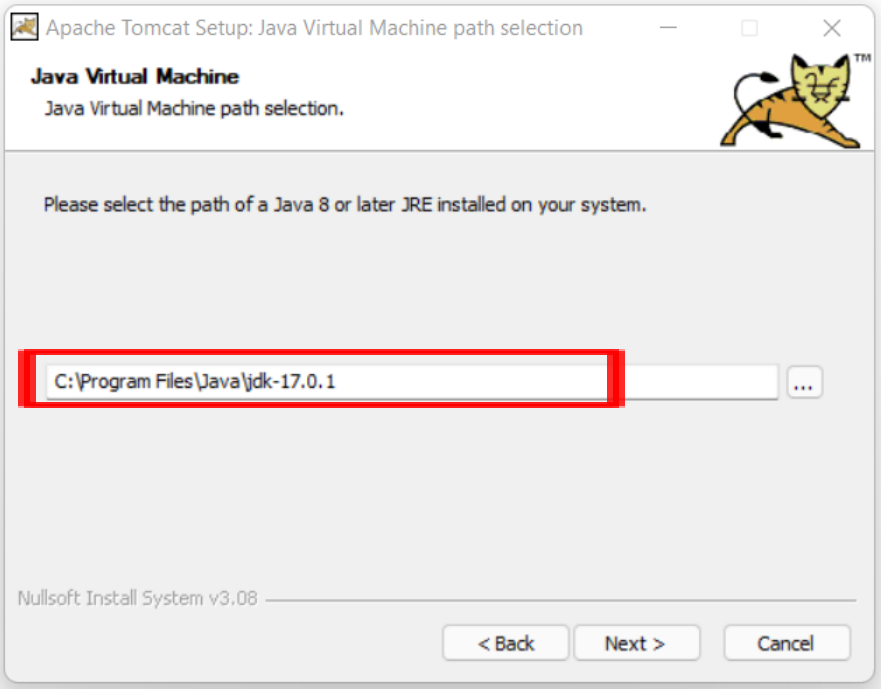
Step 6: Click on next Below



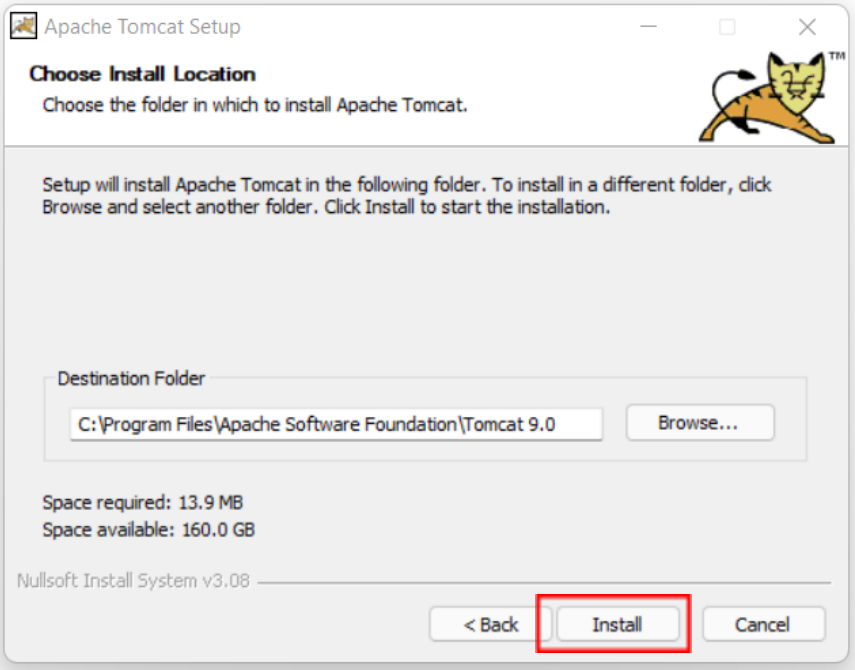
Step 7: Next provide username and password as shown below and click on next



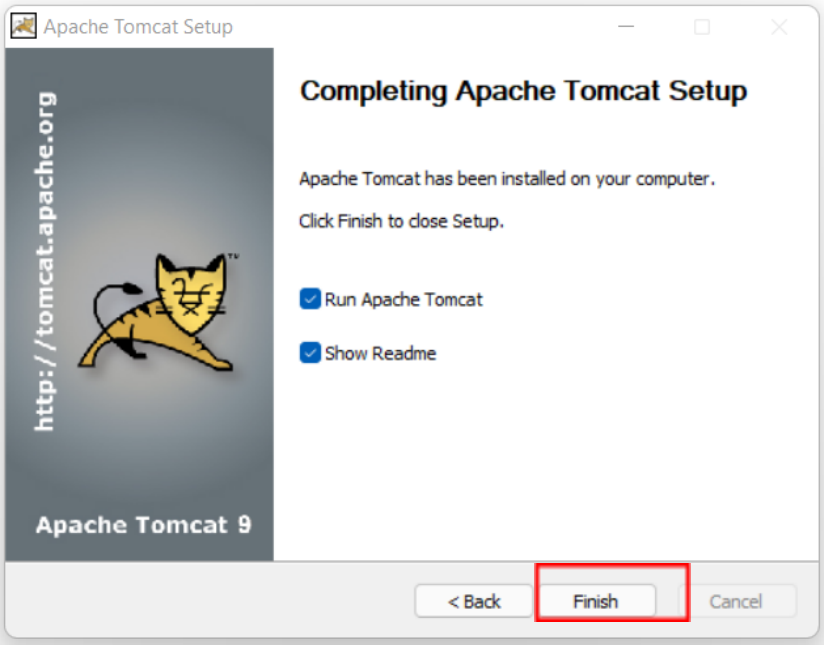
Step 8: Here in the below path select the correct JDK path on your system and click on next, else you will get an error message.



