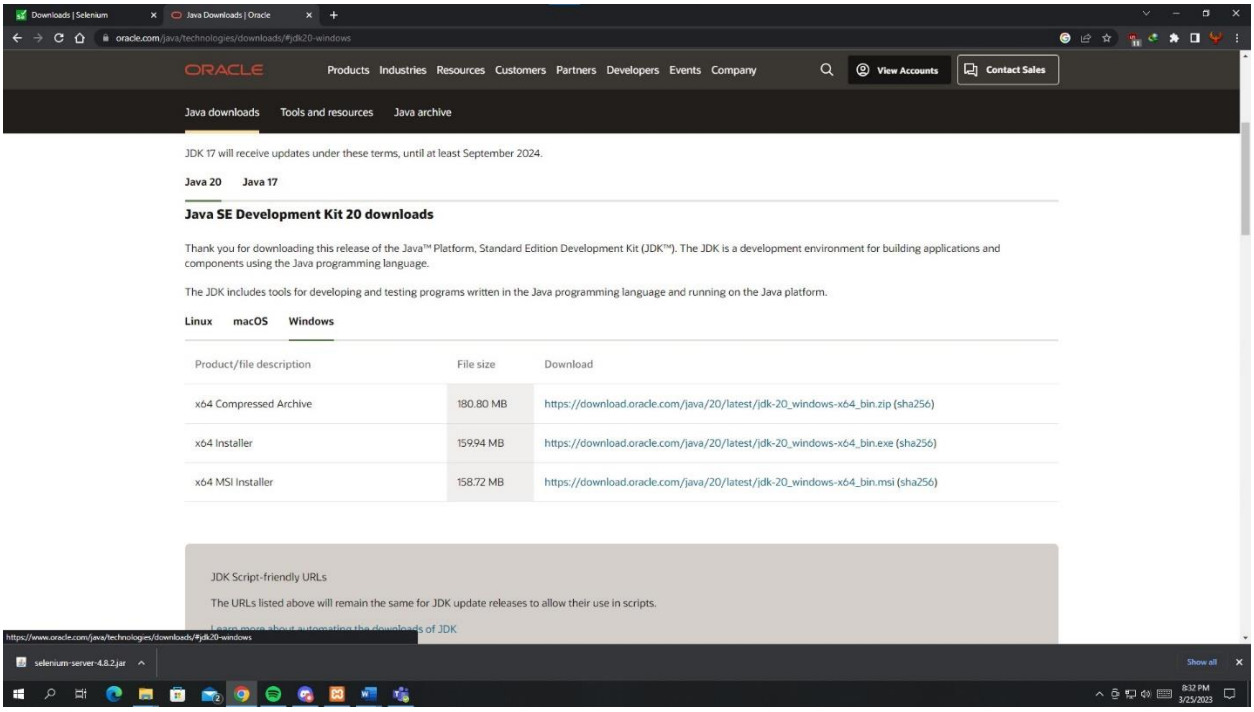
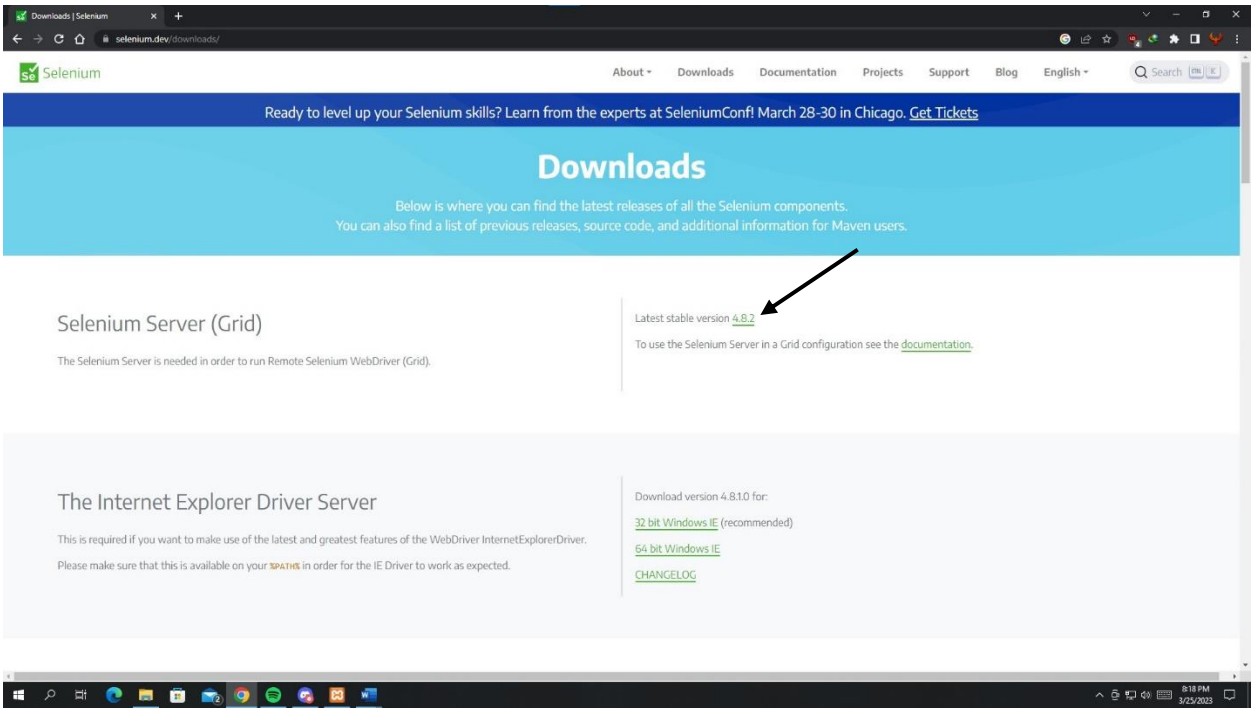
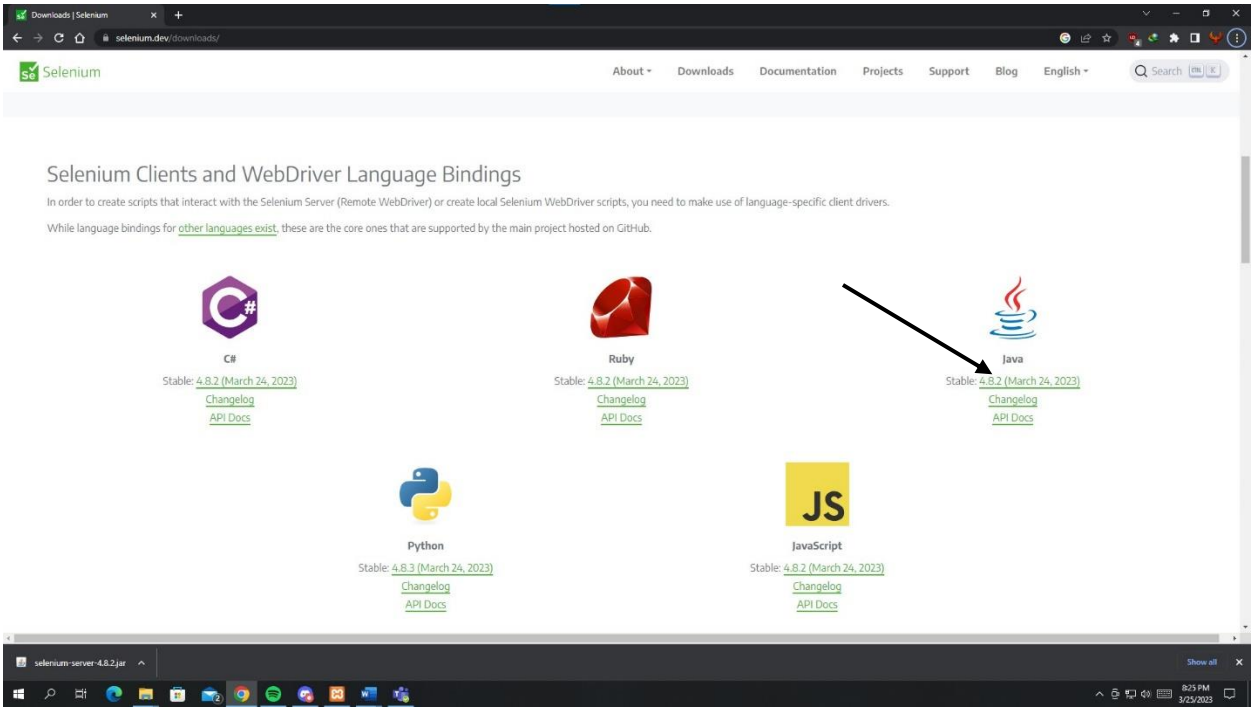
Step-1: First, we will download JDK because we will be using java for testing a program.



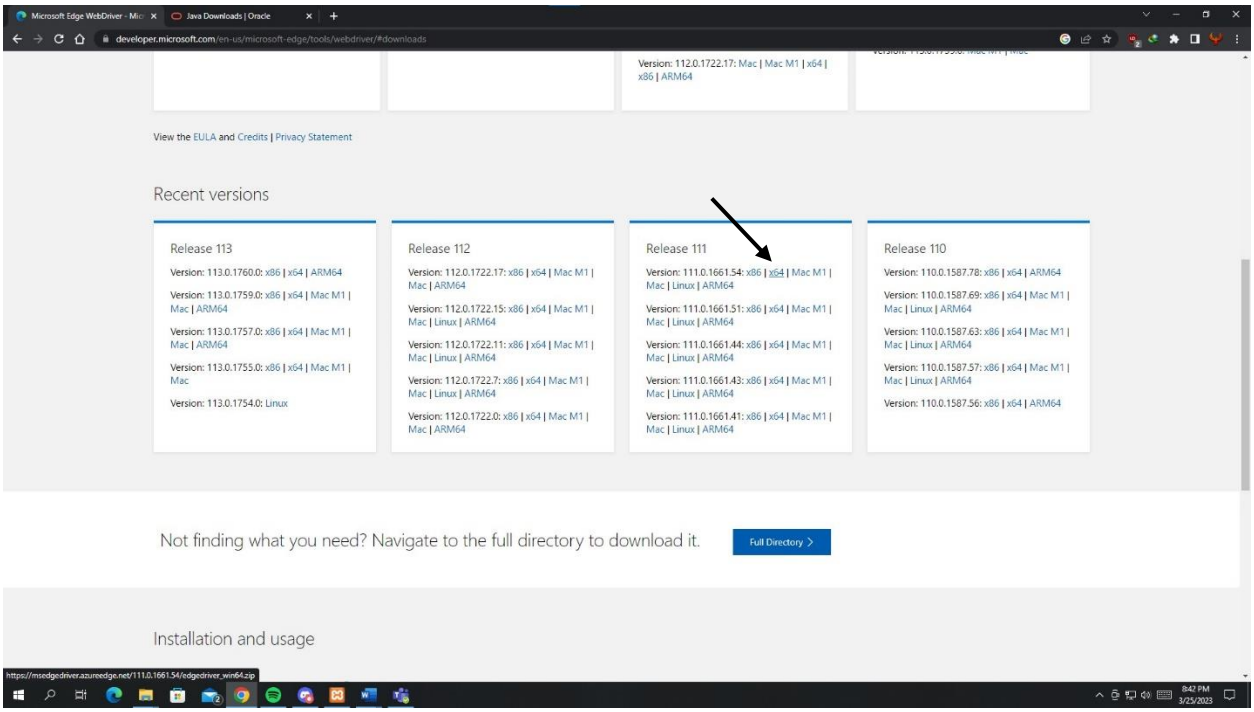
Step-2: Now, we will download Selenium server latest version. Here latest version is 4.8.2.



