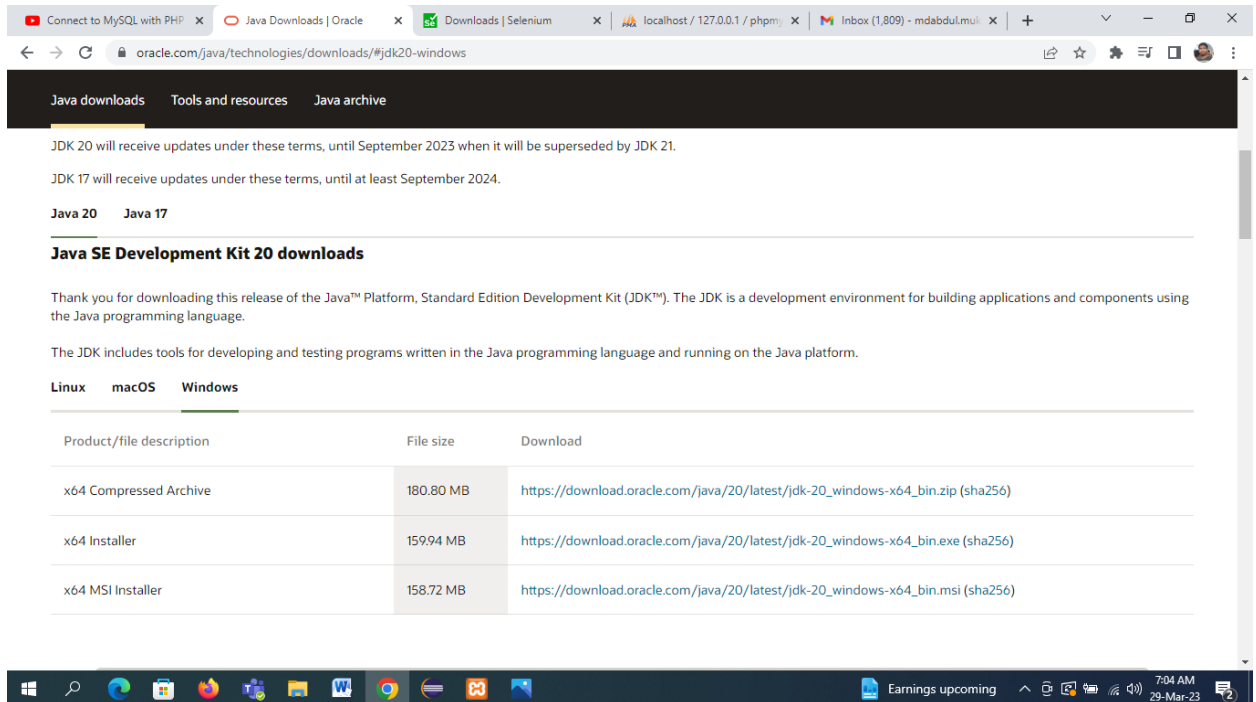


Selenium: it is basically a software testing tool. It is automated and very easy to use. We use it mainly because it is open source and free for all. Before we start our testing process we need to install some tools and environment variables.