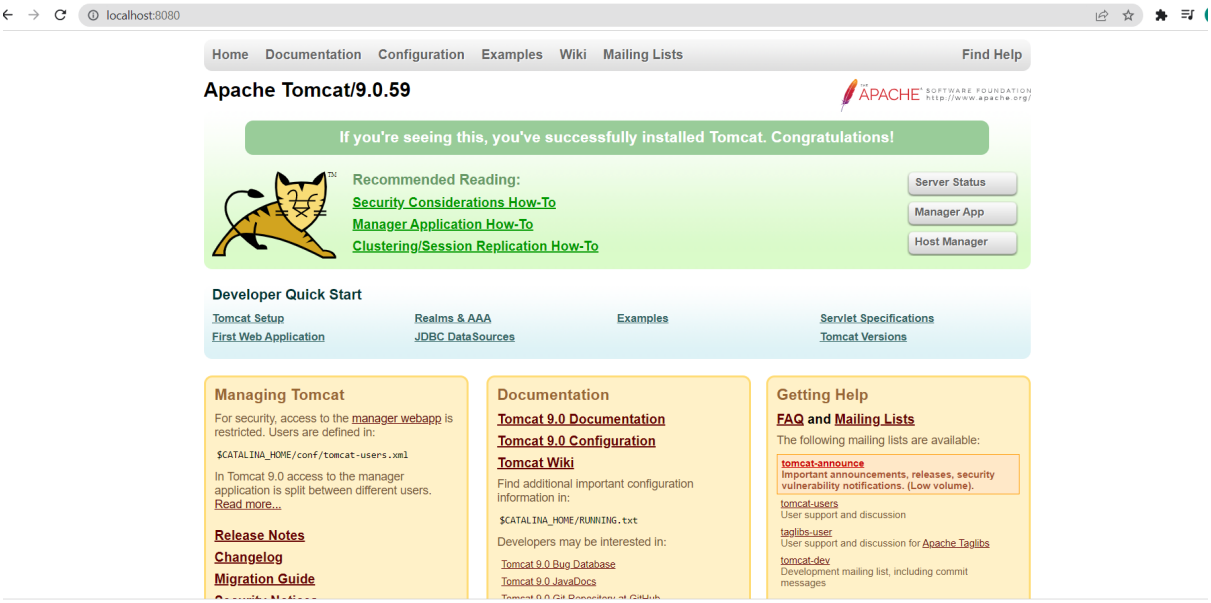
Step 9: Next Click on Install below



Step 10: Last step click on finish, Tomcat is been installed on your computer

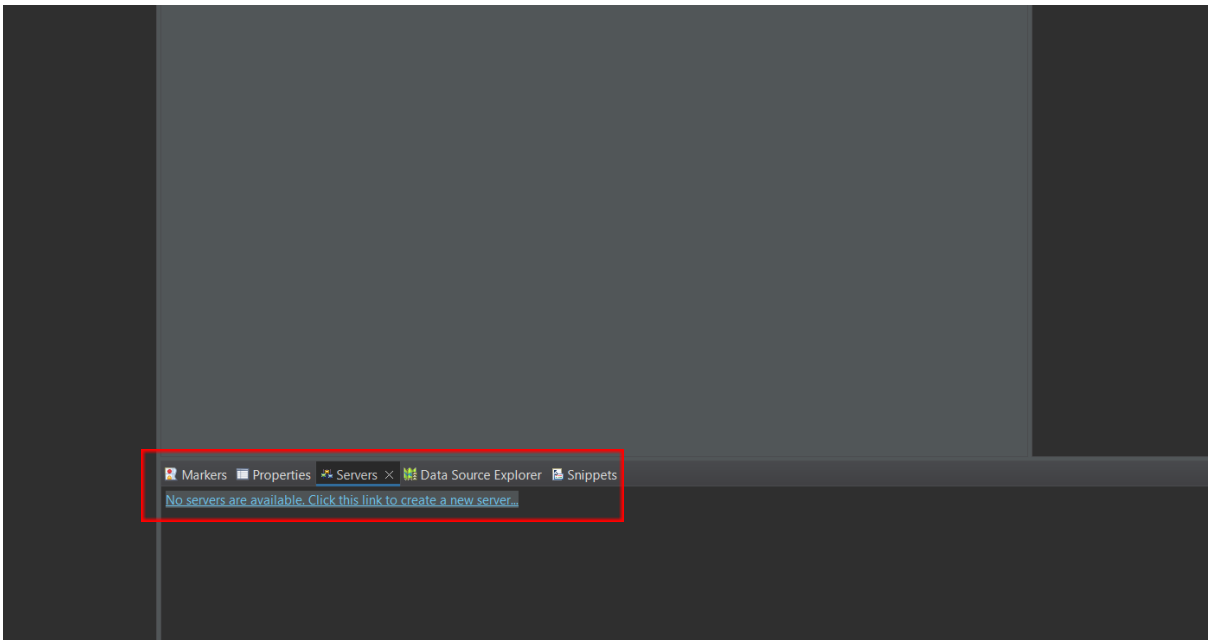


Step 11: To check whether it is installed successfully, go to browser and type localhost:8080 you will get page shown below then it

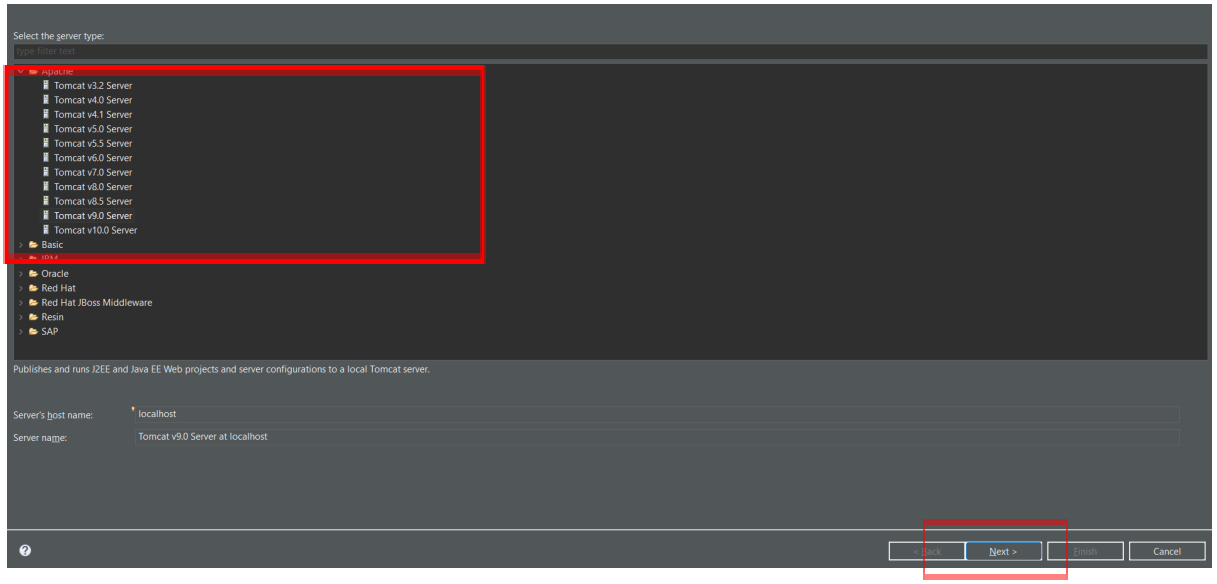


Connecting Eclipse with Tomcat:
Before we connect tomcat to eclipse, first we need to stop the tomcat server then eclipse should be java EE perspective

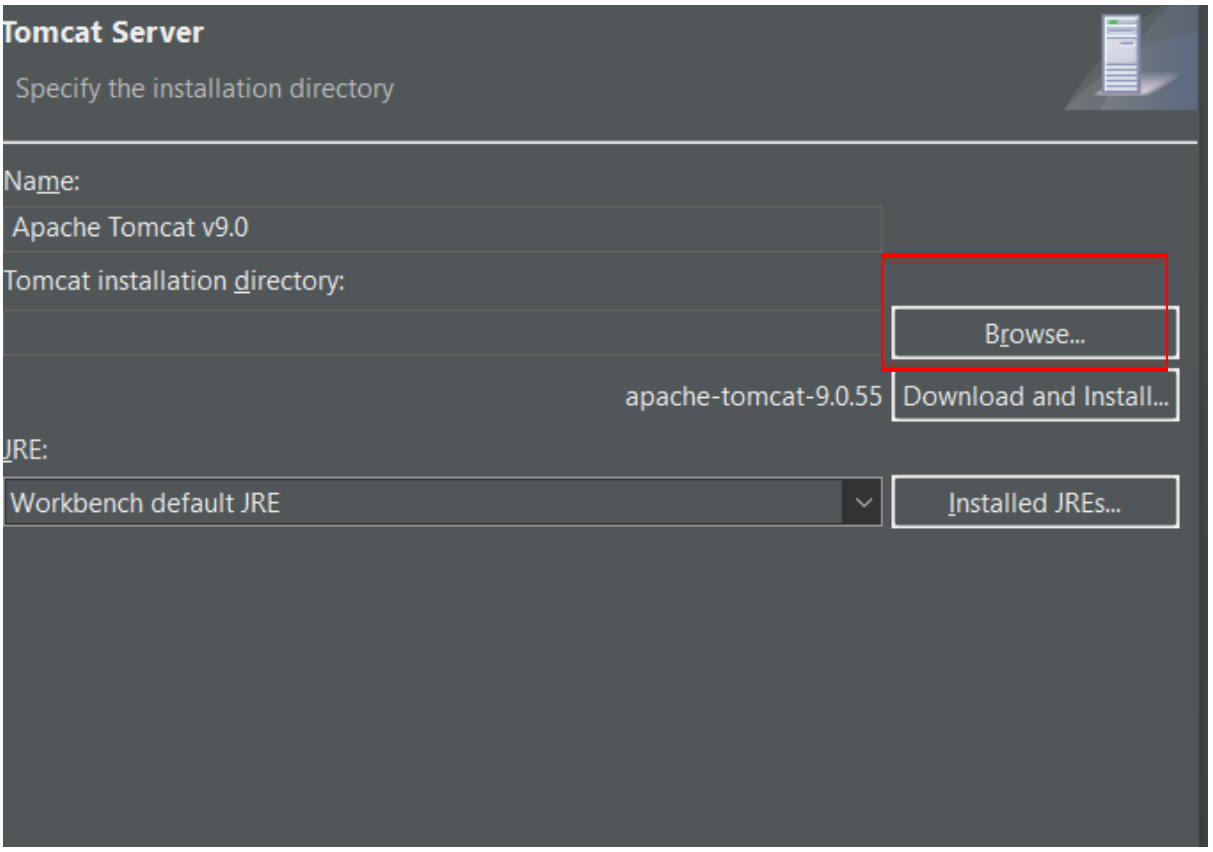
Step 1: Now Eclipse is in Java EE perspective, Here go to server section and click on the link