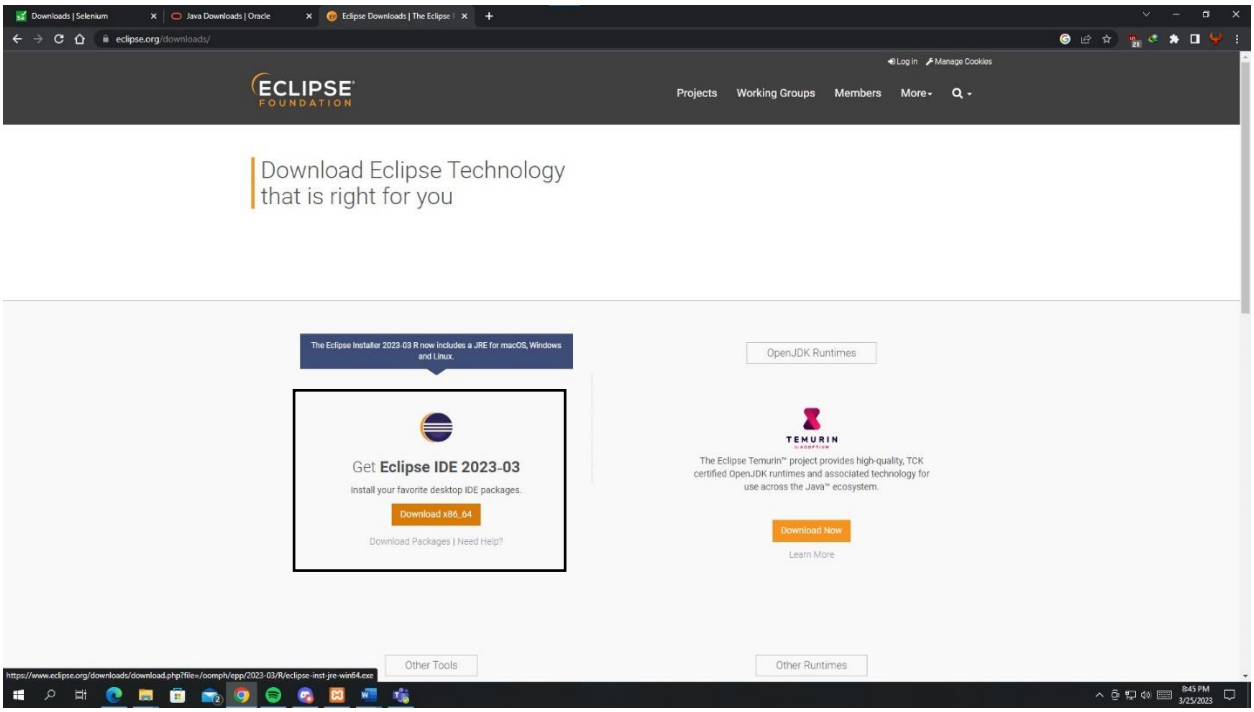
Step-3: Now, we need to download selenium client latest version (4.8.2)



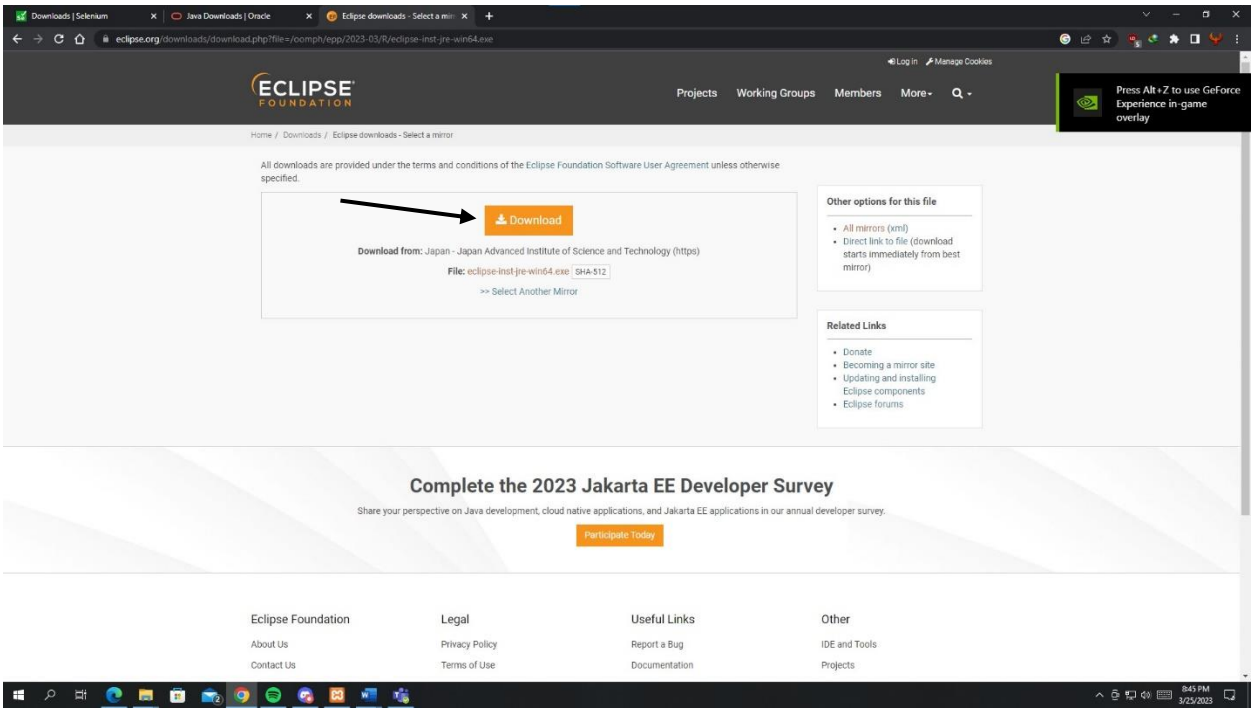
Step-4: WebDriver is an essential thing to test a website or a module of it. We will be using Microsoft Edge. So, we will download edge driver. Furthermore, the version of the browser and the system type should be matched. This PC is 64-bit. So, 64-bit of the driver will be downloaded.



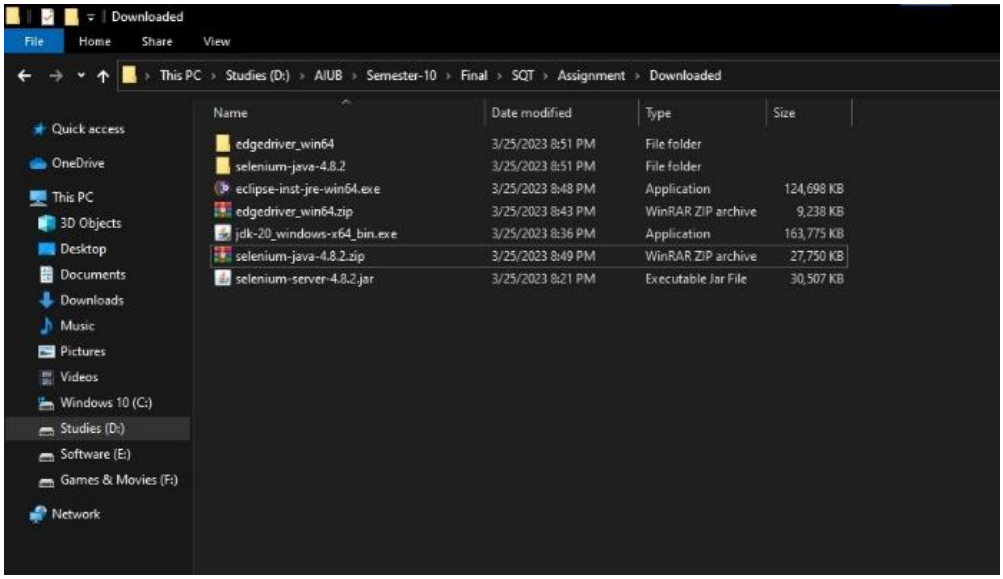
Step-5: Eclipse IDE will be needed to test our project.



Step-6: By clicking the download button, Eclipse IDE will start downloading.

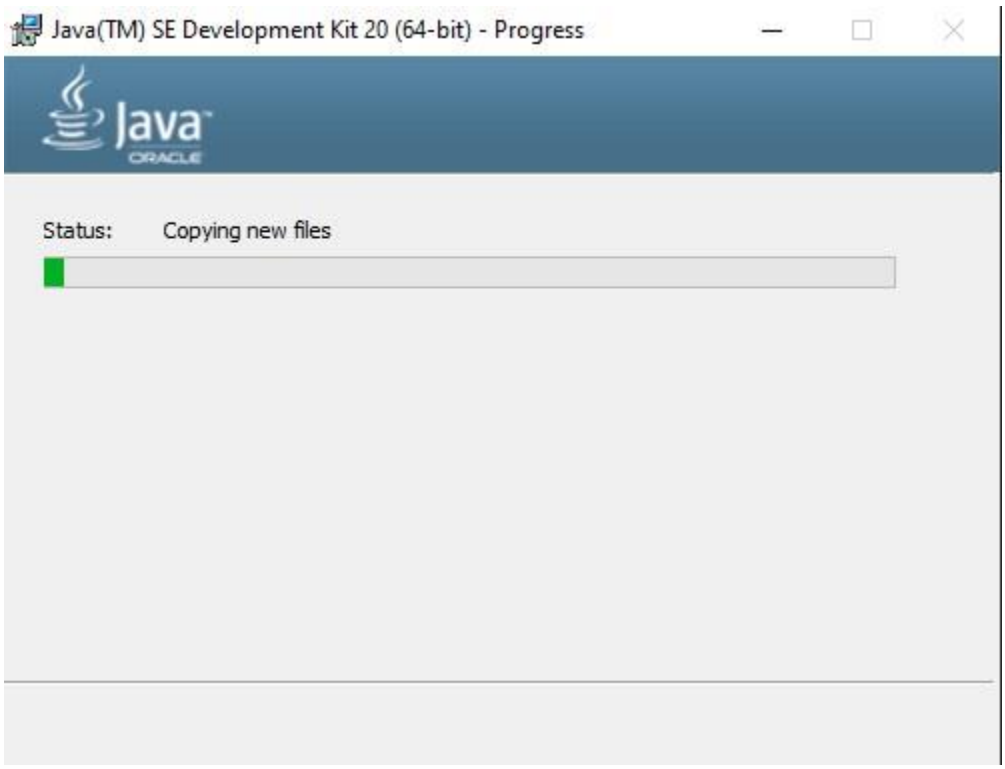


Step-7: Now we have all the necessary files. We need to extract the zip files.

