



॥ विद्याविनयेन शोभते ॥

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Practical No. 1

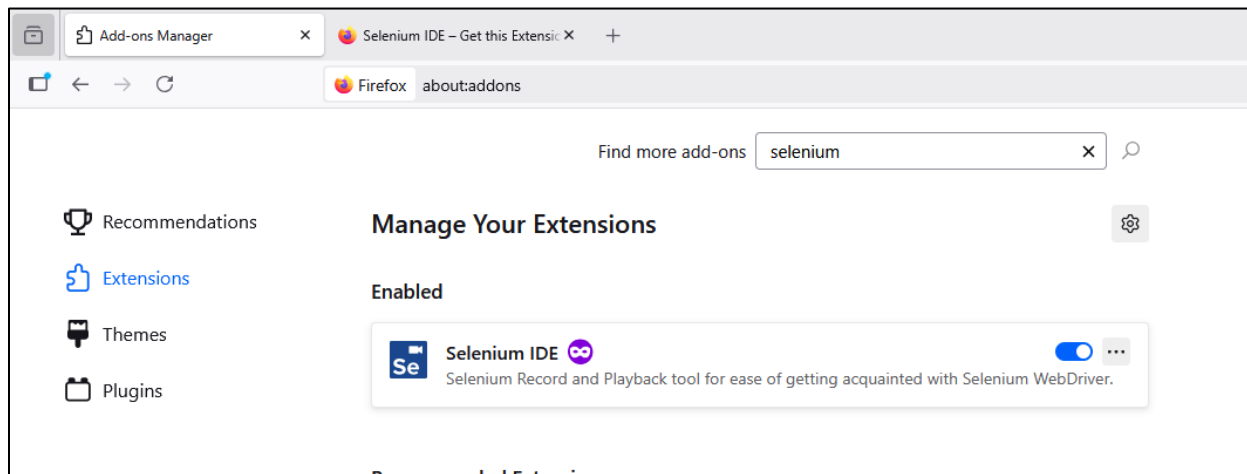
Aim: Install Selenium IDE. Write a test suite containing minimum 4 test cases for different formats.

REQUIREMENTS:

- 1) Selenium IDE extension on a browser.
- 2) NetBeans IDE for creating test case files.

STEPS:

- 1) Just google “Selenium IDE chrome” and click on the first link. Add the “Selenium IDE” extension to your browser.



- 2) For testing, we need a test case suite, so we create a WebApplication in NetBeans IDE.

File > New Project > Java Web > Web Application > Add Apache Tomcat > Finish.

- 3) In index.html, we write the following code for “ARITHMETIC OPERATIONS” test case suite:

---- index.html ---

```
<html>
<head>
  <title>prac1</title>
  <script language="javascript">
    function addition() {
```

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Class: TY.BSC.CS

Roll No: 13

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```
var num1 = parseInt(document.arithmetic.n1.value);
var num2 = parseInt(document.arithmetic.n2.value);
var result = num1 + num2;
document.arithmetic.res.value = result;
}
function subtraction() {
var num1 = parseInt(document.arithmetic.n1.value);
var num2 = parseInt(document.arithmetic.n2.value);
var result = num1 - num2;
document.arithmetic.res.value = result;
}
function multiplication() {
var num1 = parseInt(document.arithmetic.n1.value);
var num2 = parseInt(document.arithmetic.n2.value);
var result = num1 * num2;
document.arithmetic.res.value = result;
}
function division() {
var num1 = parseInt(document.arithmetic.n1.value);
var num2 = parseInt(document.arithmetic.n2.value);
var result = num1 / num2;
document.arithmetic.res.value = result;
}
</script>
</head>
<body>
<h1 align="center">Arithmetic Operations</h1>
<form name="arithmetic">
<table border="1" align="center">
<tr>
<td>Number 1:</td>
<td><input type="text" name="n1" size="20" /></td>
</tr>
<tr>
<td>Number 2:</td>
<td><input type="text" name="n2" size="20" /></td>
</tr>
<tr>
<td colspan="2">
<input
```

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```
type="button"
name="add"
value="Add"
onclick="javascript:addition();"
/>&nbsp;
<input
type="button"
name="sub"
value="Subtract"
onclick="javascript:subtraction();"
/>&nbsp;
<input
type="button"
name="mul"
value="Multiply"
onclick="javascript:multiplication();"
/>&nbsp;
<input
type="button"
name="div"
value="Divide"
onclick="javascript:division();"
/>&nbsp;
</td>
</tr>
<tr>
<td colspan="2">
Result is: <input type="text" name="res" size="20" value="" />
</td>
</tr>
</table>
</form>
</body>
</html>
```

----- newjsp.jsp -----

```
<% @page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
```