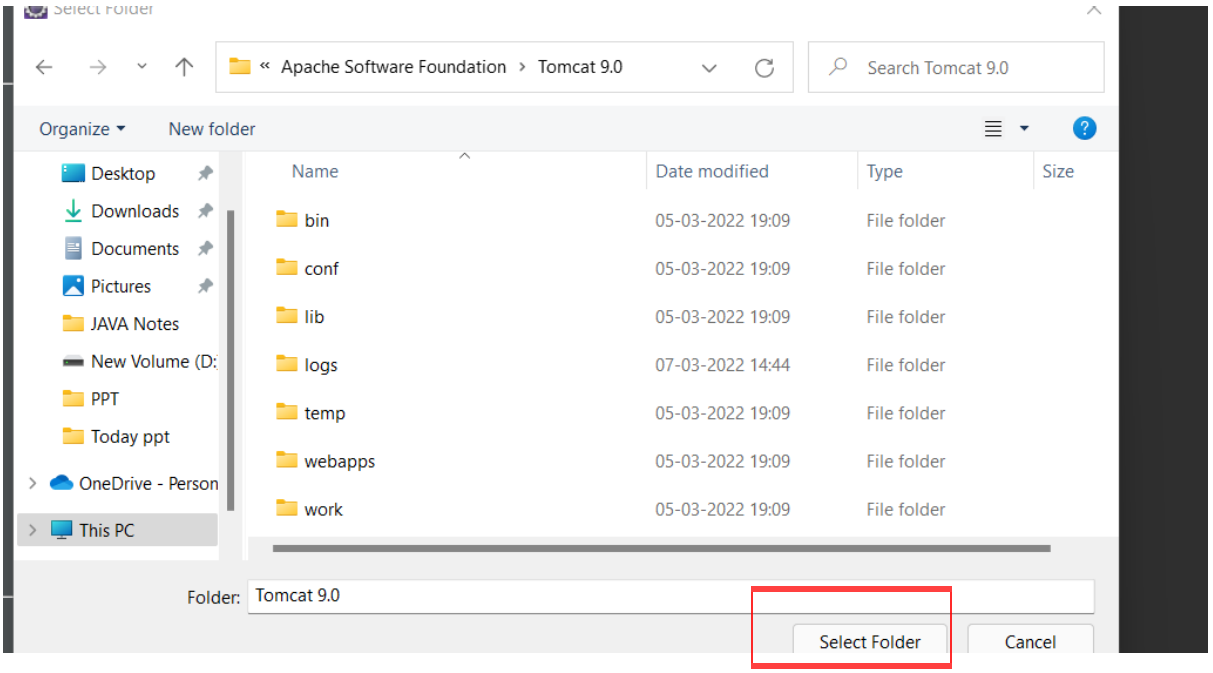
Step 2: Here select the version of tomcat that you have downloaded, here we are going with version 9 and then click on next



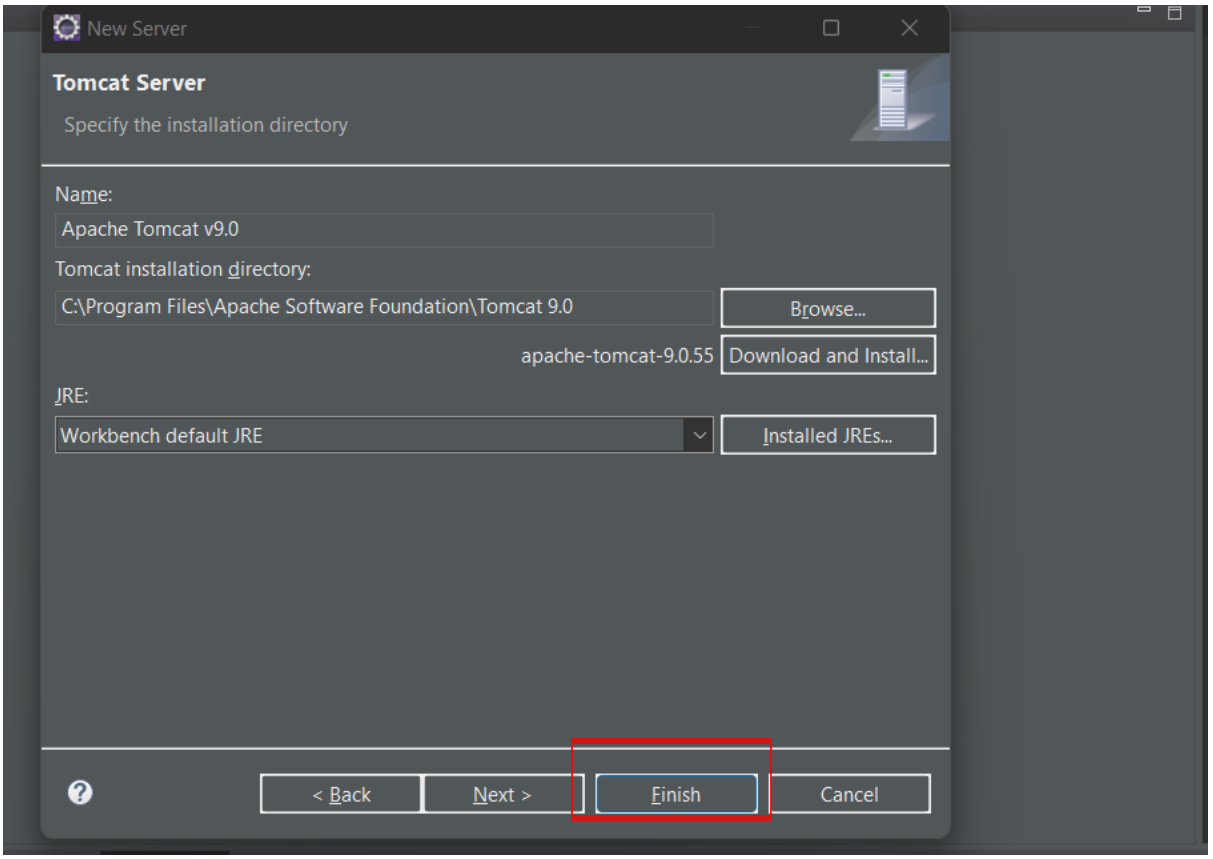
Step 3: Here browse the path where tomcat is located



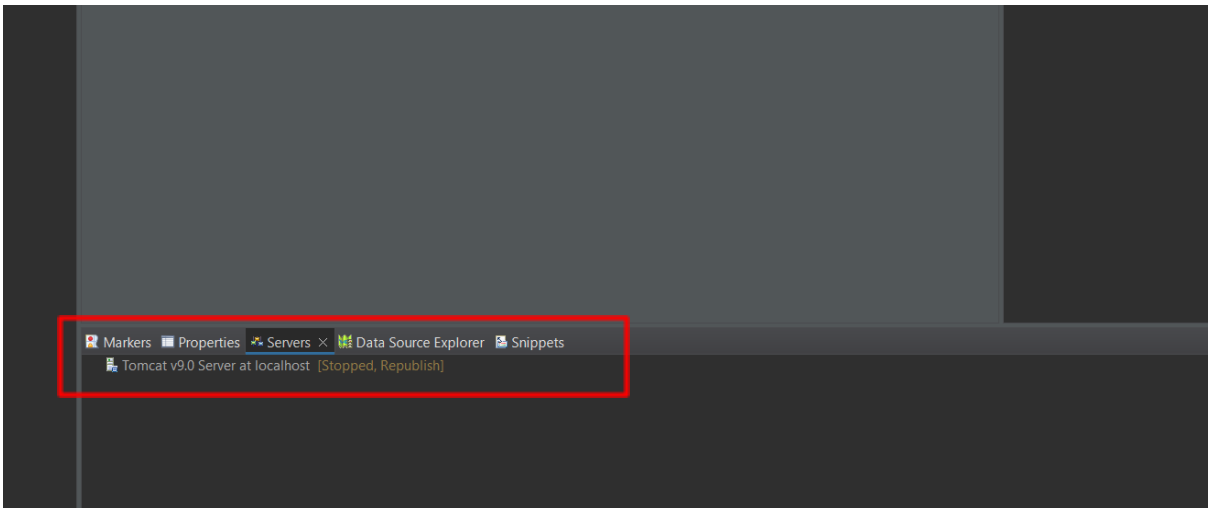
Step 4: After browsing click on select folder