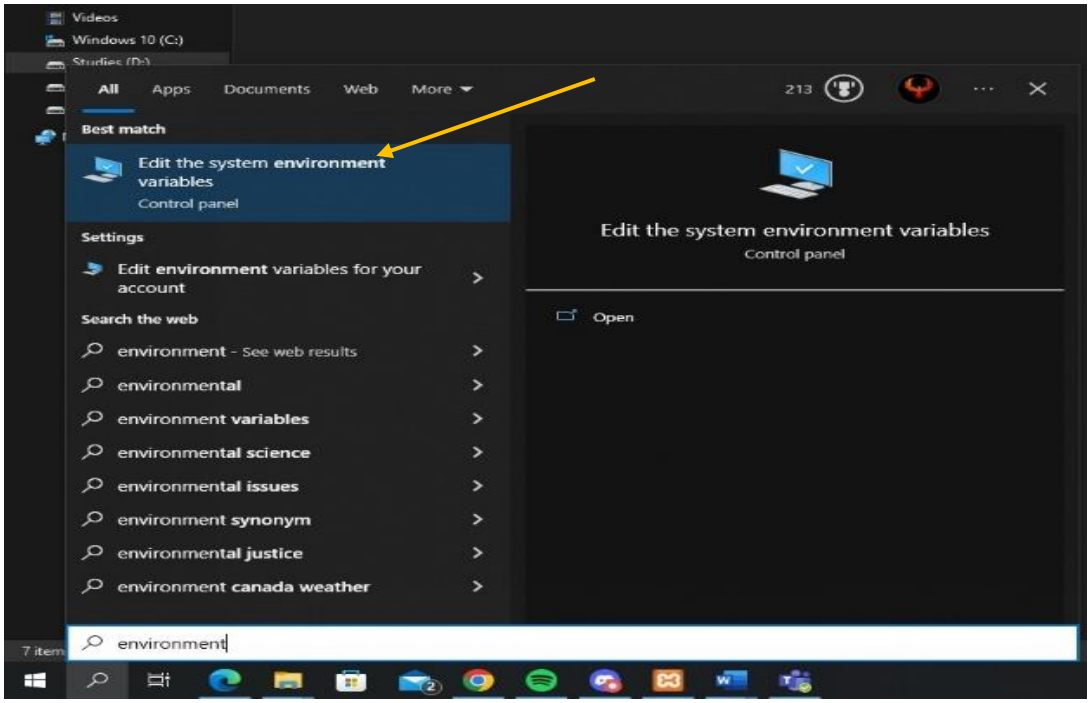


Step-8: JDK will be installed first.

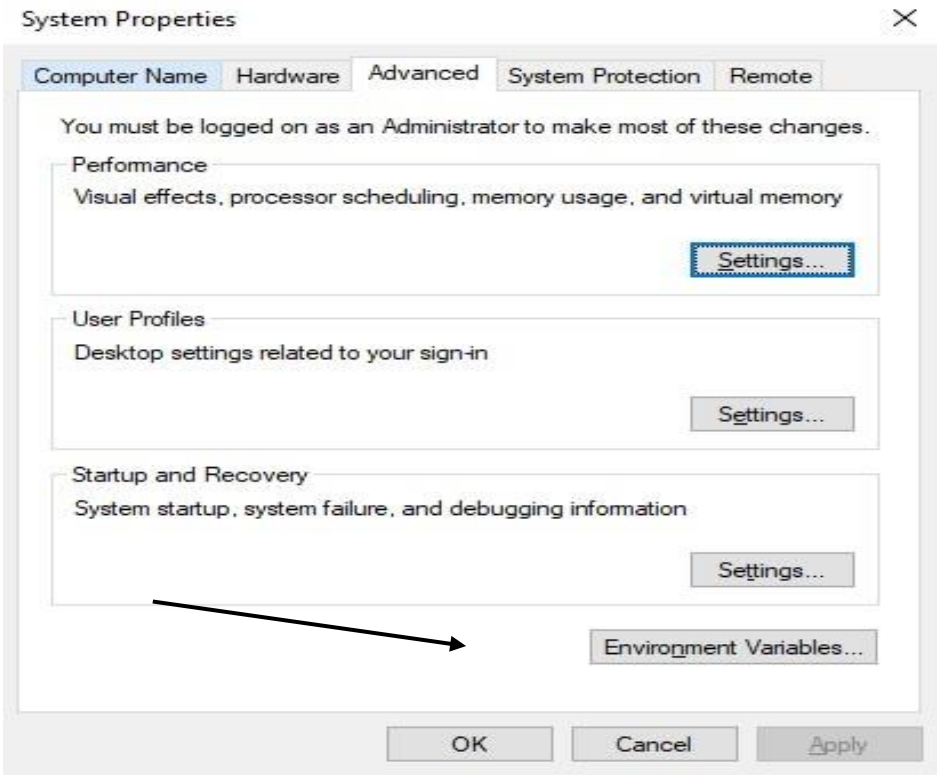
Java(TM) SE Development Kit 20 (64-bit) - Destination Folder
Java
ORACLE
This will install the Java(TM) SE Development Kit 20 (64-bit), which requires 420MB on your hard drive. Click the "Change" button to change the installation folder.
Install Java(TM) SE Development Kit 20 (64-bit) to:
C:\Program Files\Java\jdk-20\
Change...
Back
Next
Cancel


Java(TM) SE Development Kit 20 (64-bit) - Progress
Java
ORACLE
Status:
Copying new files

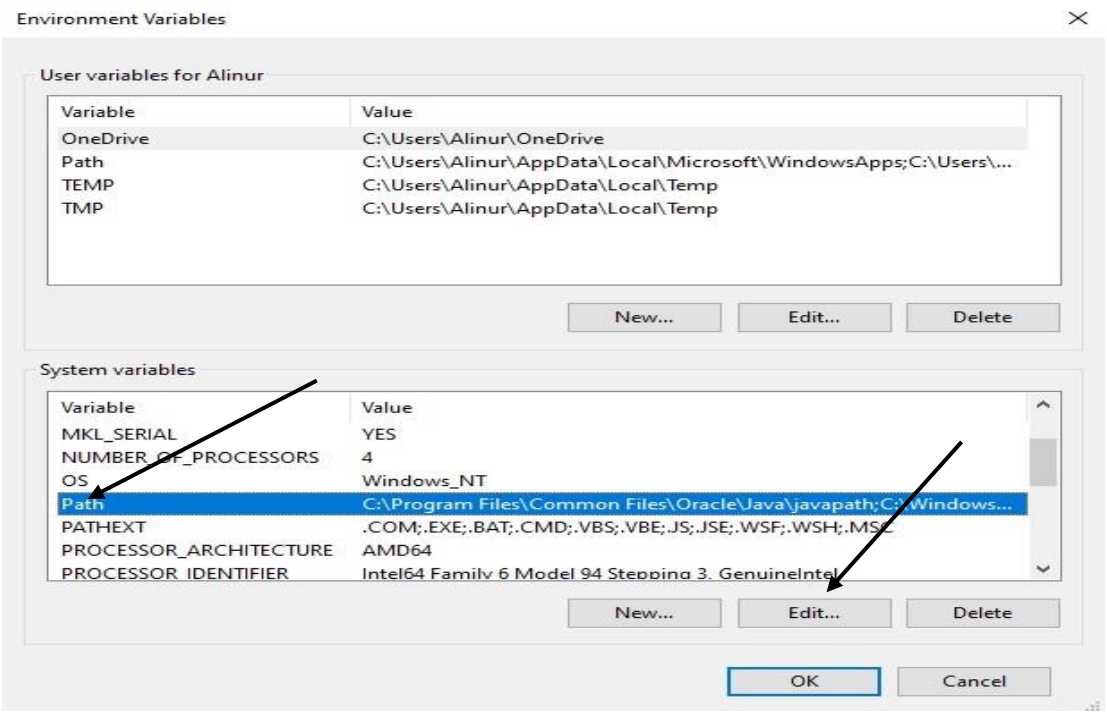
Step-9: Now we need to go to environment settings to add the library path of the JDK which we have installed now.



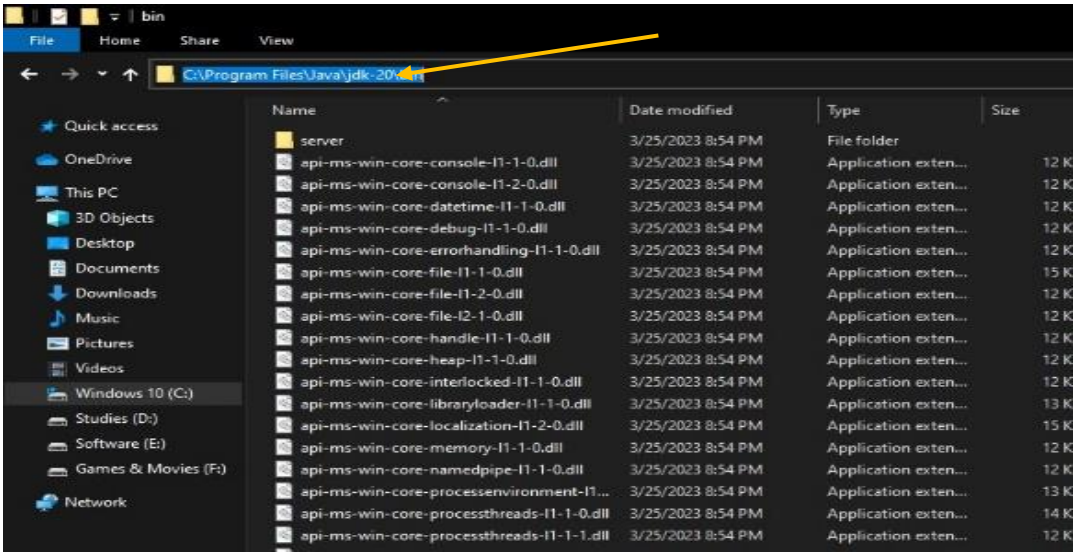
Step-10: First, we clicked on Environment Variables



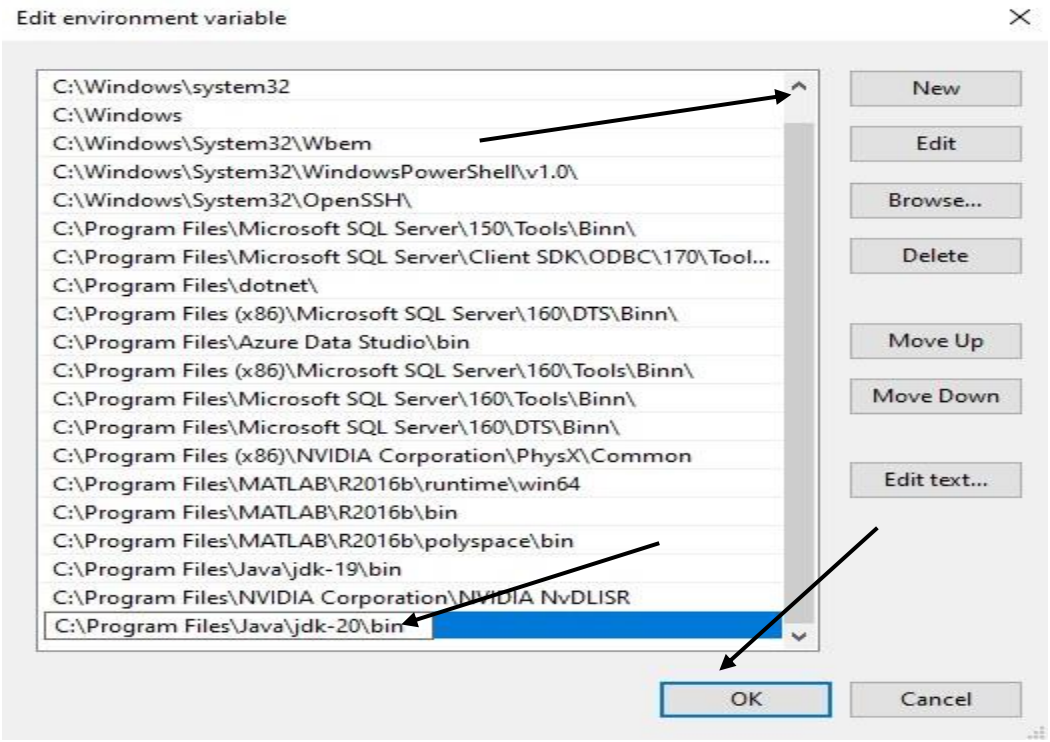
Step-11: Now, we'll click on Path and then click on Edit.