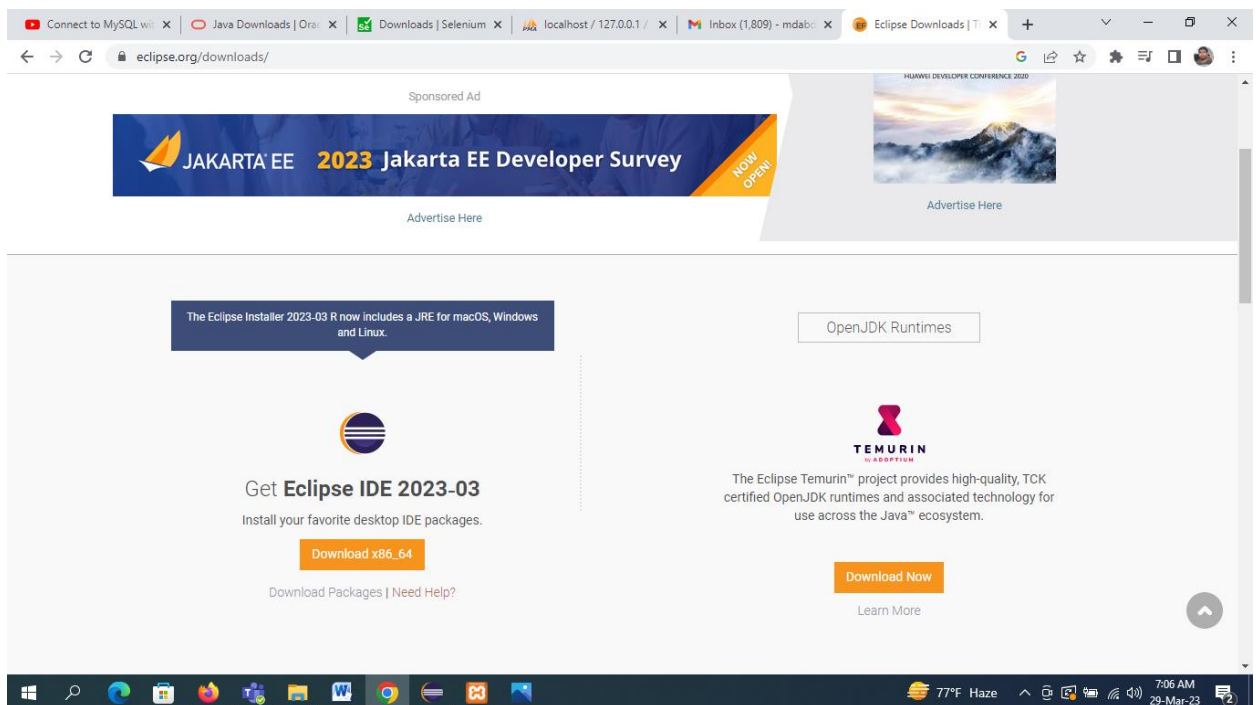
1. Installing Java development kit or JDK.



The screenshot shows the Oracle Java Downloads page for JDK 20. The browser tabs include 'Connect to MySQL with PHP', 'Java Downloads | Oracle', 'Downloads | Selenium', 'localhost / 127.0.0.1 / phpmy', and 'Inbox (1,809) - mdabdul.mui'. The address bar shows 'oracle.com/java/technologies/downloads/#jdk20-windows'. The page has a dark header with 'Java downloads', 'Tools and resources', and 'Java archive'. The main content area has a dark background with white text. It states that JDK 20 will receive updates until September 2023 and JDK 17 until September 2024. There are links for 'Java 20' and 'Java 17'. The section 'Java SE Development Kit 20 downloads' includes a thank you message and a link to the JDK. Below this is a table with three columns: 'Product/file description', 'File size', and 'Download'. The table lists three download options for Windows: 'x64 Compressed Archive' (180.80 MB), 'x64 Installer' (159.94 MB), and 'x64 MSI Installer' (158.72 MB). The Windows tab is selected in the navigation bar.