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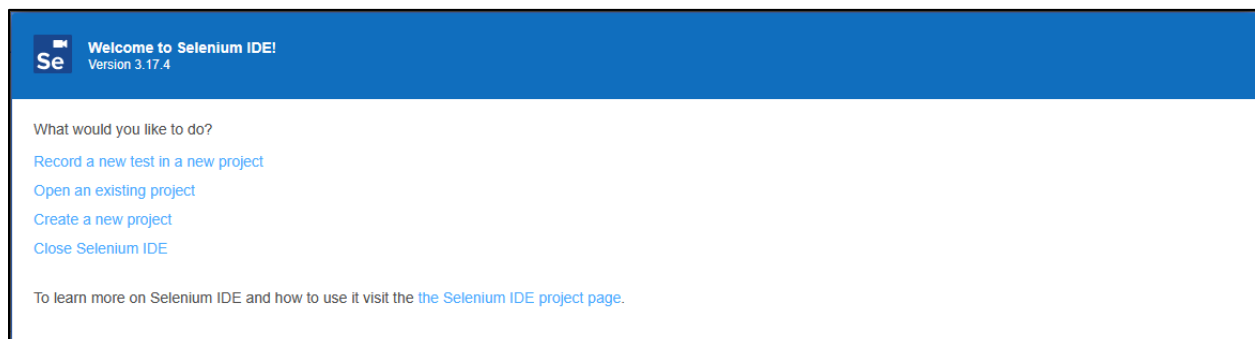
4

```
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
<title>JSP Page</title>
</head>
<body align="center">
  <h1>Test Cases IDE</h1>
  <a href="index.html">Arithmetic Operations</a>
</body>
</html>
```

5) Run this JSP file from NetBeans. It will then open up in a browser.

- Then from the browser, open the link:
- Now you'll be redirected to ARITHMETIC OPERATIONS page.
Copy the URL of the page and open "Selenium IDE" extension:

- Now, Record a new test project in a new project:



- Name your project:

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×

Name your new project

Please provide a name for your new project.

PROJECT NAME

Gaurav

You can change the name of your project at any time by clicking it and entering a new name.

OKCANCEL

- Paste that URL here and click Start Recording:

×

Set your project's base URL

Before you can start recording, you must specify a valid base URL for your project. Your tests will start by navigating to this URL.

BASE URL

http://localhost:8080/Gaurav/

START RECORDINGCANCEL

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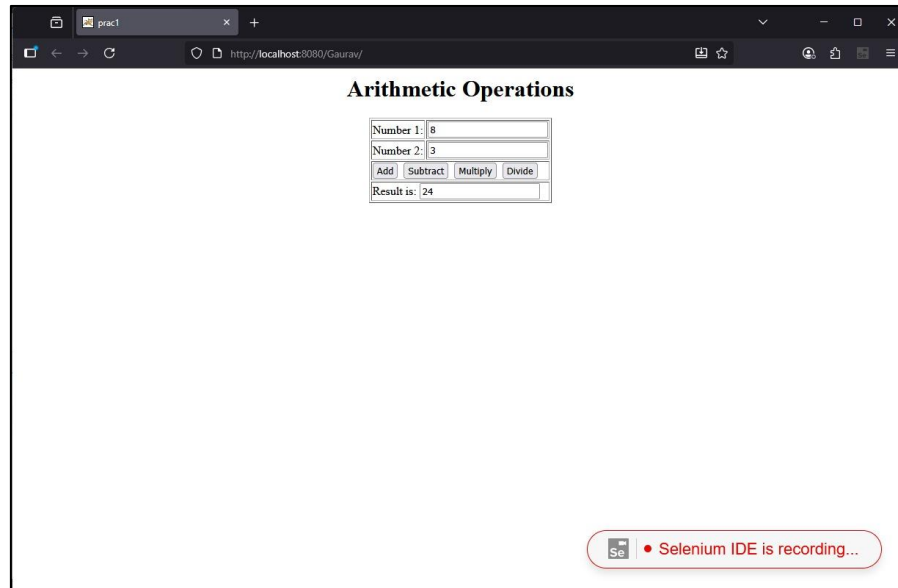
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- A new tab will be opened, maximize that tab(this tab is your working tab for recording):




- Click on Stop Recording:
- Just as you stop your recording, you'll be prompted to Name your new test

×

Name your new test

Please provide a name for your new test.

TEST NAME

You can change it at any time by clicking the  icon next to its name in the tests panel.

OK

LATER

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OUTPUT:

Extension: (Selenium IDE) - Selenium IDE - Gaurav* — Mozilla Firefox

Project: Gaurav*

Tests +

Search tests...

http://localhost:8080

	Command	Target	Value
1	✓ open	/Gaurav/	
2	✓ set window size	1237x809	
3	✓ click	name=n1	
4	✓ type	name=n1	8
5	✓ click	name=n2	

Command

Target

Value

Description

Log Reference

Running 'practical 2'