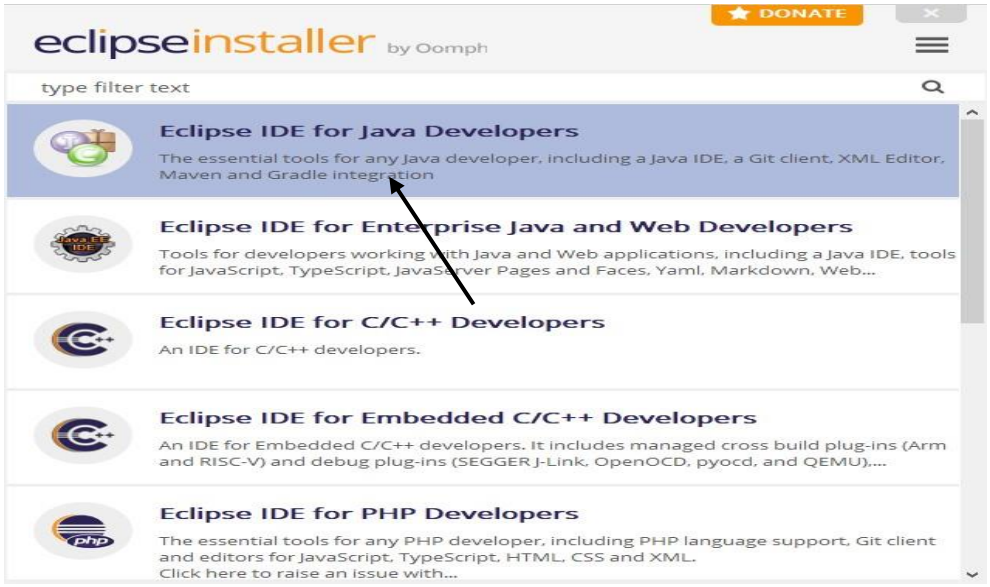
Step-12: Now, we'll go to the directory of the bin folder where we have installed the JDK. Then, we will copy the location of the bin folder.



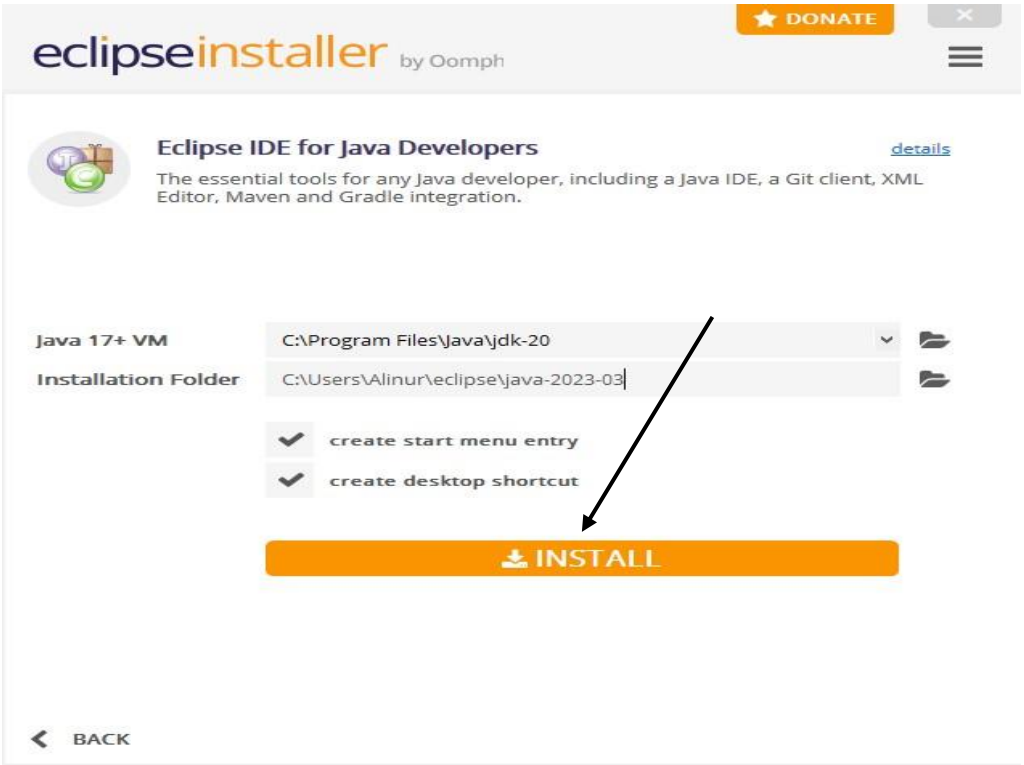
Step-13: Then click new, paste the path and then click everything ok. We have successfully installed the Java in our PC.



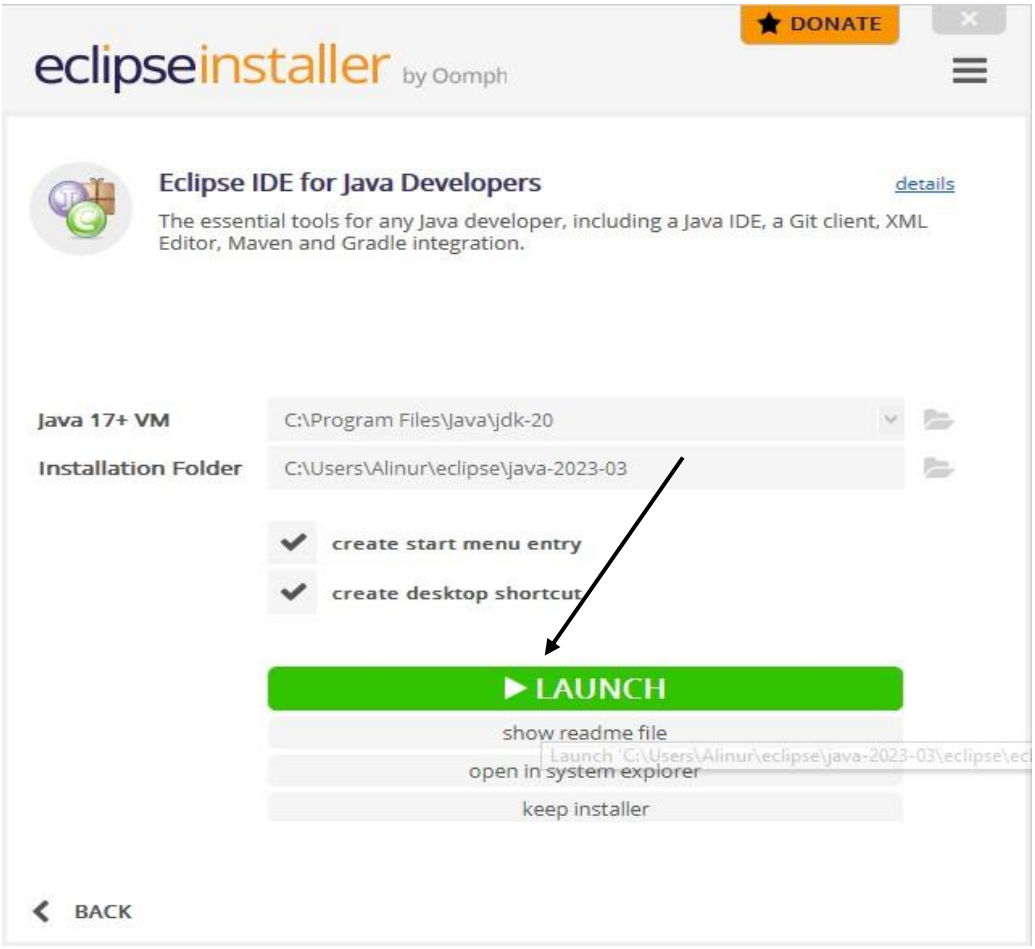
Step-14: Now we will install the Eclipse. So, we need to install the IDE by clicking on the "Eclipse IDE for Java Developers". Because we'll be using Java for testing our project.



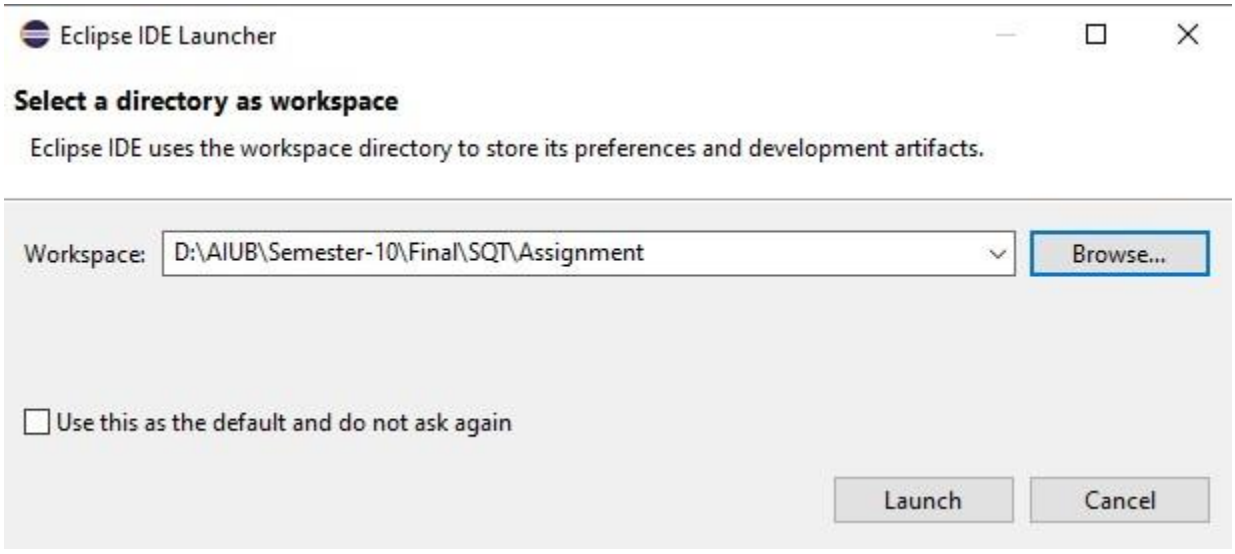
Step-15: Installation will begin after clicking on the Install button.



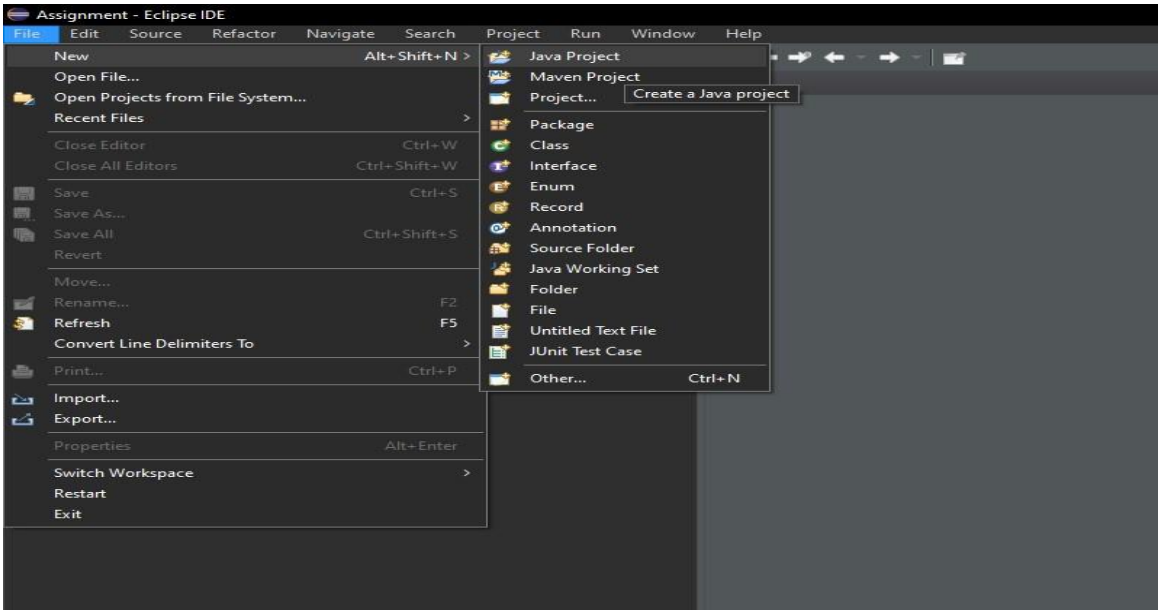
Step-16: Now, click launch to begin the Eclipse IDE.