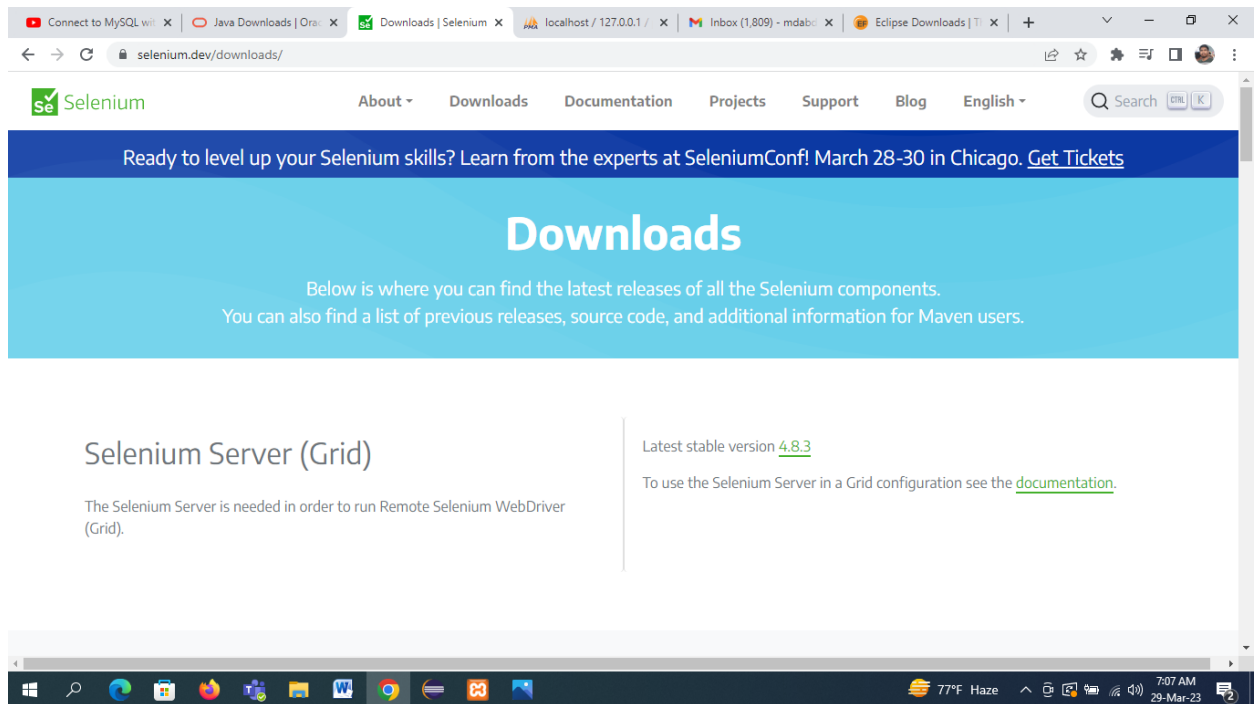
Product/file description	File size	Download
x64 Compressed Archive	180.80 MB	https://download.oracle.com/java/20/latest/jdk-20_windows-x64_bin.zip (sha256)
x64 Installer	159.94 MB	https://download.oracle.com/java/20/latest/jdk-20_windows-x64_bin.exe (sha256)
x64 MSI Installer	158.72 MB	https://download.oracle.com/java/20/latest/jdk-20_windows-x64_bin.msi (sha256)