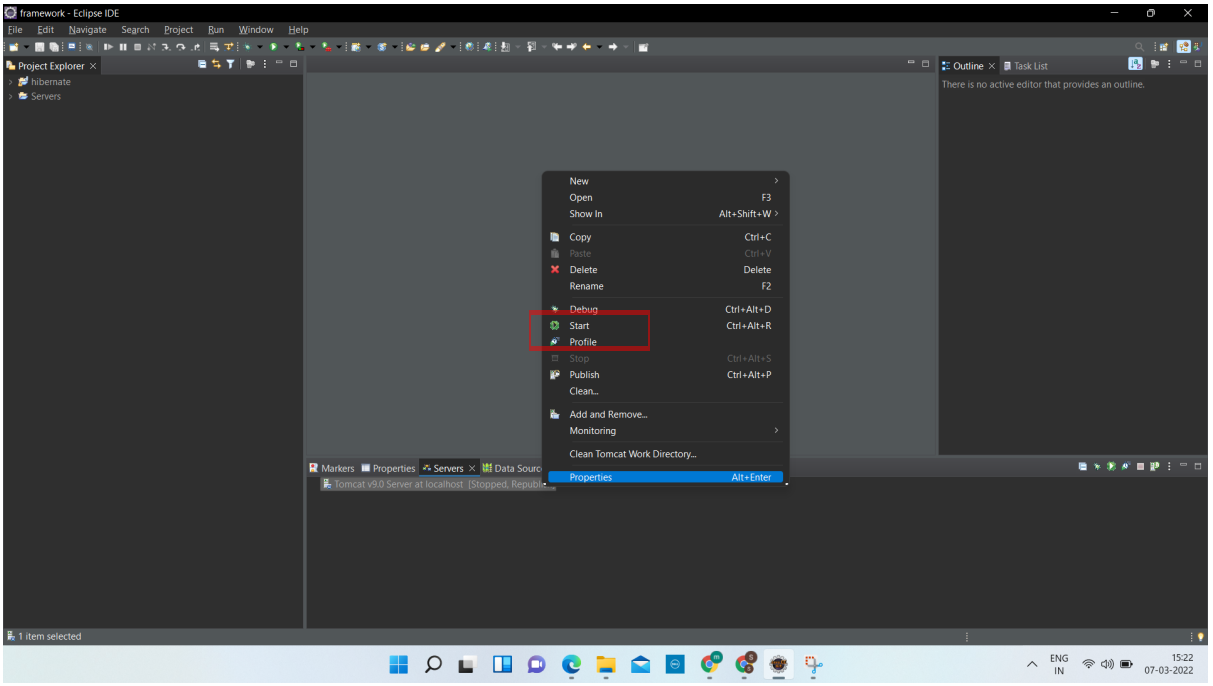


Step 5: Next click on Finish



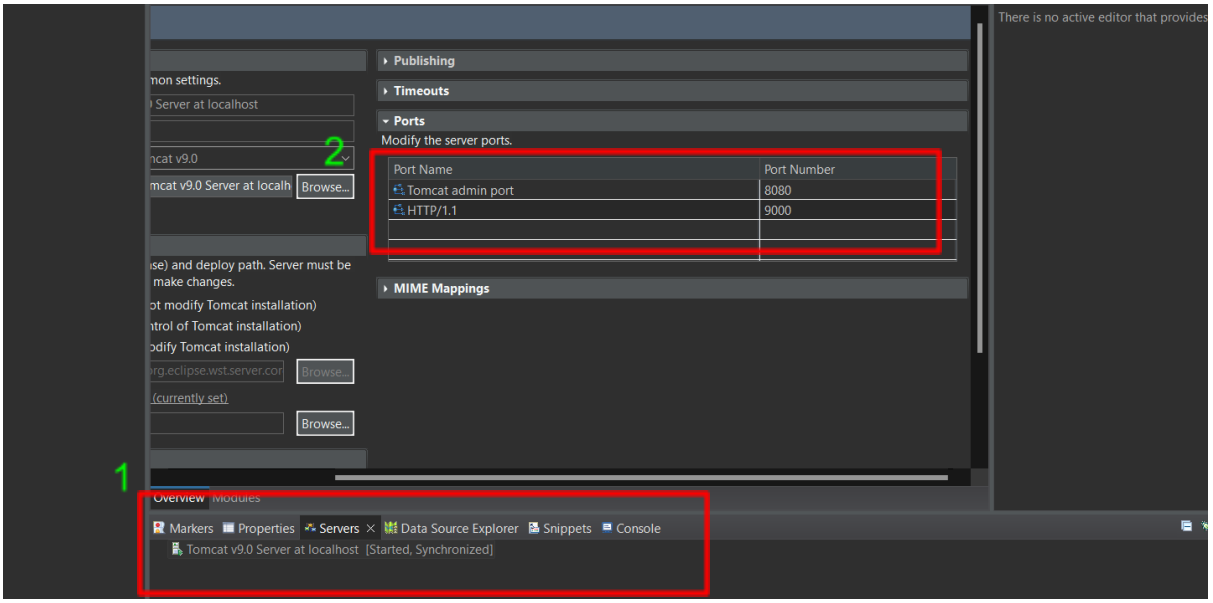
Step 6: After you click on finish, the window below appears. It has stopped now. To start the server right click on the server and select start server



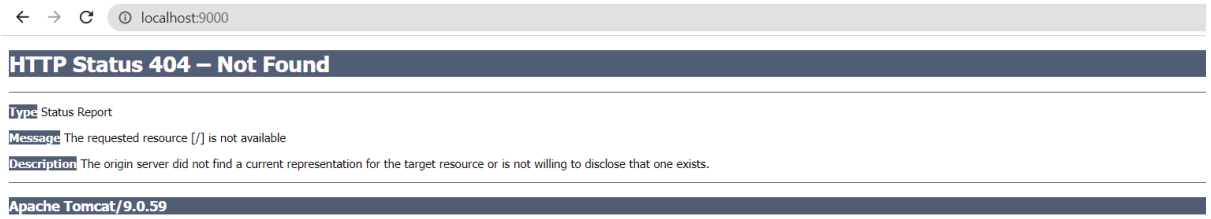


Step 7: When you click on start sometimes it will show an error message saying one or more ports are invalid to rectify that set the port numbers as shown below.

- click on the link then set the port number



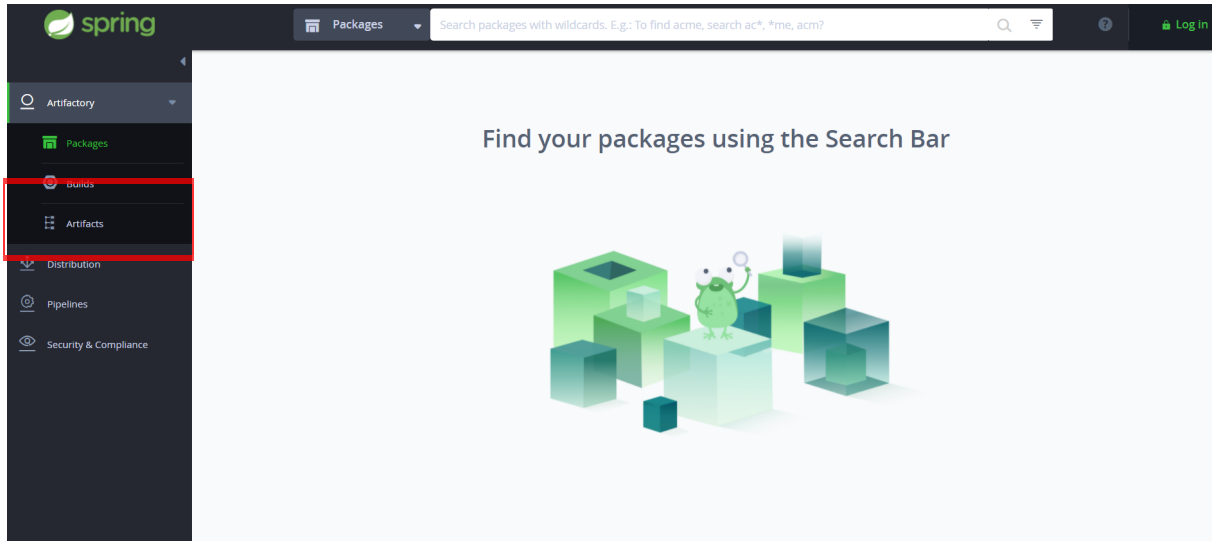
Step 8: To just verify whether the server is running successfully, go to browser then type localhost:9090 / localhost:8080 you will get the window as shown below it means server is running



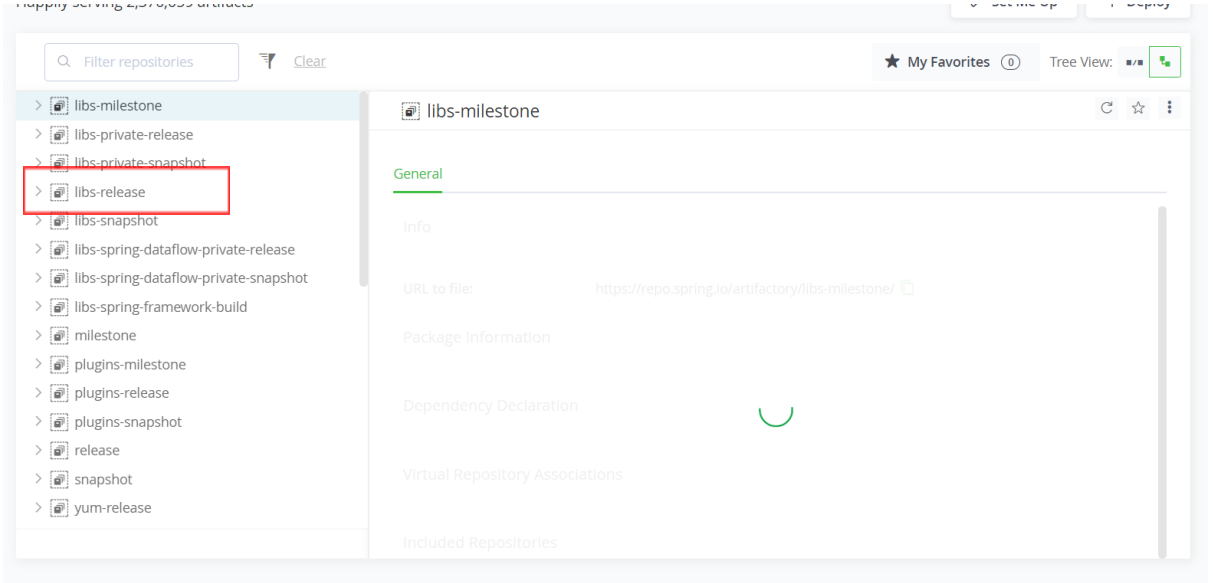
Now we are successful in connecting eclipse to tomcat server