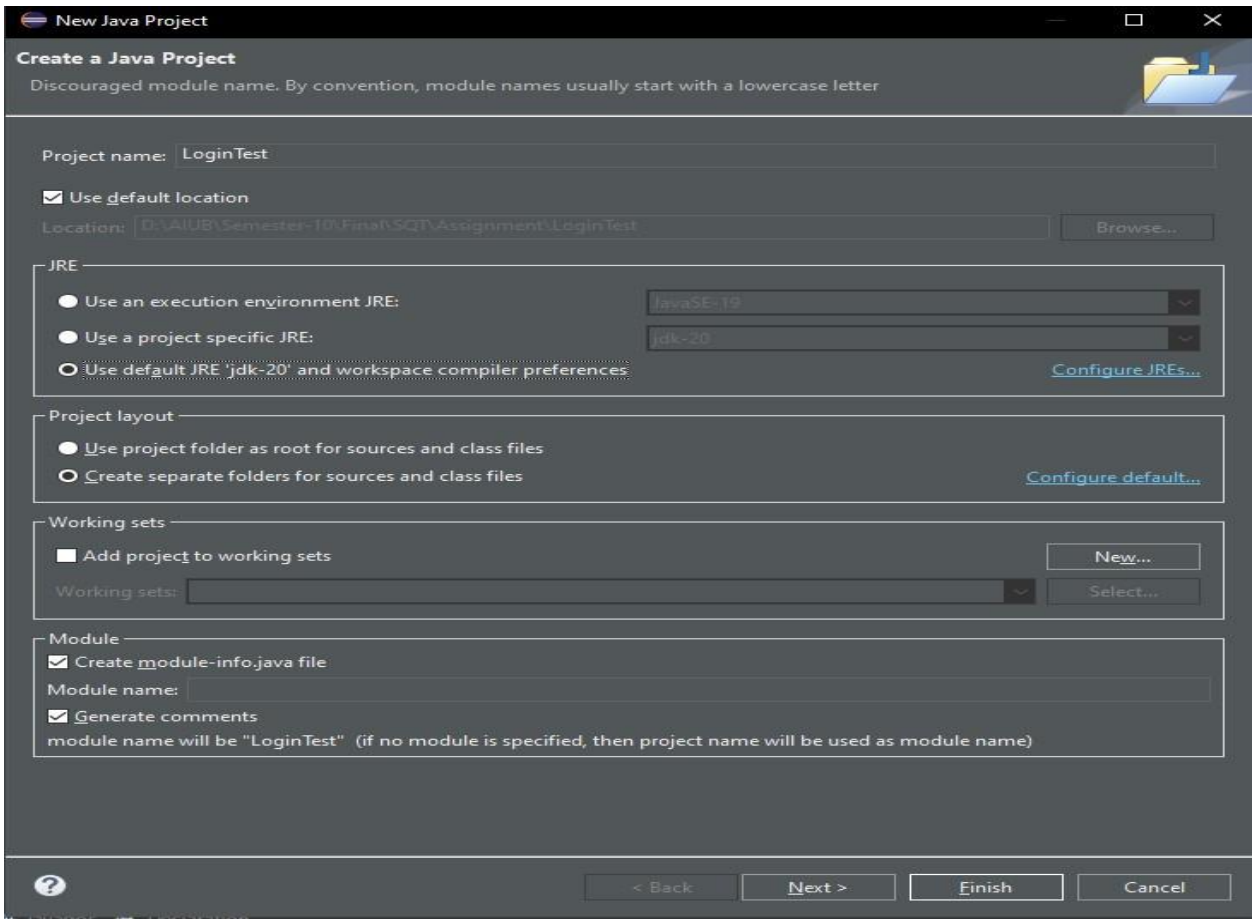
Step-17: Select a directory to save the location for the workspace.



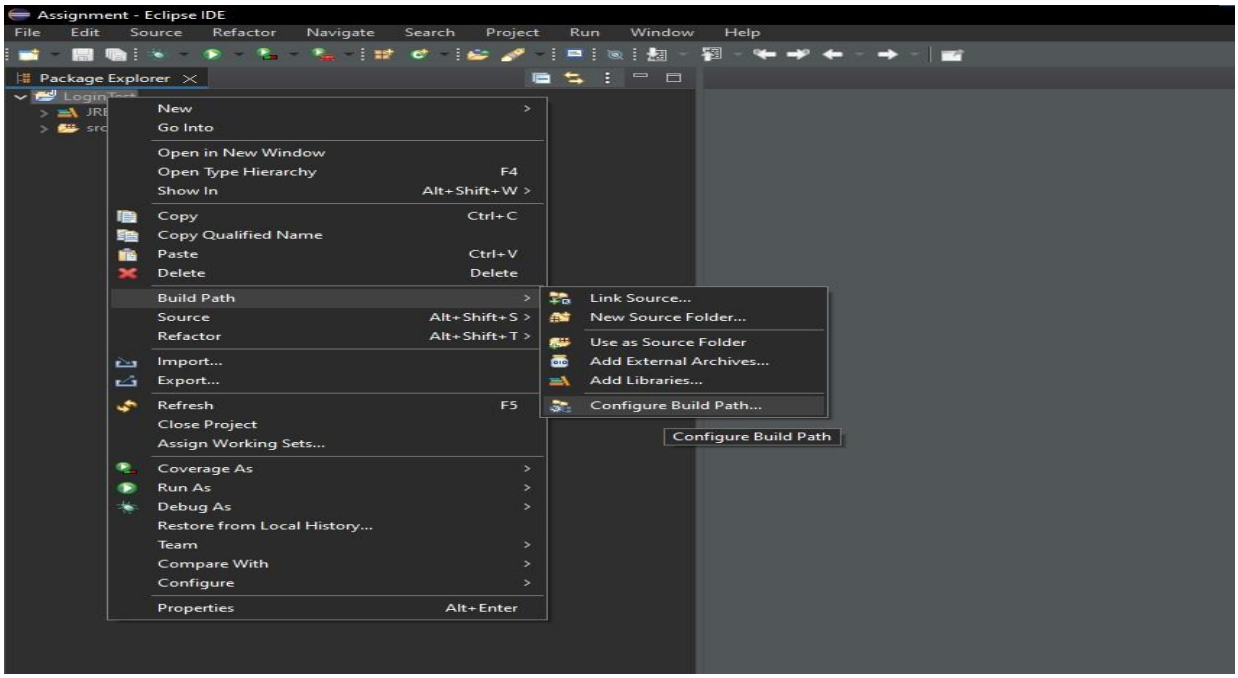
Step-18: By clicking on New, we can start a new Java project.



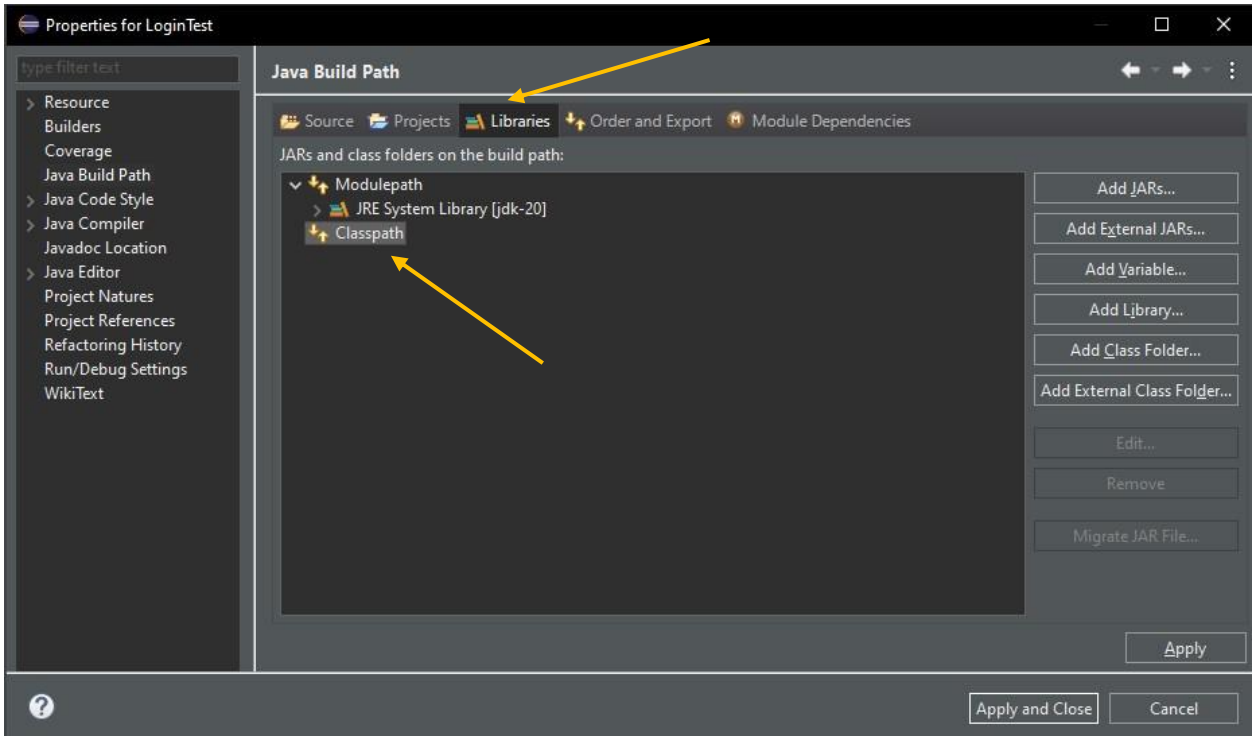
Step-19: After writing a project name and selecting the default JDK, we can click Finish button.