2. Installing Eclipse IDE for java



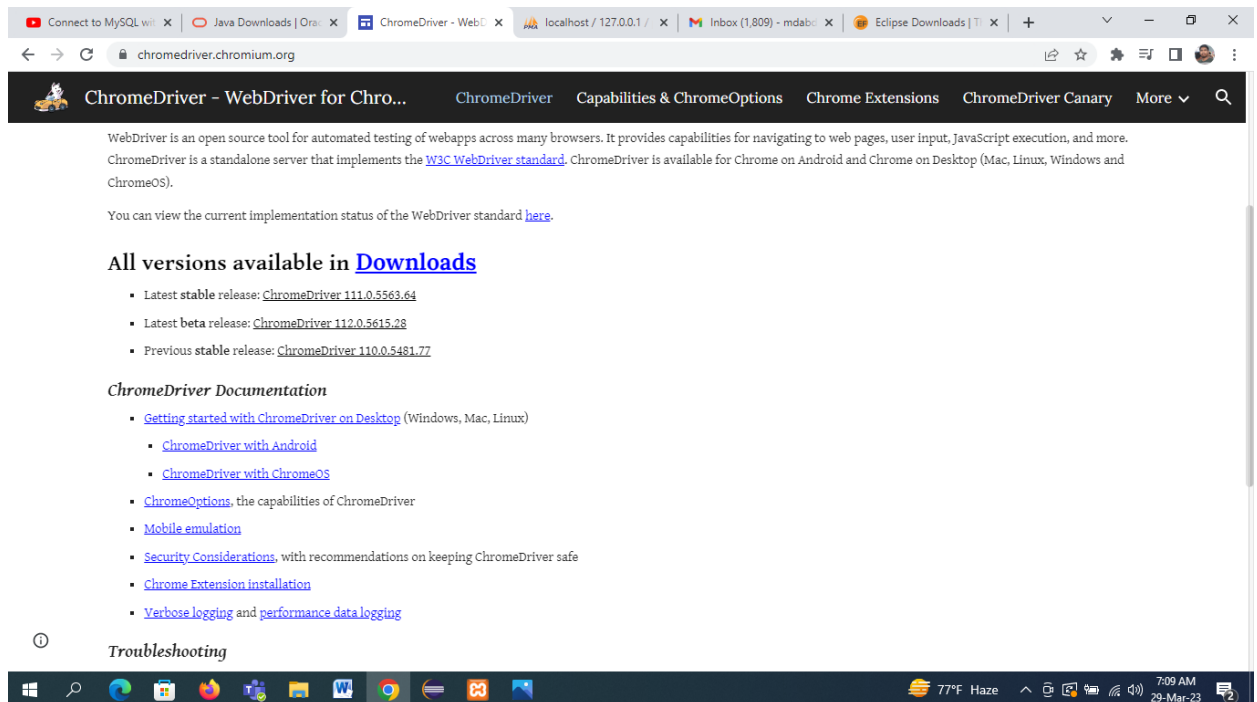
The screenshot shows the Eclipse IDE 2023-03 download page. The browser tabs include 'Connect to MySQL with PHP', 'Java Downloads | Ora', 'Downloads | Selenium', 'localhost / 127.0.0.1 /', 'Inbox (1,809) - mdabo', and 'Eclipse Downloads | T'. The address bar shows 'eclipse.org/downloads/'. The page features a 'Sponsored Ad' for 'JAKARTA EE 2023 Jakarta EE Developer Survey' with a 'NOW OPEN!' badge. Below the ad is a section for 'The Eclipse IDE 2023-03' with a 'Download x86_64' button. To the right is a section for 'OpenJDK Runtimes' with a 'Download Now' button. The page also includes a 'Learn More' link and a 'Need Help?' link.

3. Install Selenium stale release 4.3.0



The screenshot shows the Selenium Downloads page in a web browser. The browser's address bar displays 'selenium.dev/downloads/'. The page features a navigation bar with links for 'About', 'Downloads', 'Documentation', 'Projects', 'Support', 'Blog', and 'English'. A search bar is located on the right. A blue banner at the top promotes SeleniumConf! with the text 'Ready to level up your Selenium skills? Learn from the experts at SeleniumConf! March 28-30 in Chicago. [Get Tickets](#)'. Below this, a large 'Downloads' heading is centered. A paragraph states: 'Below is where you can find the latest releases of all the Selenium components. You can also find a list of previous releases, source code, and additional information for Maven users.' The main content area is titled 'Selenium Server (Grid)' and includes the text: 'The Selenium Server is needed in order to run Remote Selenium WebDriver (Grid)'. To the right, it notes 'Latest stable version [4.8.3](#)' and 'To use the Selenium Server in a Grid configuration see the [documentation](#).' The Windows taskbar at the bottom shows the time as 7:07 AM on 29-Mar-23.