Setting up SPRING JARs to Eclipse

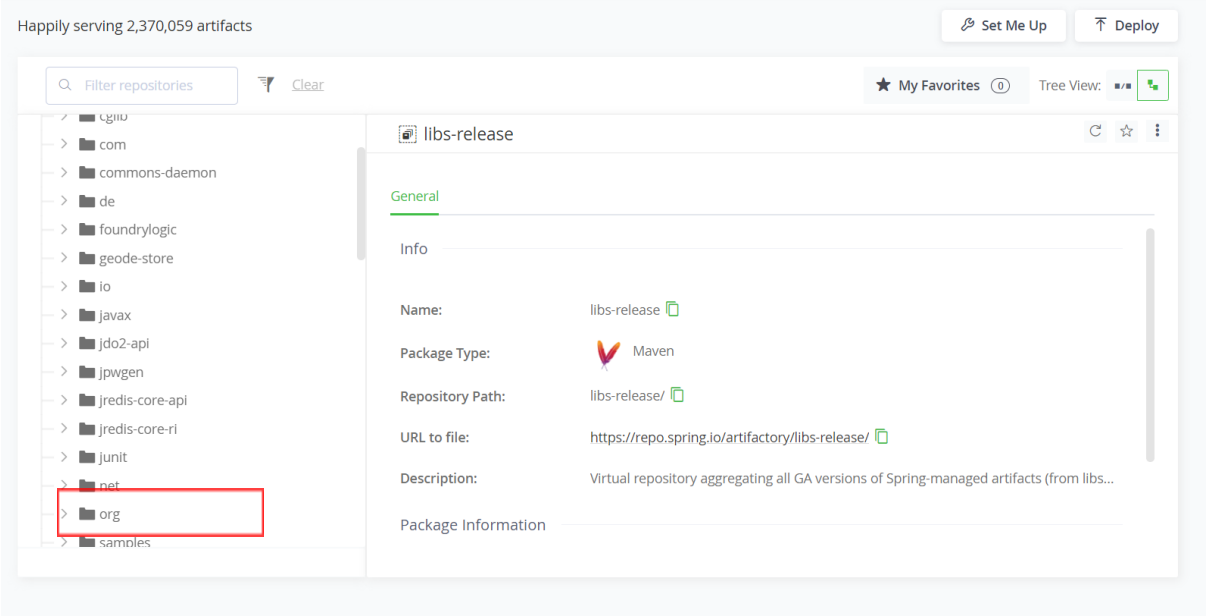
Step 1: Go to repo.spring.io to download the jar files this will redirect to the page below. Here we need to select Artifcats
https://repo.spring.io/ui/



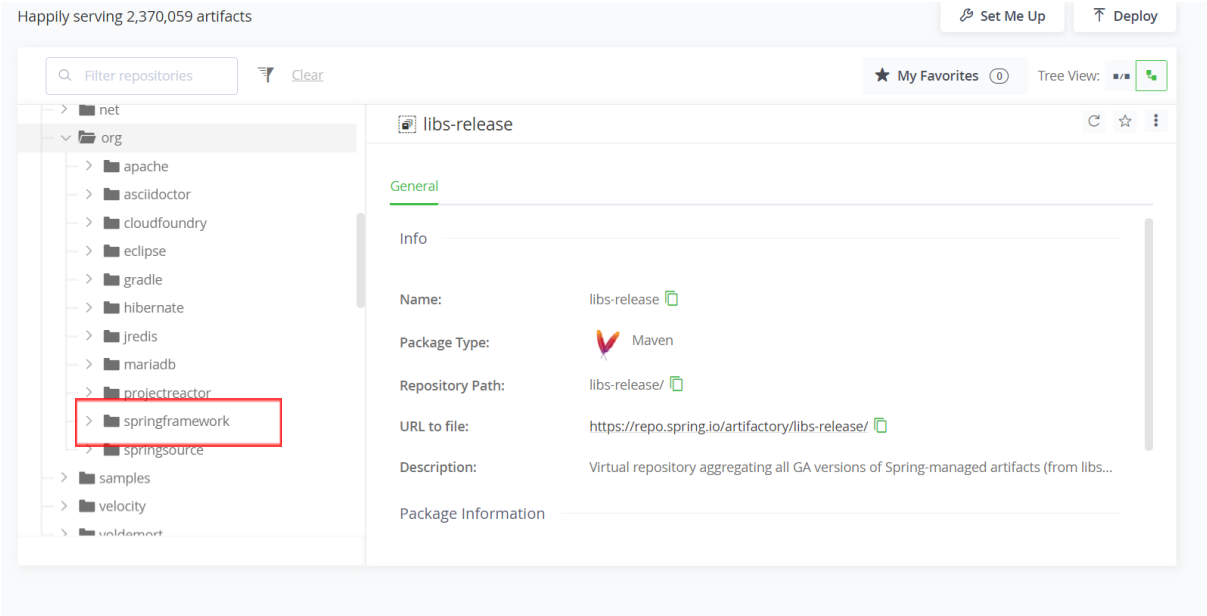
Step 2: Once you click on artifacts you will get the page below, here you need to click on the drop down of libs-release



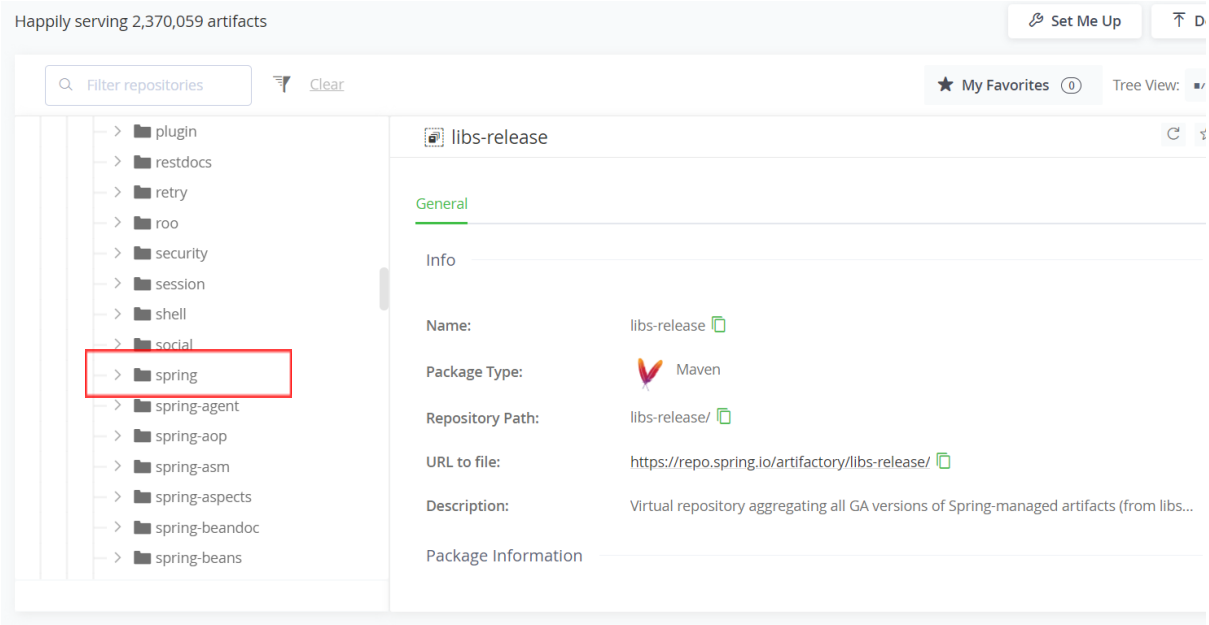
Step 3: Once you click on that you will get so many options, now you need to click on org dropdown