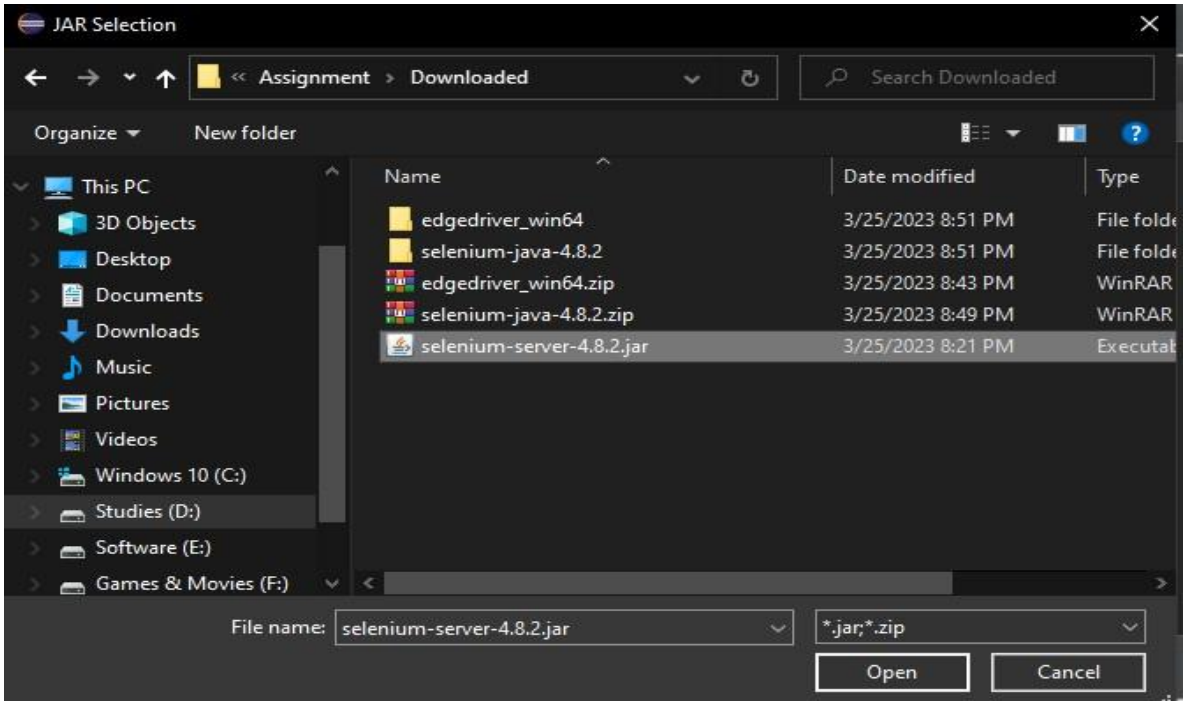
Step-20: Now, we need to add the selenium jar files into our project file. Right click on the project file, go to build path and then click on configure build path.

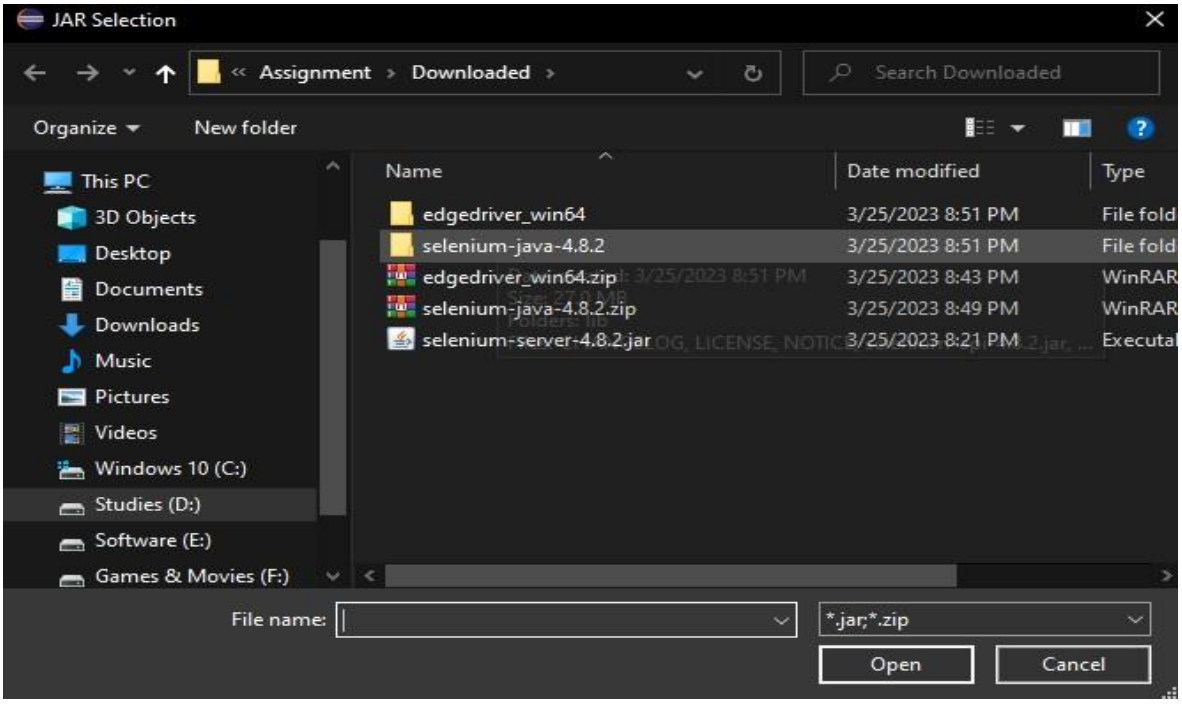


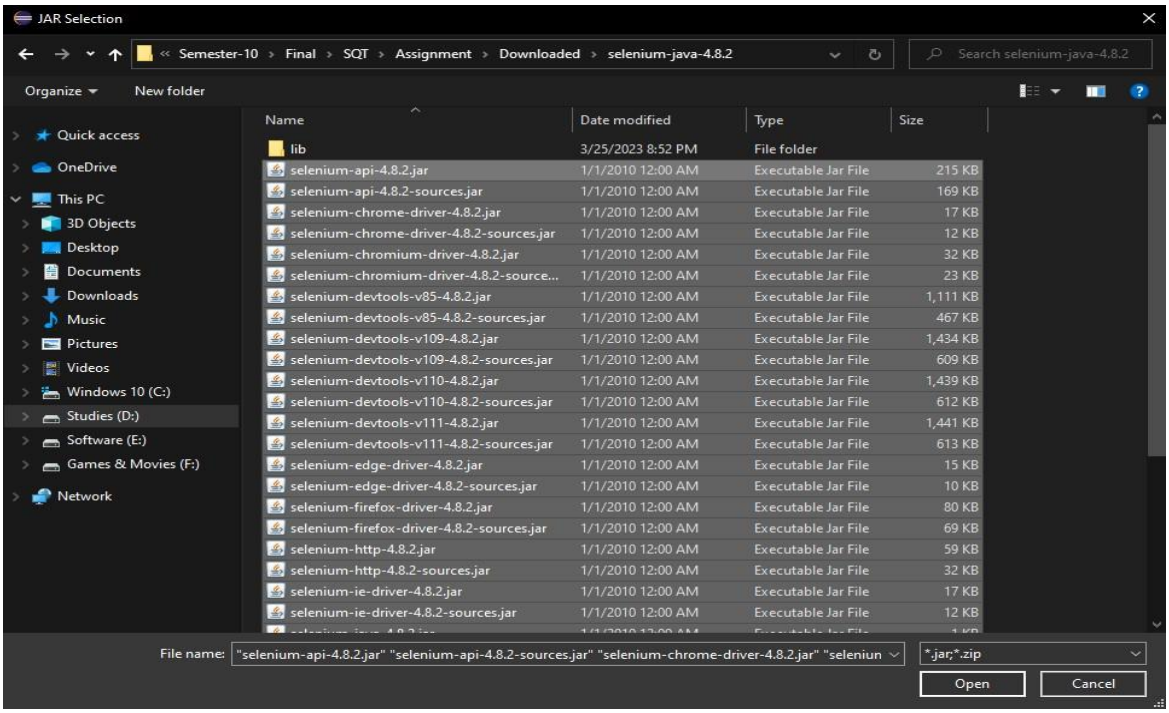
Step-21: Click on Libraries, then the Class path and after that click on Add External JARs to add the selenium jar files.

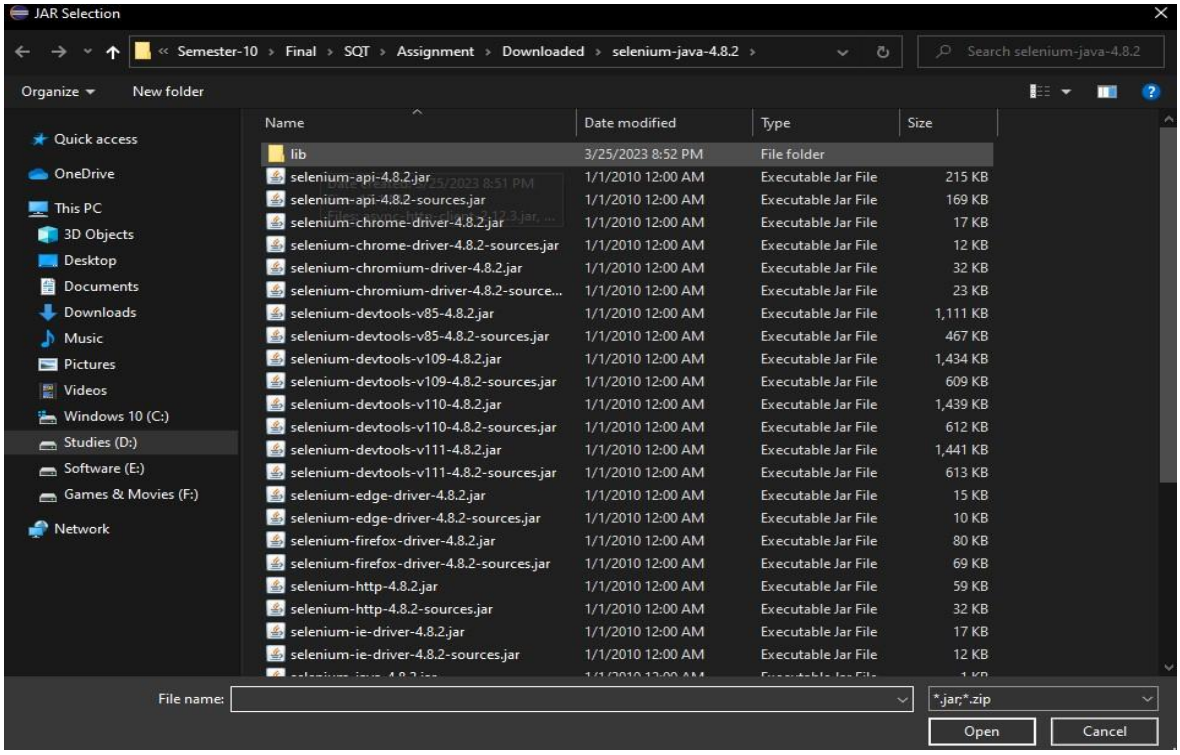


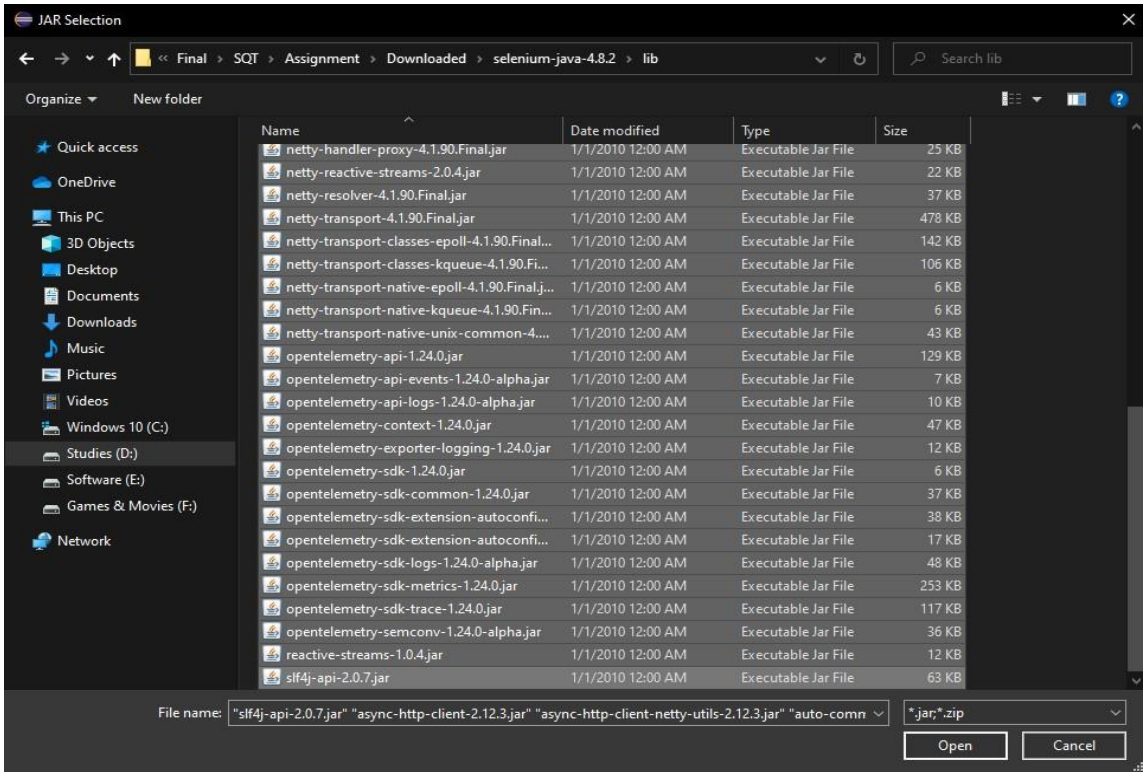
Step-22: Adding the selenium JAR files.