1. open on /Gaurav/ OK 13:56:57

2. setWindowSize on 1237x809 OK 13:56:58

3. click on name=n1 OK 13:56:58

4. type on name=n1 with value 8 OK 13:56:58

5. click on name=n2 OK 13:56:58

6. type on name=n2 with value 3 OK 13:56:58

7. click on name=mul OK 13:56:58

8. click on css=html OK 13:56:58

9. click on css=html OK 13:56:59

'practical 2' completed successfully 13:56:59

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Practical No. 2

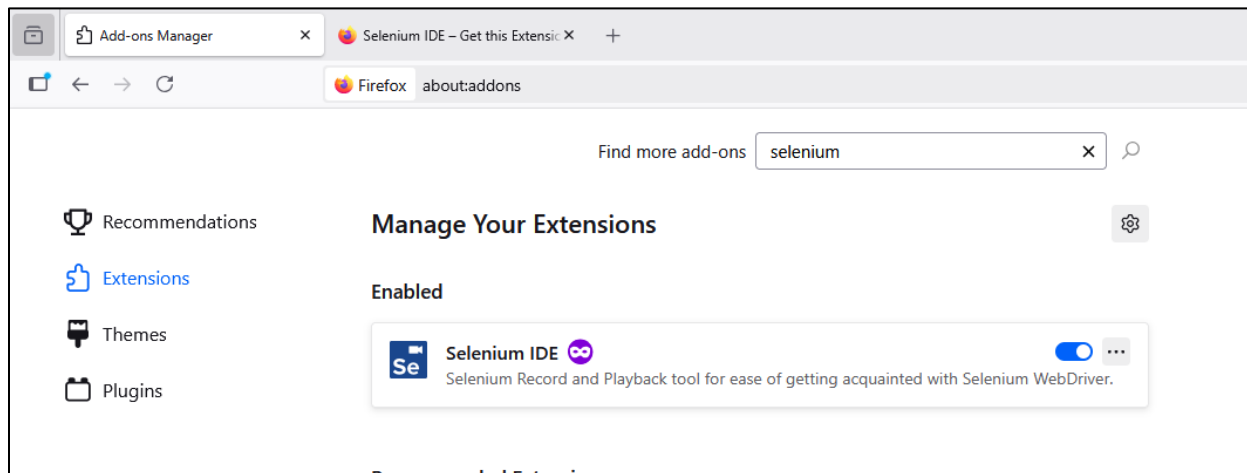
AIM: Conduct a test case suite for any two websites.

REQUIREMENTS:

- 1) Selenium IDE extension on a browser.
- 2) A stable Internet connection.

STEPS:

- 1) Just google “Selenium IDE chrome” and click on the first link. Add the “Selenium IDE” extension to your browser.



- 2) For testing, we'll choose “bookmyshow.com” as our first website. We'll be checking some Selenium

IDE Commands like assertText, verifyTitle, storeText, echo.

- Now google “bookmyshow.com”.
- Copy the URL of the page and open “Selenium IDE” extension:

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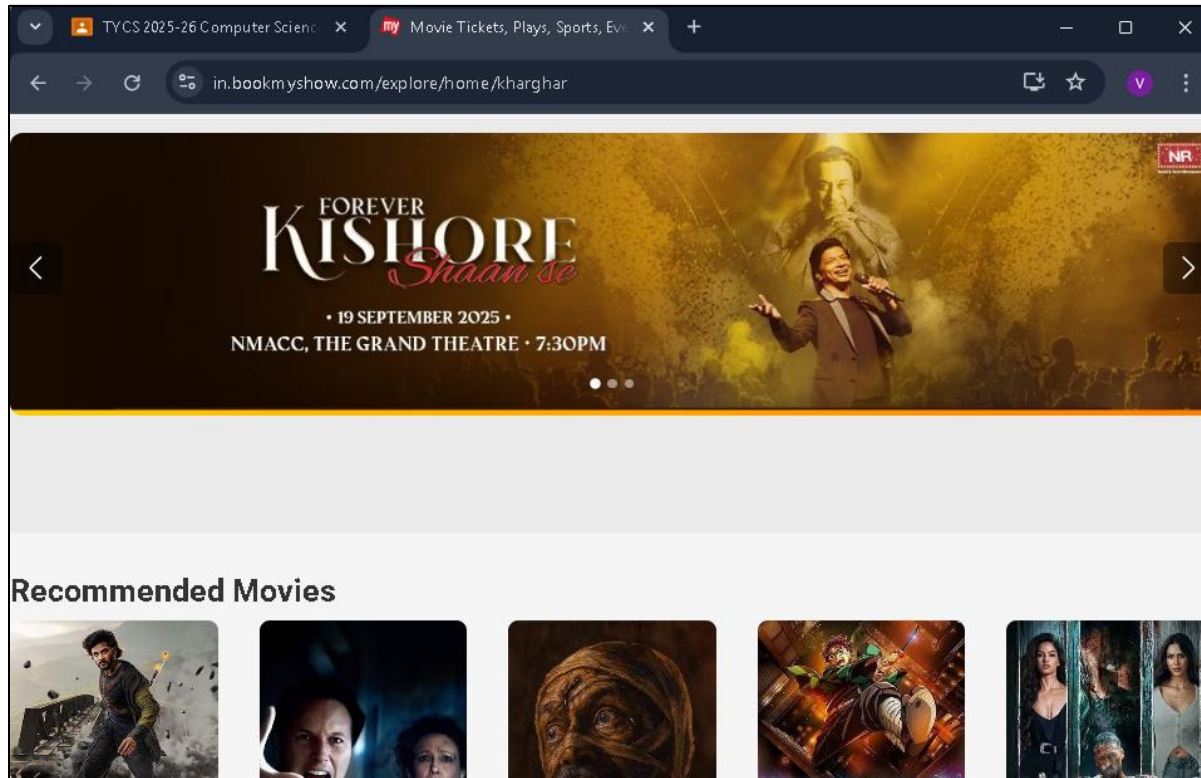
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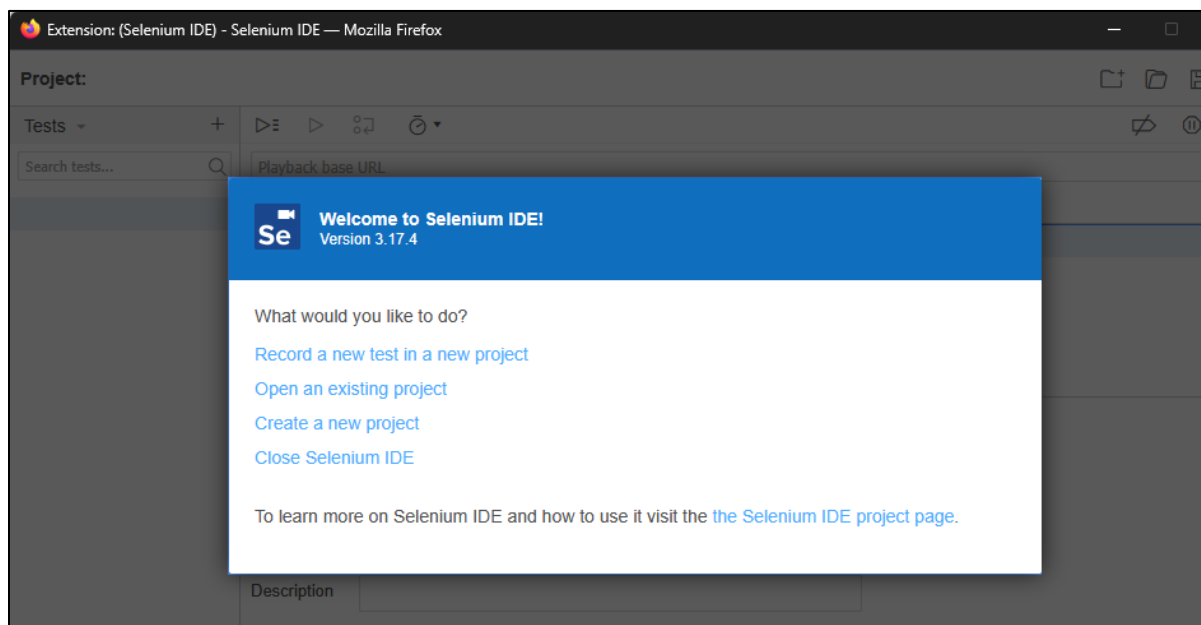
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- Now, Record a new test project in a new project:



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- Name your project:

×

Name your new project

Please provide a name for your new project.

PROJECT NAME

book my show

You can change the name of your project at any time by clicking it and entering a new name.

OK

CANCEL

- Paste that URL here and click Start Recording:

×

Set your project's base URL

Before you can start recording, you must specify a valid base URL for your project. Your tests will start by navigating to this URL.

BASE URL

https://in.bookmyshow.com/explore/home/kharghar

START RECORDING

CANCEL

- A new tab will be opened, maximize that tab(this tab is your working tab for recording):
- Now we'll make use of command verifyTitle.
(This command verifies title of the webpage and keeps on continuing the execution.)
So anywhere on the window, do Right Click> select Selenium IDE> click Verify Title:

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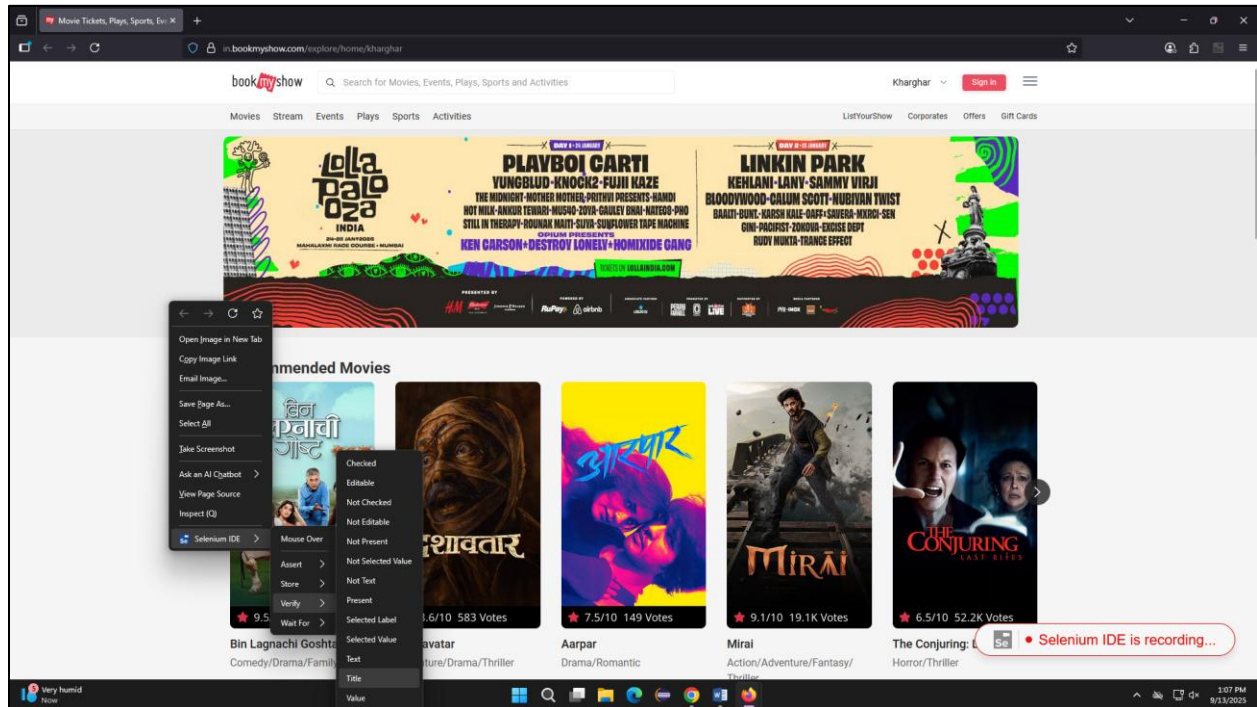
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- NOTE THAT each command is recorded:
- Now we'll make use of command assertText.