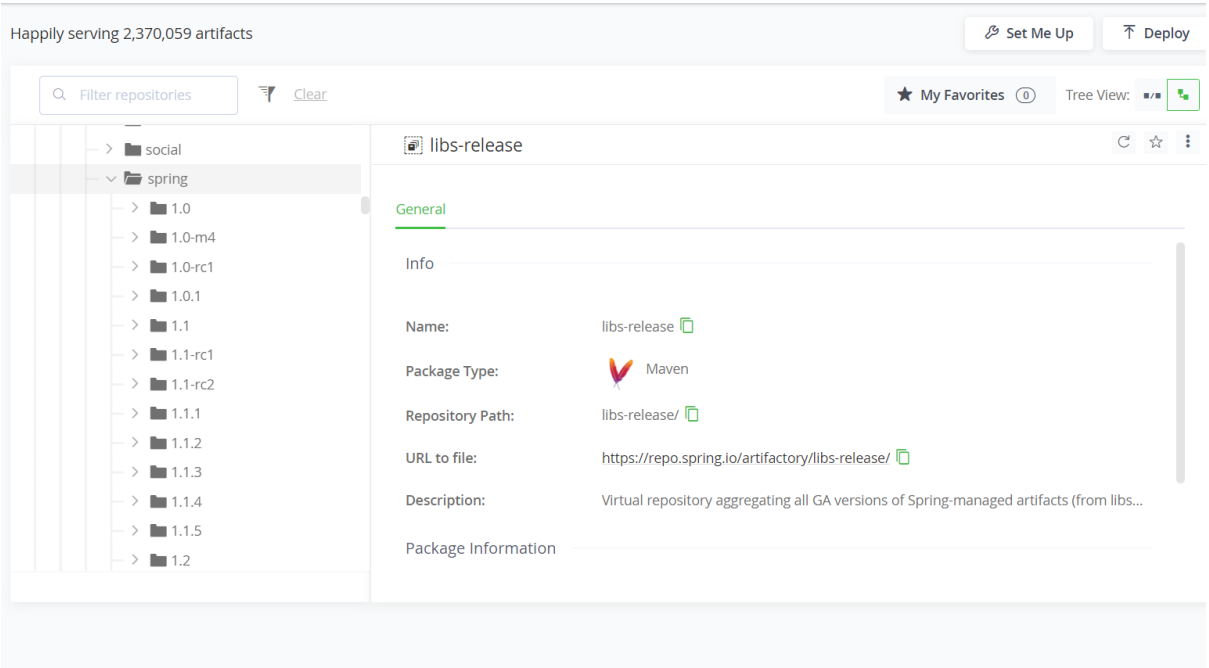
Step 4: Now you need to click on drop down of springframework



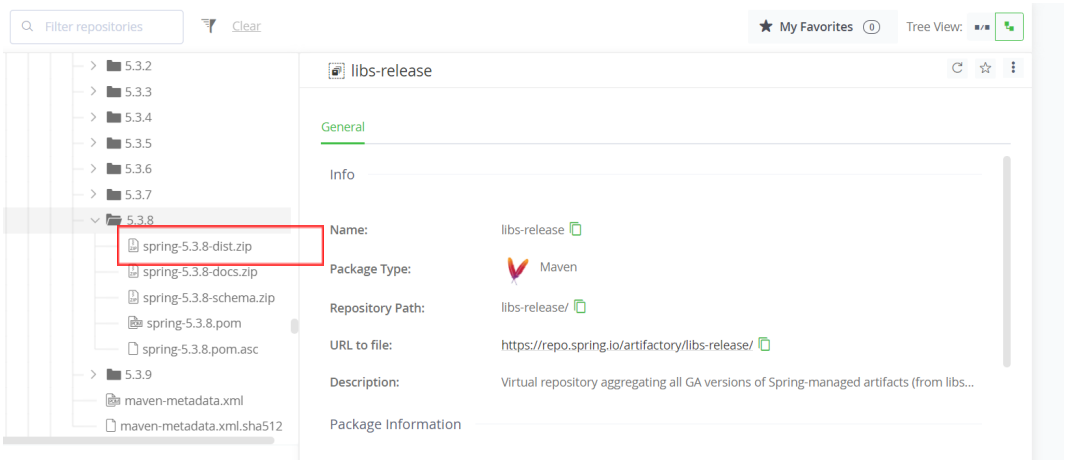
Step 5: Here you will get many options, now you need to select the drop down of spring



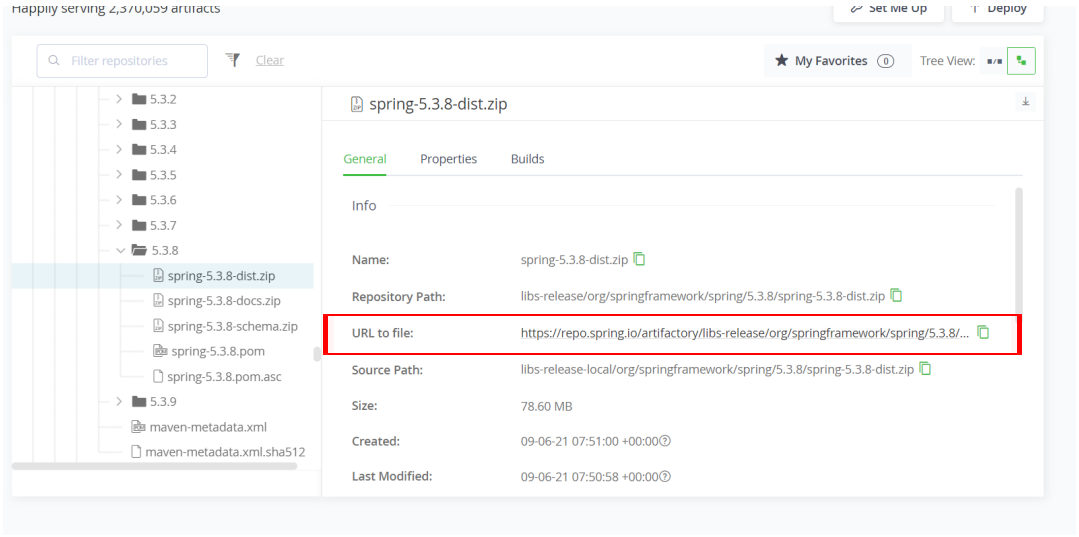
Step 6: When you click on that there are different versions you will get, go to the latest version. Here we are going with 5.3.8 version



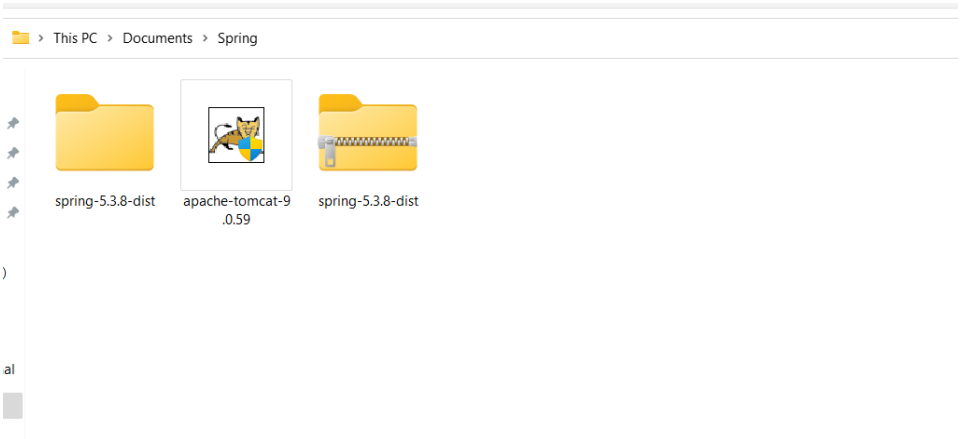
Step 7: Here you need to select first option



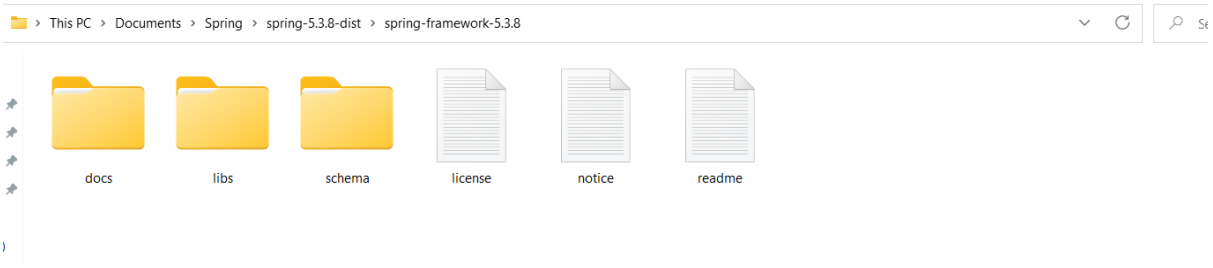
Step 8: Here you need to click on link of url to file shown below it will start downloading the jar files