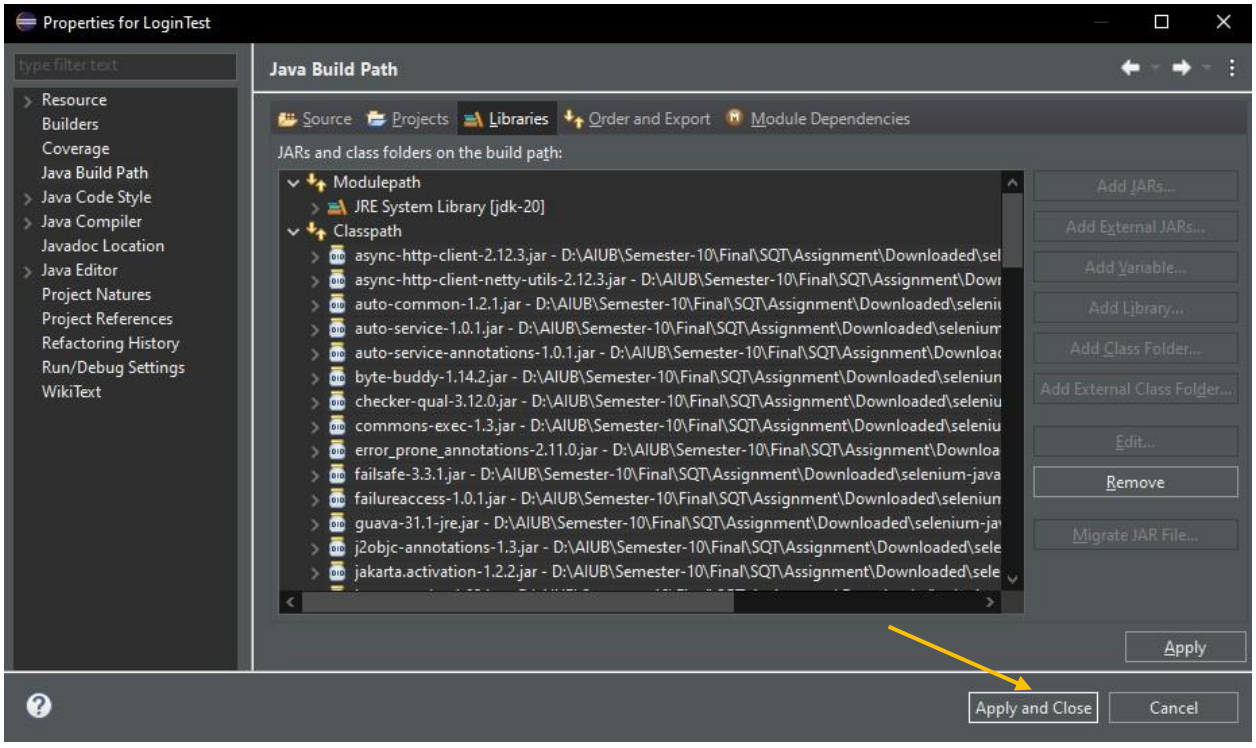



JAR Selection
Semester-10 › Final › SQT › Assignment › Downloaded › selenium-java-4.8.2
Search selenium-java-4.8.2
Organize
New folder
Quick access
OneDrive
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Windows 10 (C:)
Studies (D:)
Software (E:)
Games & Movies (F:)
Network
Name
Date modified
Type
Size
lib 3/25/2023 8:52 PM File folder
selenium-api-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 215 KB
selenium-api-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 169 KB
selenium-chrome-driver-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 17 KB
selenium-chrome-driver-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 12 KB
selenium-chromium-driver-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 32 KB
selenium-chromium-driver-4.8.2-source... 1/1/2010 12:00 AM Executable Jar File 23 KB
selenium-devtools-v85-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 1,111 KB
selenium-devtools-v85-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 467 KB
selenium-devtools-v109-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 1,434 KB
selenium-devtools-v109-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 609 KB
selenium-devtools-v110-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 1,439 KB
selenium-devtools-v110-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 612 KB
selenium-devtools-v111-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 1,441 KB
selenium-devtools-v111-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 613 KB
selenium-edge-driver-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 15 KB
selenium-edge-driver-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 10 KB
selenium-firefox-driver-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 80 KB
selenium-firefox-driver-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 69 KB
selenium-http-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 59 KB
selenium-http-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 32 KB
selenium-ie-driver-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 17 KB
selenium-ie-driver-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 12 KB
File name: "selenium-api-4.8.2.jar" "selenium-api-4.8.2-sources.jar" "selenium-chrome-driver-4.8.2.jar" "seleniun
.jar;.zip
Open
Cancel

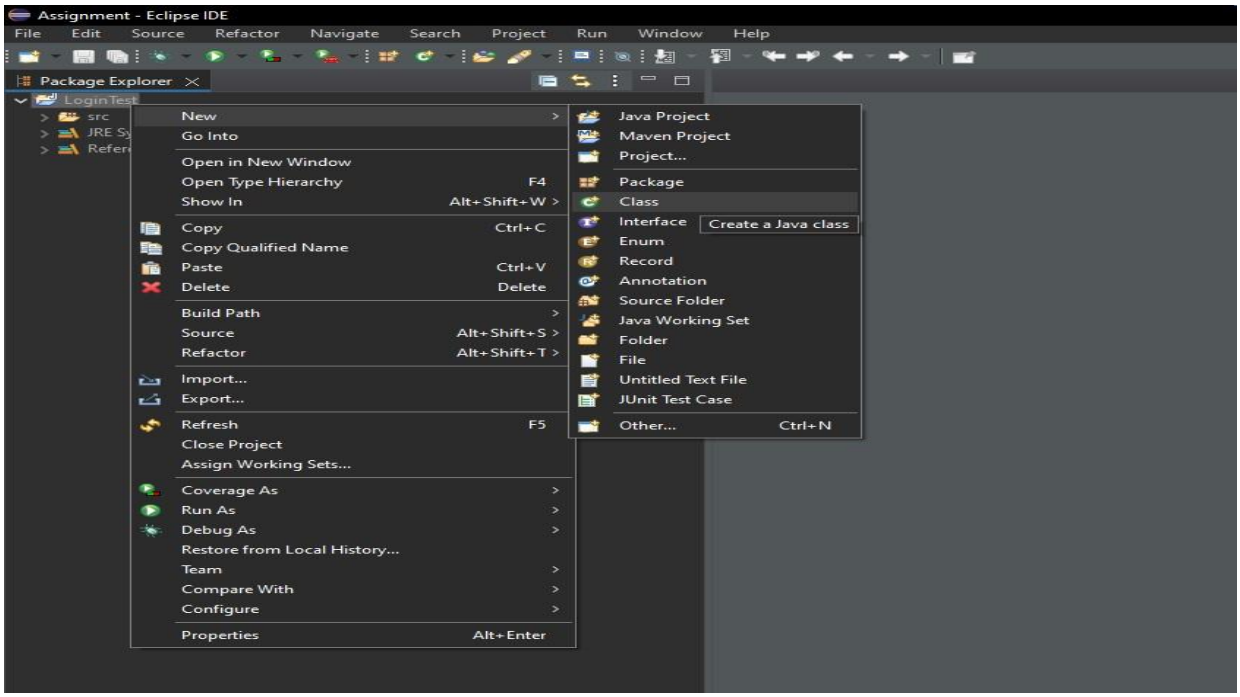

JAR Selection
Semester-10 › Final › SQT › Assignment › Downloaded › selenium-java-4.8.2 ›
Search selenium-java-4.8.2
Organize
New folder
Quick access
OneDrive
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Windows 10 (C:)
Studies (D:)
Software (E:)
Games & Movies (F:)
Network
Name
Date modified
Type
Size
lib 3/25/2023 8:52 PM File folder
selenium-api-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 215 KB
selenium-api-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 169 KB
selenium-chrome-driver-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 17 KB
selenium-chrome-driver-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 12 KB
selenium-chromium-driver-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 32 KB
selenium-chromium-driver-4.8.2-source... 1/1/2010 12:00 AM Executable Jar File 23 KB
selenium-devtools-v85-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 1,111 KB
selenium-devtools-v85-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 467 KB
selenium-devtools-v109-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 1,434 KB
selenium-devtools-v109-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 609 KB
selenium-devtools-v110-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 1,439 KB
selenium-devtools-v110-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 612 KB
selenium-devtools-v111-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 1,441 KB
selenium-devtools-v111-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 613 KB
selenium-edge-driver-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 15 KB
selenium-edge-driver-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 10 KB
selenium-firefox-driver-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 80 KB
selenium-firefox-driver-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 69 KB
selenium-http-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 59 KB
selenium-http-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 32 KB
selenium-ie-driver-4.8.2.jar 1/1/2010 12:00 AM Executable Jar File 17 KB
selenium-ie-driver-4.8.2-sources.jar 1/1/2010 12:00 AM Executable Jar File 12 KB
File name:
.jar;.zip
Open
Cancel