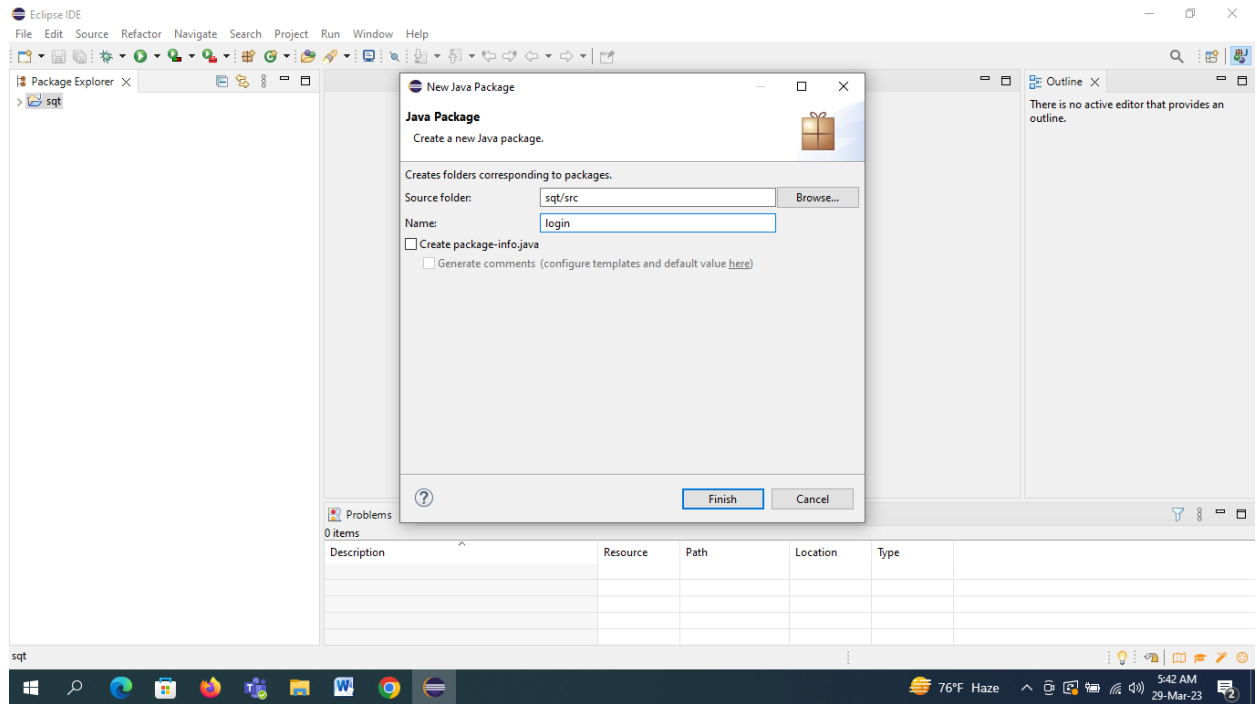
4. Download ChromeDriver



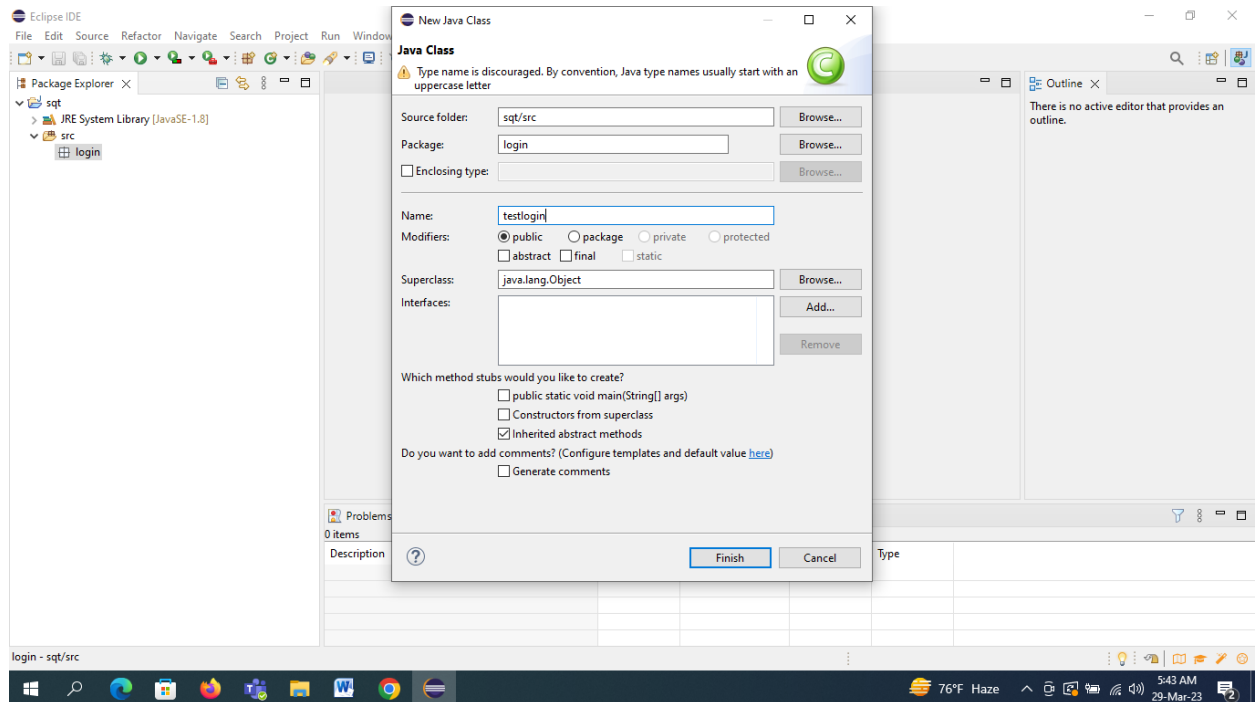
The screenshot shows the ChromeDriver download page in a web browser. The browser's address bar displays 'chromedriver.chromium.org'. The page has a navigation bar with links for 'ChromeDriver', 'Capabilities & ChromeOptions', 'Chrome Extensions', 'ChromeDriver Canary', and 'More'. The main content area explains that WebDriver is an open source tool for automated testing and that ChromeDriver is a standalone server implementing the W3C WebDriver standard. It provides links to the current implementation status and a list of 'All versions available in [Downloads](#)'. The versions listed are: 'Latest stable release: [ChromeDriver 111.0.5563.64](#)', 'Latest beta release: [ChromeDriver 112.0.5615.28](#)', and 'Previous stable release: [ChromeDriver 110.0.5481.77](#)'. Below this, a section titled 'ChromeDriver Documentation' lists links for 'Getting started with ChromeDriver on Desktop', 'ChromeDriver with Android', 'ChromeDriver with ChromeOS', 'ChromeOptions', 'Mobile emulation', 'Security Considerations', 'Chrome Extension installation', and 'Verbose logging and performance data logging'. A 'Troubleshooting' link is also present. The Windows taskbar at the bottom shows the time as 7:09 AM on 29-Mar-23.

Once the installation is finished, we now need to do the following steps to test a Web application using selenium.