(This command verifies particular text of the webpage and stops the execution of testcase if the match isn't found.)

So, we want to make sure that our automated testcase chooses our specified Bus Provider.

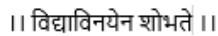
To ensure that, here we do Right Click over the name of the bus provider>
then select Selenium IDE> and click Assert Text :

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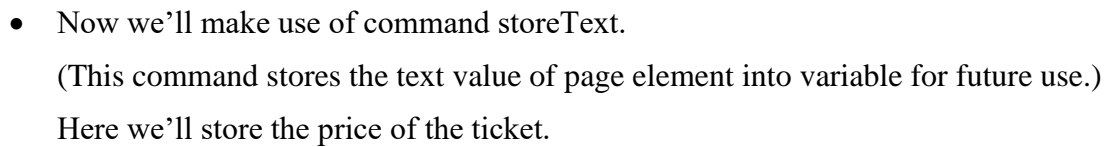
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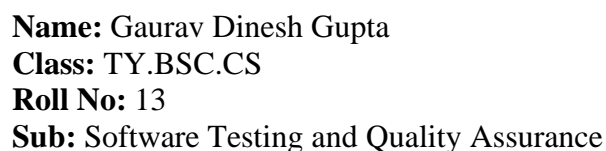


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So, we select the price> right click over it> select Selenium IDE> click Store Text :





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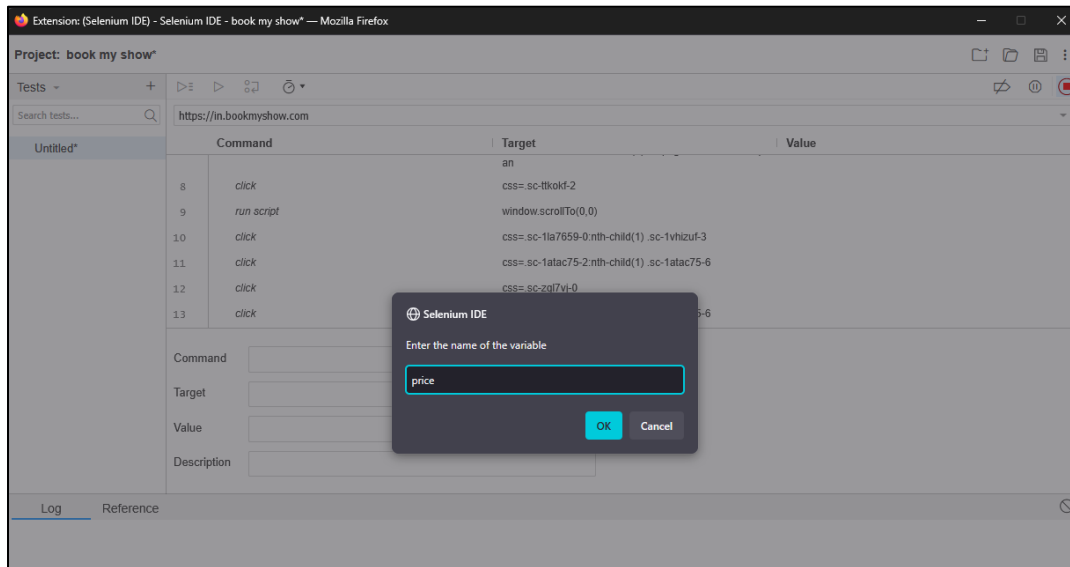
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- Now Selenium IDE will prompt us to enter the name of the variable in which that price will be stored:



- After clicking OK, we can see how the target is automatically mapped to the css attribute of the page, and our price is stored:
- Now we'll make use of command echo.
(This command is used to display text(comments, notes) and/or the stored value of variables in the log area of Selenium IDE.)
Here we'll display the price of the ticket from the variable "price" that we stored during the use of storeText command.
To create a new command, we just click onto the next line and enter our command:
- We'll enter the Command name echo, & Value \${price} because we are calling the created variable "price" from this command:

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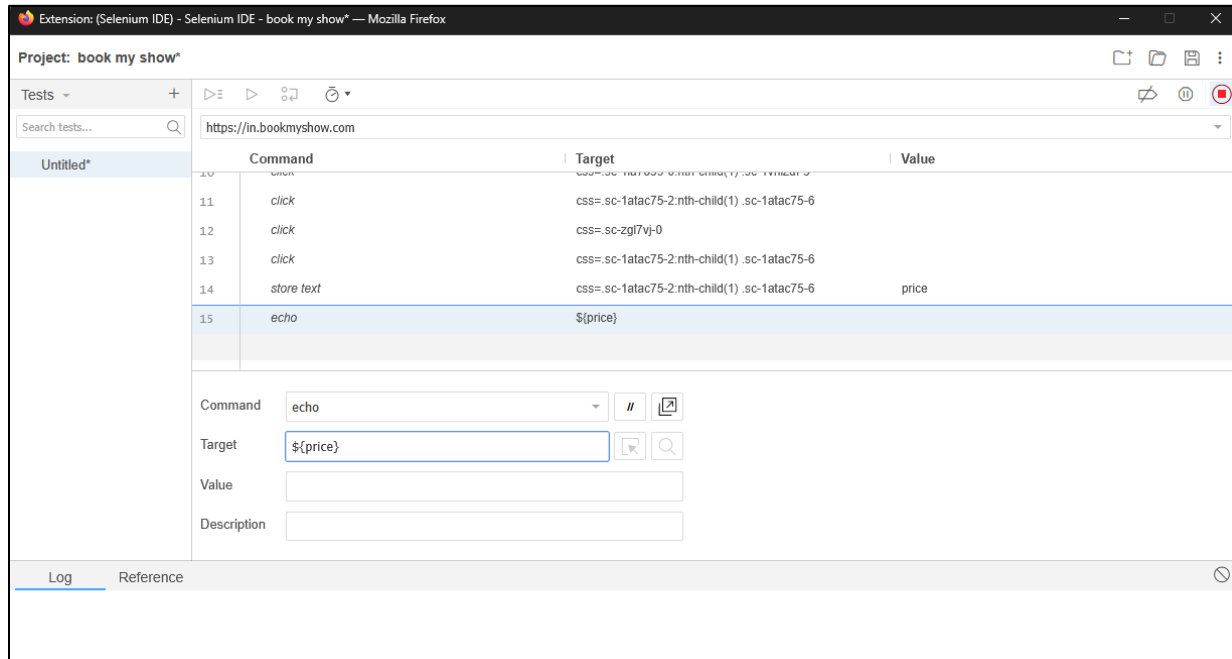
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


- Now we'll Run current test & write test name:

Name your new test

Please provide a name for your new test.

TEST NAME
practical 2

You can change it at any time by clicking the  icon next to its name in the tests panel.

OKLATER

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OUTPUT:

Extension: (Selenium IDE) - Selenium IDE - book my show* — Mozilla Firefox

Project: book my show*

Tests +

Search tests...

https://in.bookmyshow.com

	Command	Target	Value
13	✓ run script	window.scrollTo(0,0)	
14	✓ click	id=bottomSheet-model-close	
15	✓ click	css=.sc-1la7659-0:nth-child(1) > .sc-1vhizuf-1	
16	✓ click	css=.sc-1atac75-2:nth-child(1).sc-1atac75-6	
17	✓ store text	css=.sc-1atac75-2:nth-child(1).sc-1atac75-6	price
18	✓ echo	\$(price)	

Command

Target

Value

Description

Log Reference

11. runScript on window.scrollTo(0,0) OK 13:06:04

12. click on css=.sc-1qdowf4-0 OK 13:06:04

13. runScript on window.scrollTo(0,0) OK 13:06:04

14. click on id=bottomSheet-model-close OK 13:06:04

15. click on css=.sc-1la7659-0:nth-child(1) > .sc-1vhizuf-1 OK 13:06:04

16. Trying to find css=.sc-1atac75-2:nth-child(1).sc-1atac75-6... OK 13:06:04

17. storeText on css=.sc-1atac75-2:nth-child(1).sc-1atac75-6 with value price OK 13:06:05