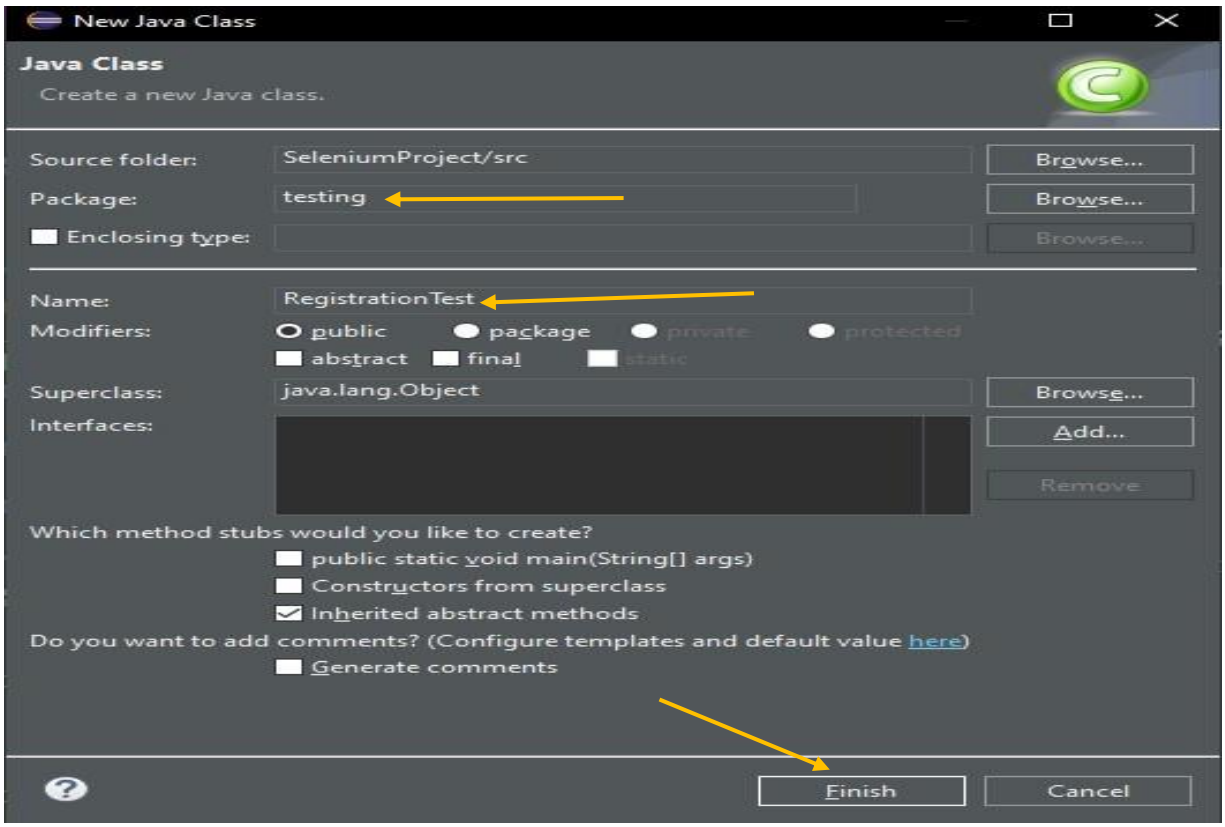
Step-23: Now we need to click apply and close.



Step-24: Let's create a class to write our code to test. Here we will be using Login and Registration page of our Web project.



Step-25: Give a name of the package, class and then click finish.

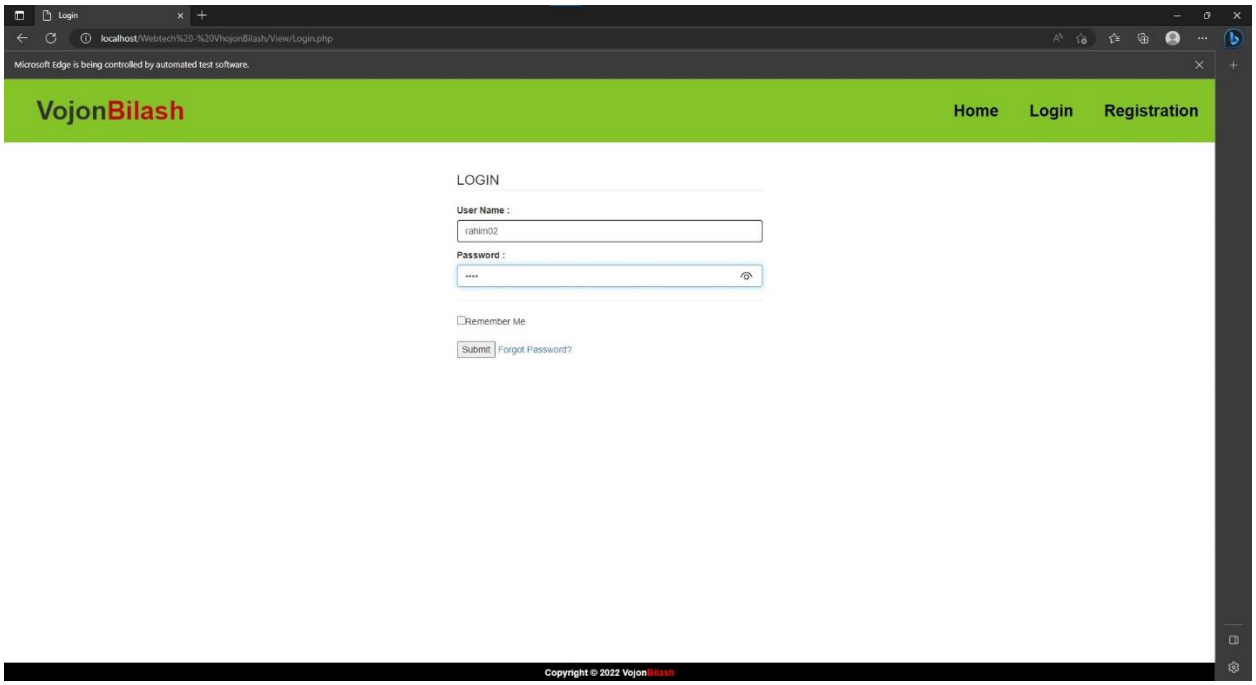


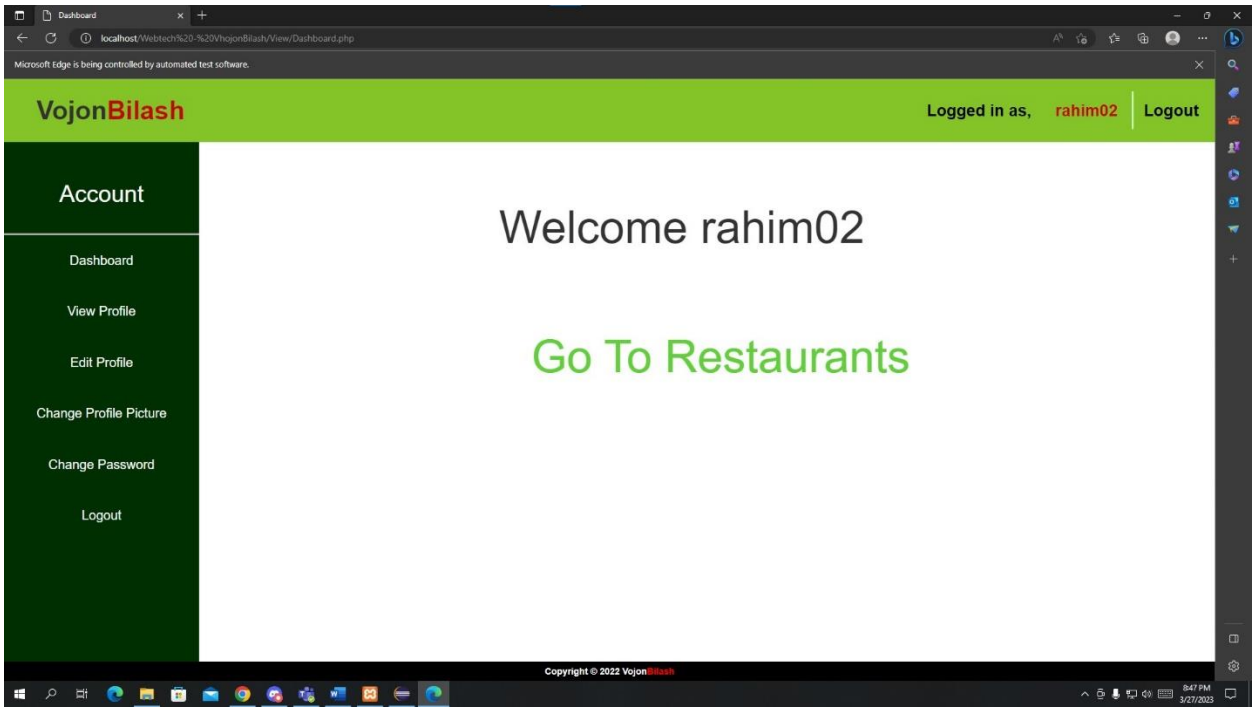
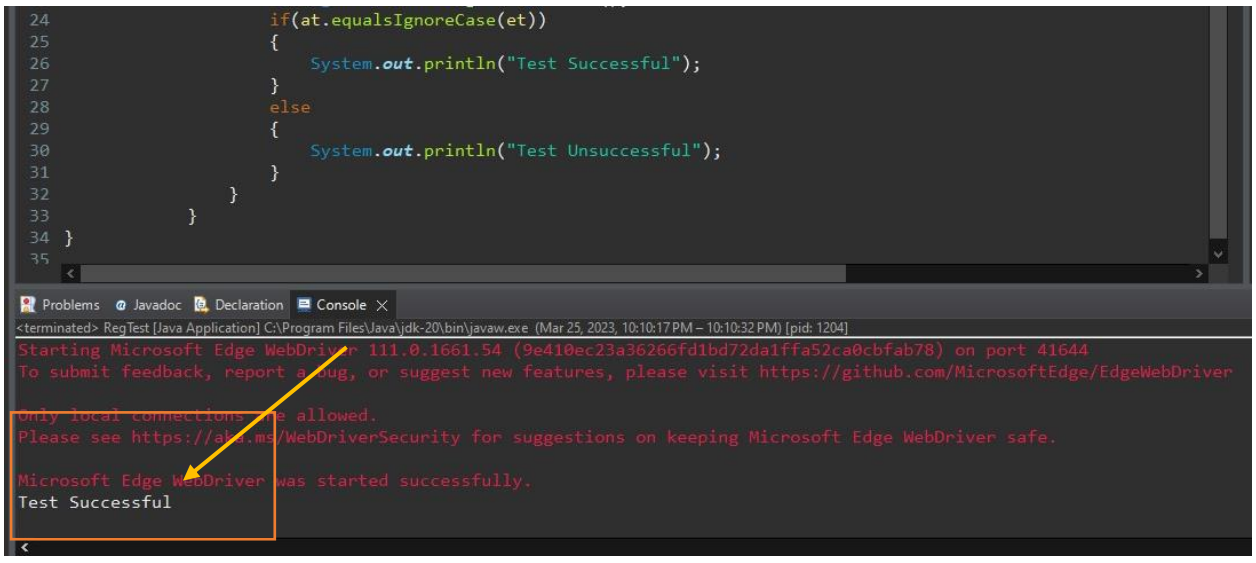
Step-26: Now let's write a code for the test and run to begin the test.

LoginTest.java | RegTest.java

```
1  package testing;
2
3  import org.openqa.selenium.By;
4  import org.openqa.selenium.WebDriver;
5  import org.openqa.selenium.edge.EdgeDriver;
6
7  public class LoginTest {
8      public static void main(String[] args)
9              throws InterruptedException
10             {
11                 {
12                     System.setProperty("webdriver.edge.driver", "D:\\AIUB\\Semester-10\\Final\\SQT\\Assignment\
13                     WebDriver driver = new EdgeDriver();
14                     driver.get("http://localhost/Webtech%20-%20VhojonBilash/View/Login.php");
15                     driver.manage().window().maximize();
16                     driver.findElement(By.id("user")).sendKeys("rahim02");
17                     Thread.sleep(1000);
18                     driver.findElement(By.id("pass")).sendKeys("1234");
19                     Thread.sleep(1000);
20                     driver.findElement(By.id("submit")).click();
21                     Thread.sleep(2000);
22                     String at = "http://localhost/Webtech%20-%20VhojonBilash/View/Dashboard.php";
23                     String et = driver.getCurrentUrl();
24                     if(at.equalsIgnoreCase(et))
25                     {
26                         System.out.println("Test Successful");
27                     }
28                     else
29                     {
30                         System.out.println("Test Unsuccessful");
31                     }
32                 }
33             }
34 }
35
```

Step-28: When the IDE will start the automatic testing process, the project will also be loaded automatically in the browser and will start the testing. Like in the login page, the username and password will be automatically written by the IDE.





Step-29: If everything is fine and if the login is successful, then the console will show us a message “Test Successful”.