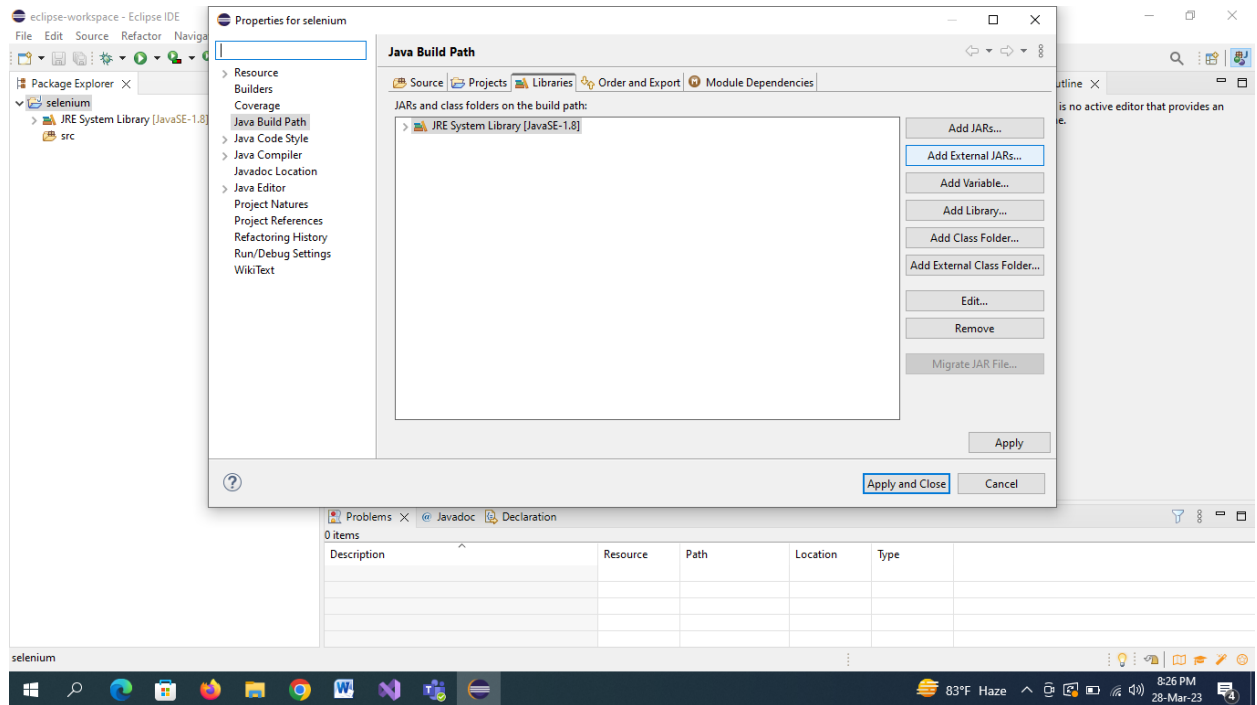
1. Open eclipse and create a new java project and name it “sqt”.