echo: ₹390 13:06:05

'practical 2' completed successfully 13:06:05

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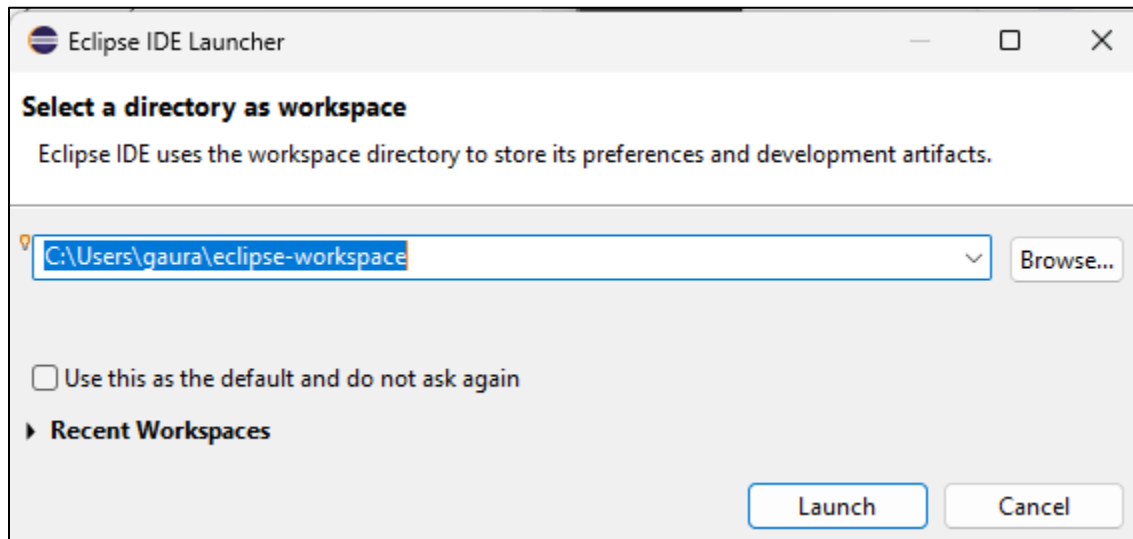
AIM: Install Selenium Server(Selenium RC) and demonstrate it using a script in Java.

REQUIREMENTS:

- 1) To Download “JDK”:
- 2) To Download “Eclipse IDE”:
- 3) To Download “Selenium Server Driver and Client Driver (JAR files)”:
 - a) For “Selenium Server Driver”:
 - b) For “Selenium Client Driver”:
- 4) To Download “Chrome Driver”:

STEPS:

- 1) Open Eclipse. Select your workspace directory. Click Launch:



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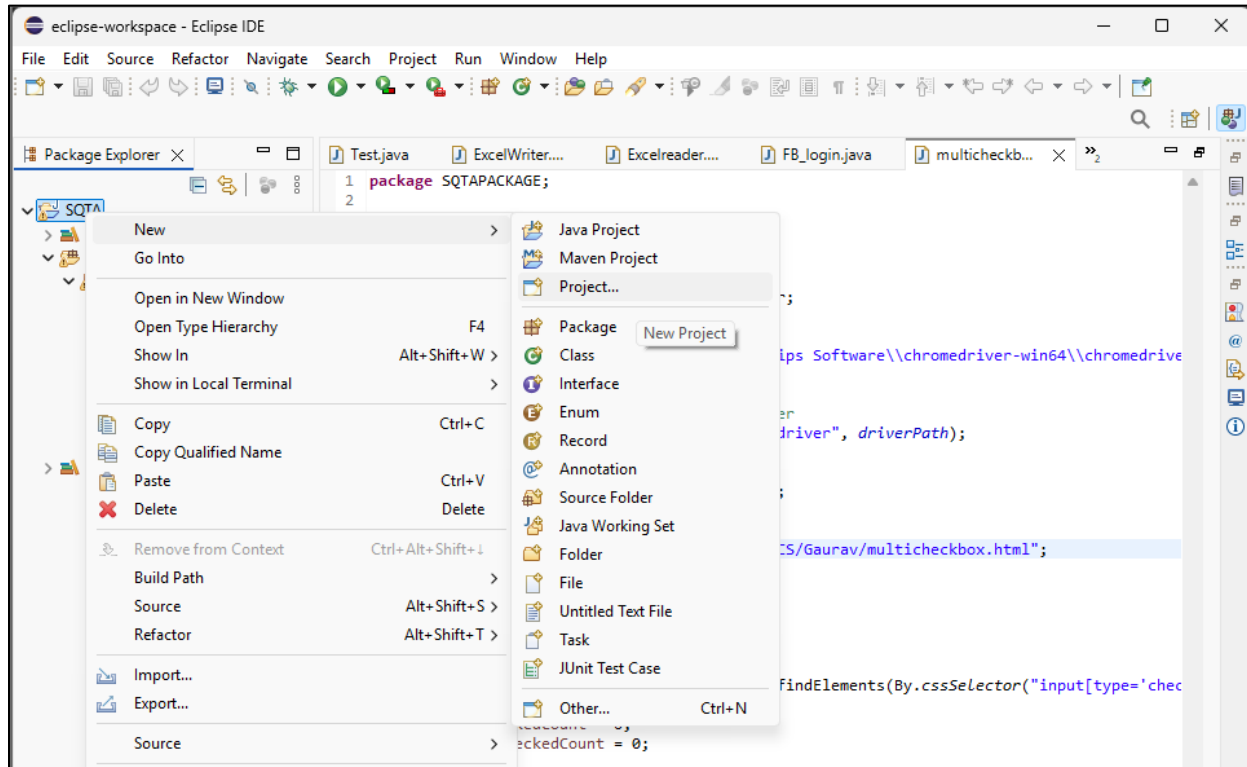
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2) Create a Project(File > New > Java Project):



3) Name the project as “gcd” > click Finish > click Don't Create module:

4) Close the “Welcome” tab.