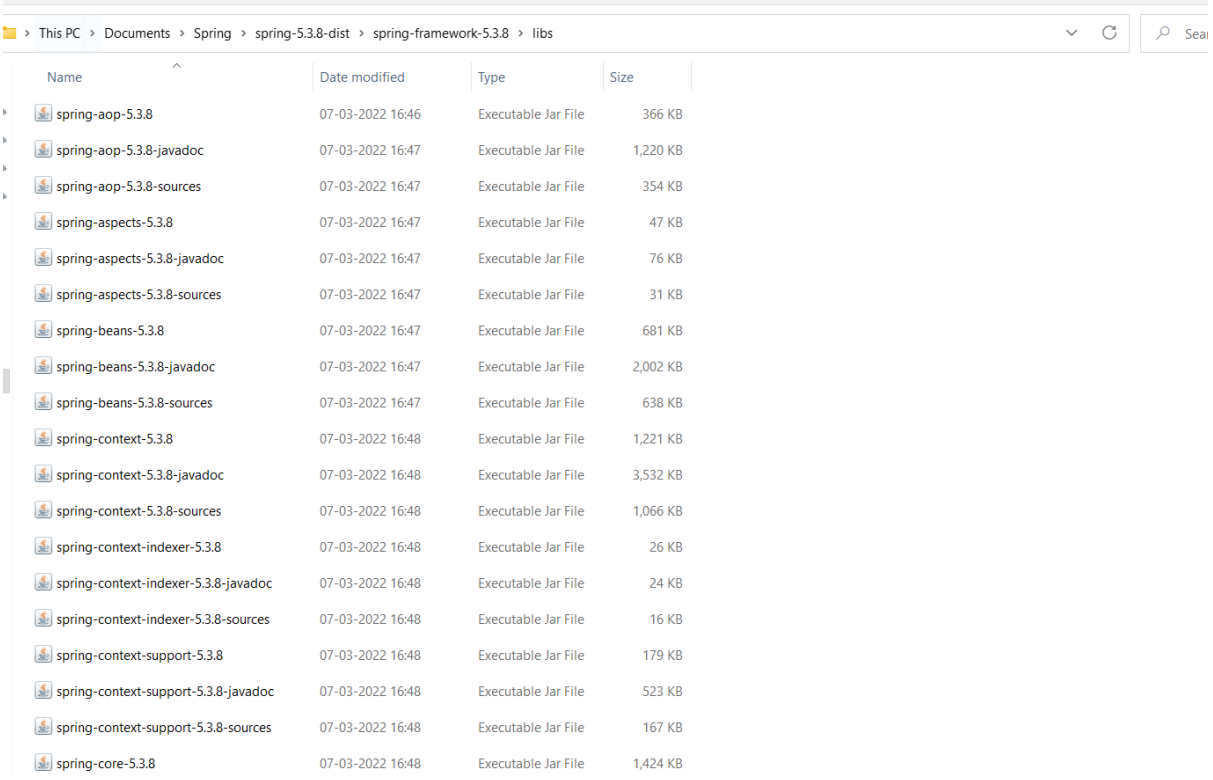


Step 9: Open the folder where the extracted zip file is there

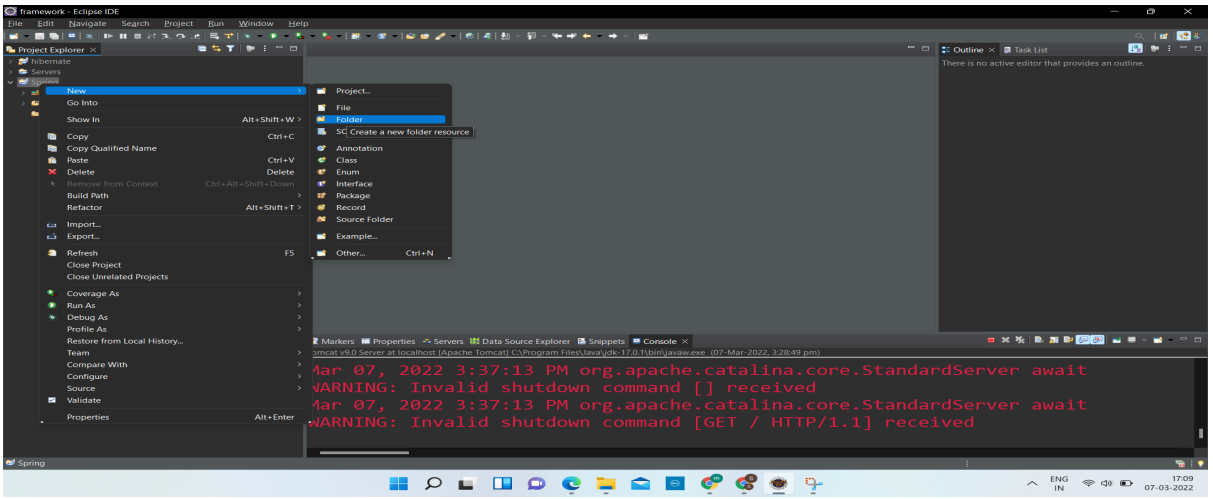


Step 10: if click on that you will libs folder click on that you will find all the jar files