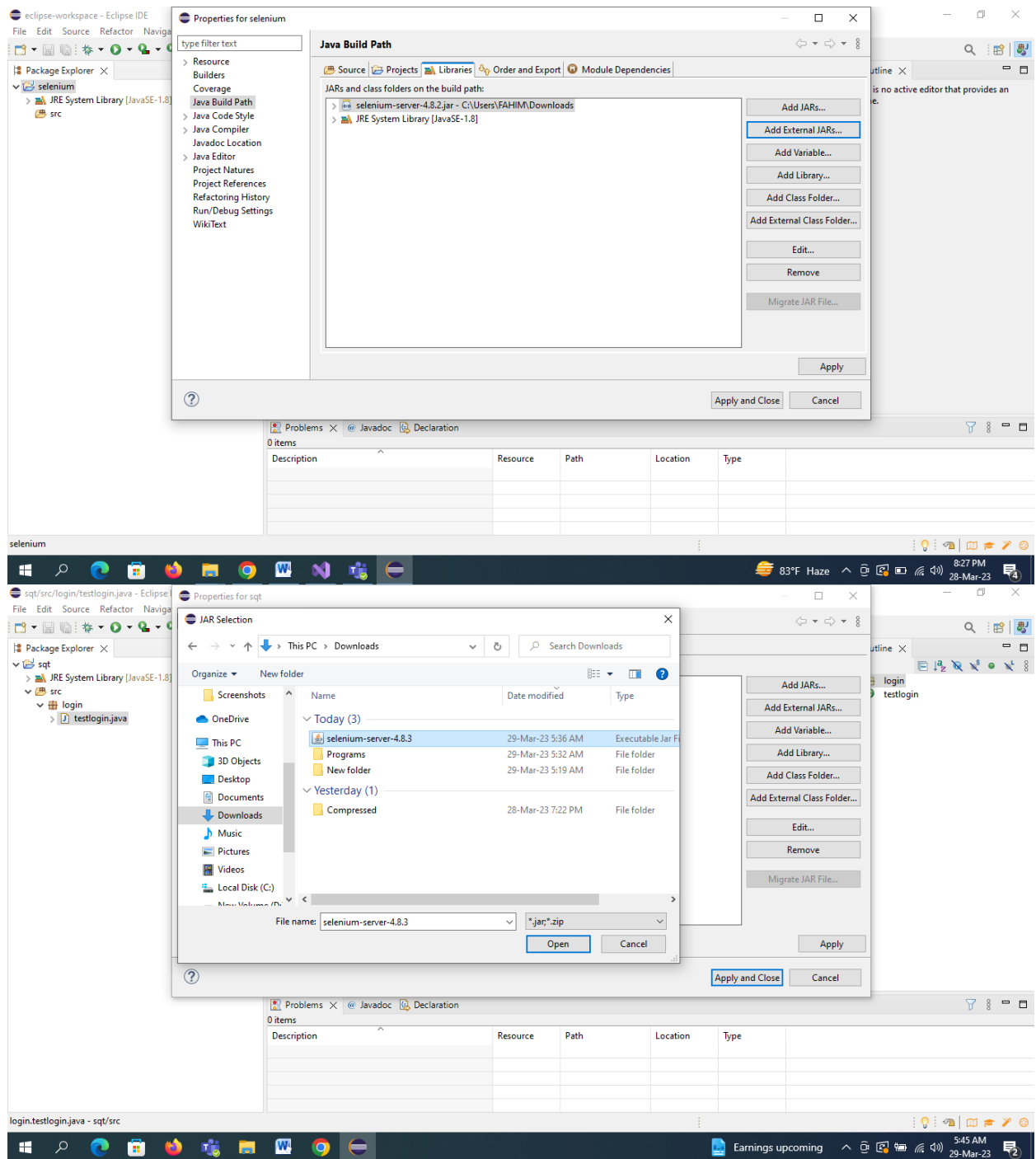


2. Under the package we created a class named “testlogin”.



- Now we have to include the selenium server as .jar file. Build path>configure build path>inside libraries> add external jar files> apply.





4. Inside the MyTestLogin.java file we wrote the following code.

```
package login;
```

```
import org.openqa.selenium.By;
```

```

import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;

public class testlogin {

    public static void main(String[] args) throws
InterruptedException {

        System.setProperty("webdriver.chrome.driver", "C:\\\\Users\\FAH
IM\\Downloads\\Compressed\\chromedriver.exe");
        WebDriver driver = new ChromeDriver();

        driver.get("http://localhost/Teacher1/View/LoginPage.php");
        driver.manage().window().maximize();
        Thread.sleep(2000);

        driver.findElement(By.id("email")).sendKeys("rashid.aloo@gmail.co
m");
        Thread.sleep(5000);
        driver.findElement(By.id("pass")).sendKeys("12345678@");
        Thread.sleep(5000);
        driver.findElement(By.id("login-btn")).click();
        Thread.sleep(5000);
        String at = driver.getTitle();
        String et = "dashboard";
        System.out.println(at);
        driver.close();

        if(at.equalsIgnoreCase(et))
        {
            System.out.println("Test successful");
        }
        else
        {
            System.out.println("Test Failure");
        }
    }
}

```

5. After building and running the code. It loads the website in the chrome window. Then first it enters the email in the email field and password in the password field. After that it presses the login button. After that we are taken into the dashboard.