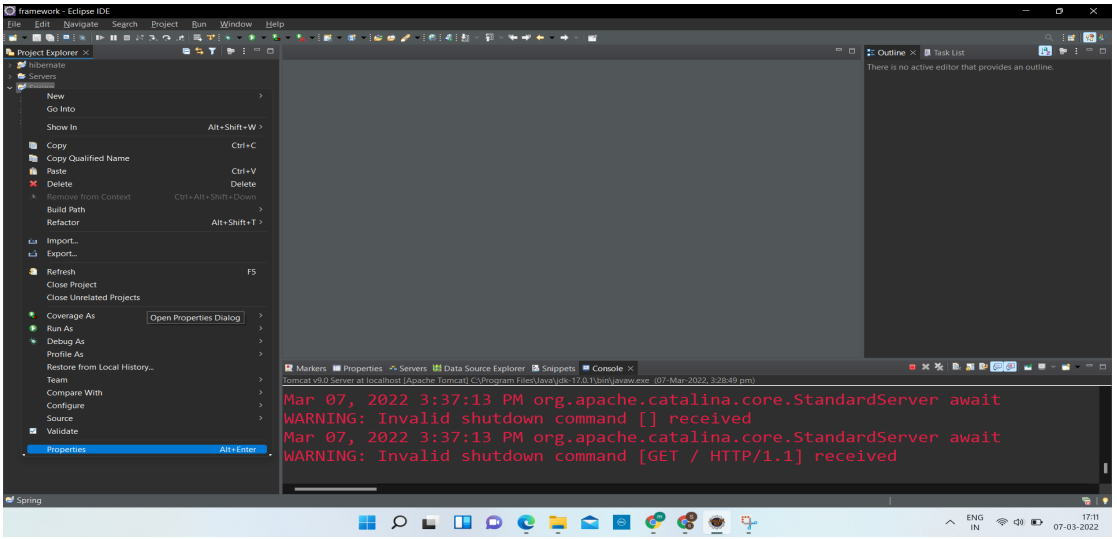


Step 11: Go to eclipse create new project then create a folder called lib

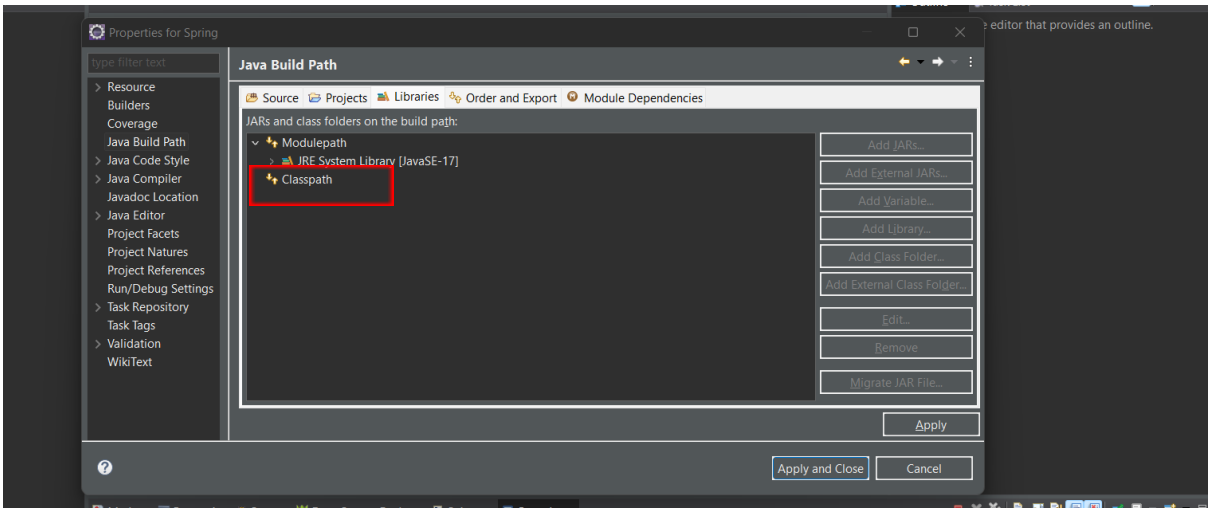


Step 12: copy all the jar files and paste it in jar folder

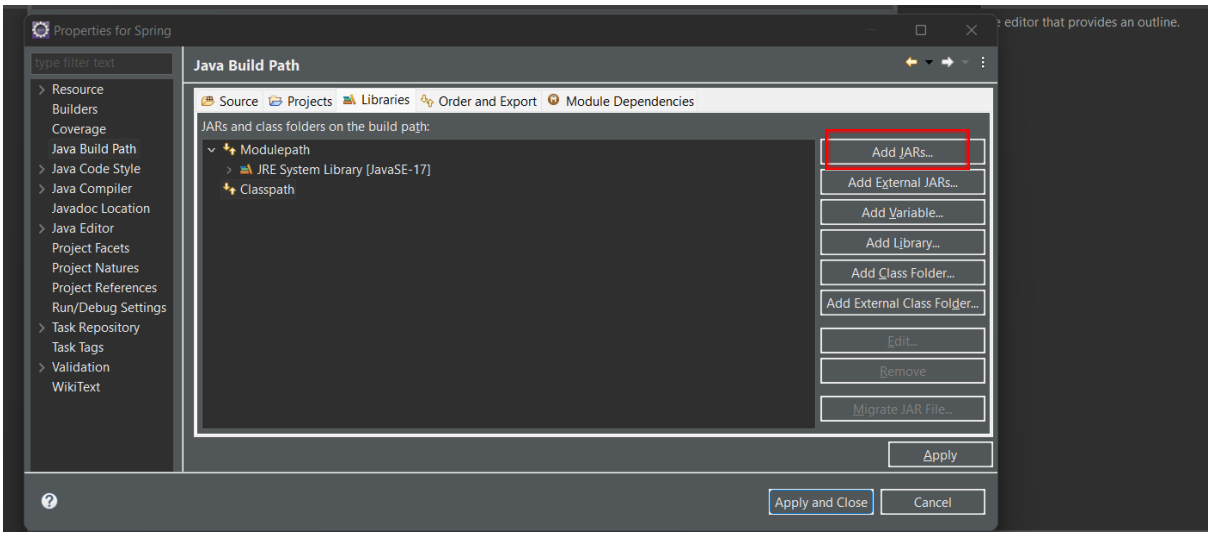
Step 13: Now right click on the project folder and go to properties



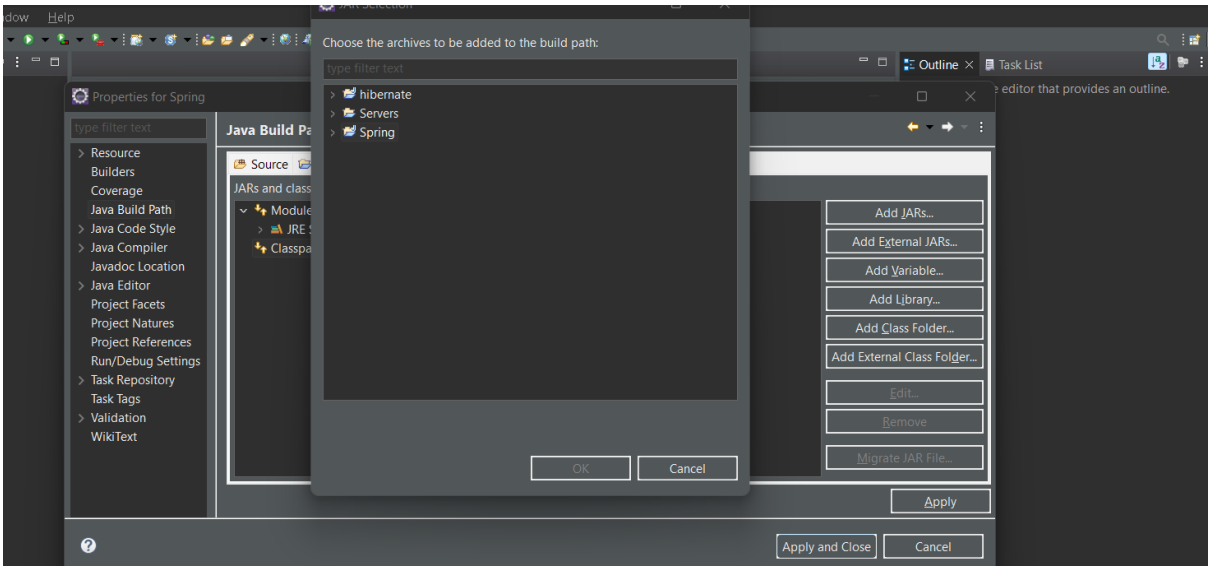
Step 14: Now you are inside the libraries, click on Classpath



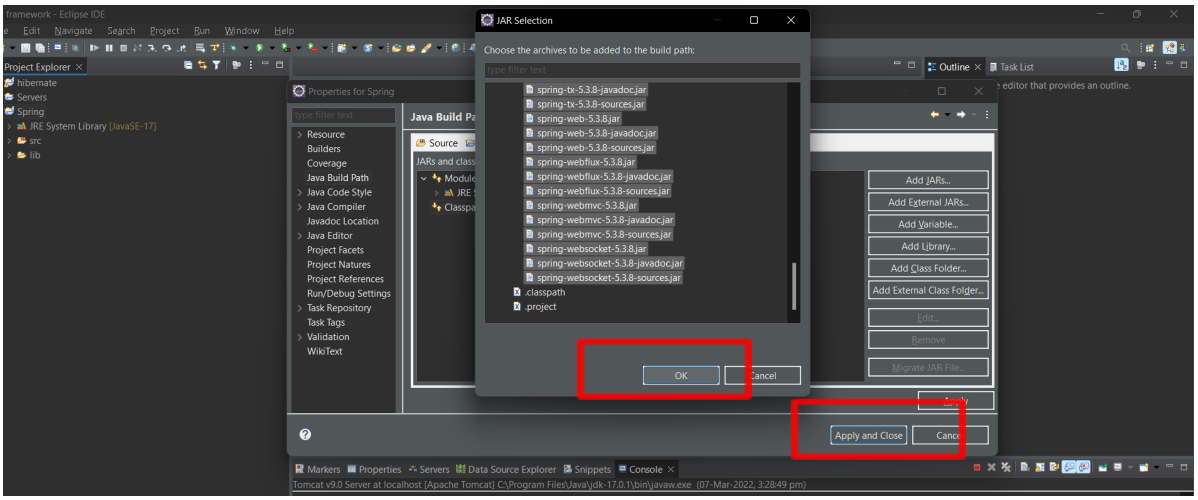
Step 15: Now click on Add JARs

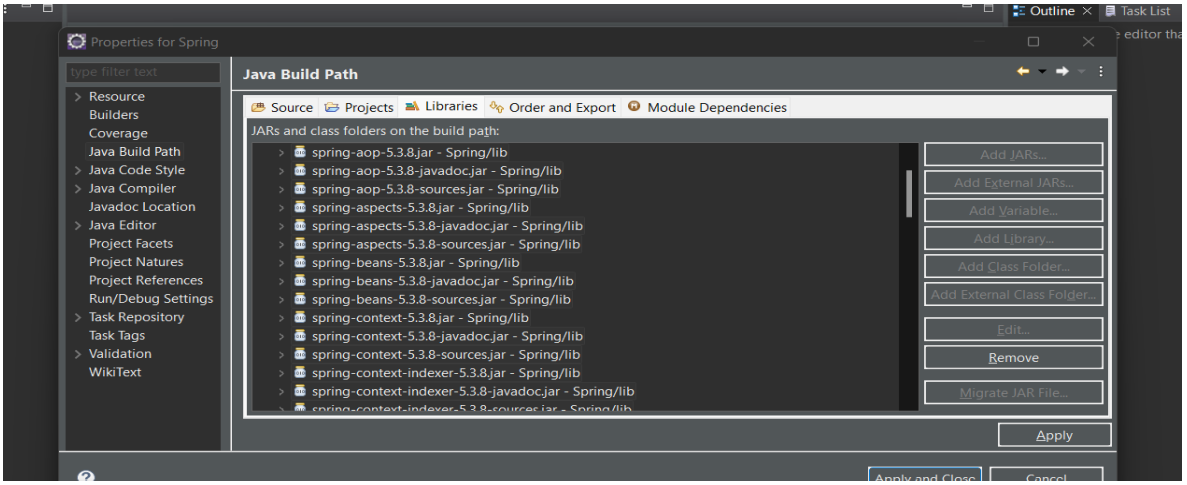


Step 16: Here click on the dropdown of the project, next click on lib folder where you have added jar files



Step 17: Copy all the jar files that is available in the lib folder then click on ok, next Apply and close





Step 18: Now check is Referenced Libraries is created in the project, if it is then all the jar files is added successfully