5) Create a Package(right-click on Project Name > New > Package > Name it > Finish):

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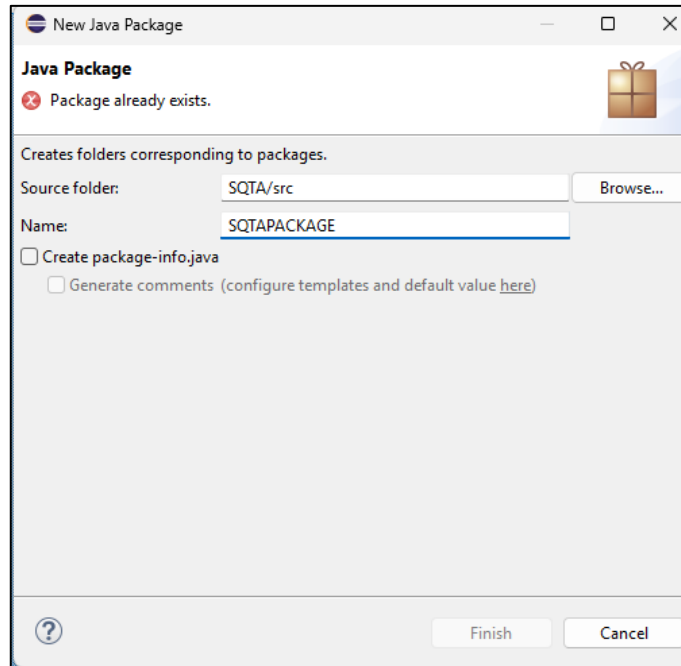
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6) Create a Class(right-click on Project Name > New > Class > Name it > Finish):

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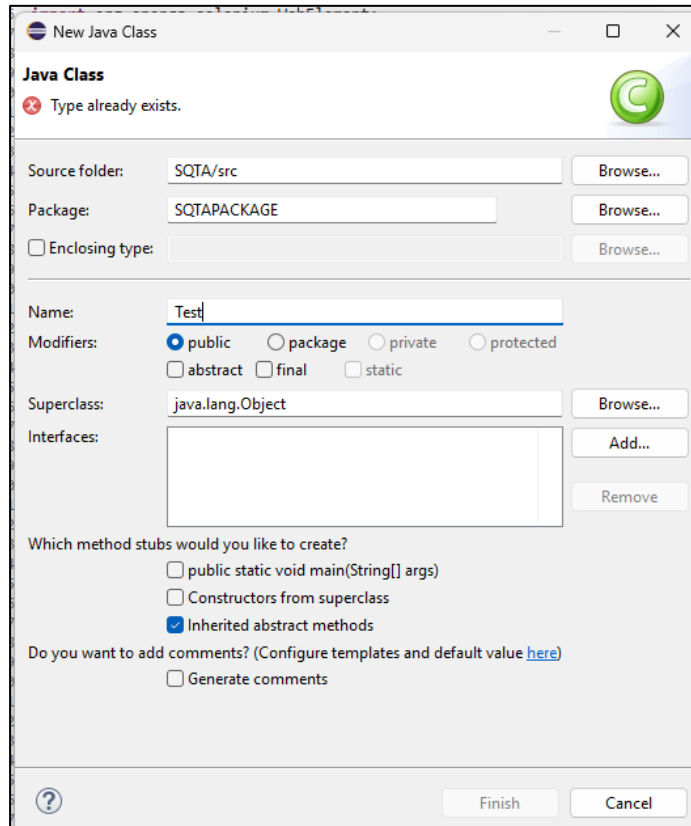
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7) Adding “Selenium Server Driver and Client Driver(JAR files)” in Eclipse IDE:

- right-click on Project Name > Build Path > Configure Build Path...

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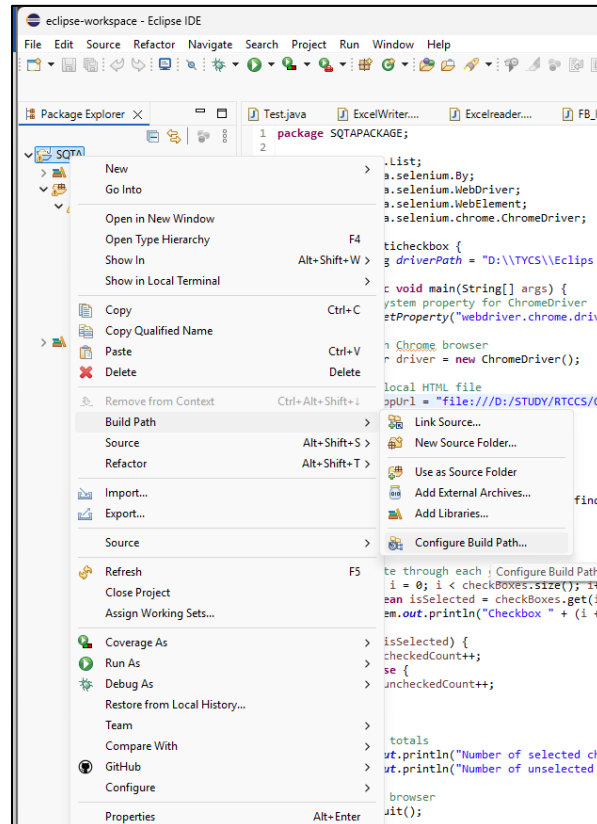
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- now go under: Java Build Path > Libraries > Classpath > click Add External JARs...

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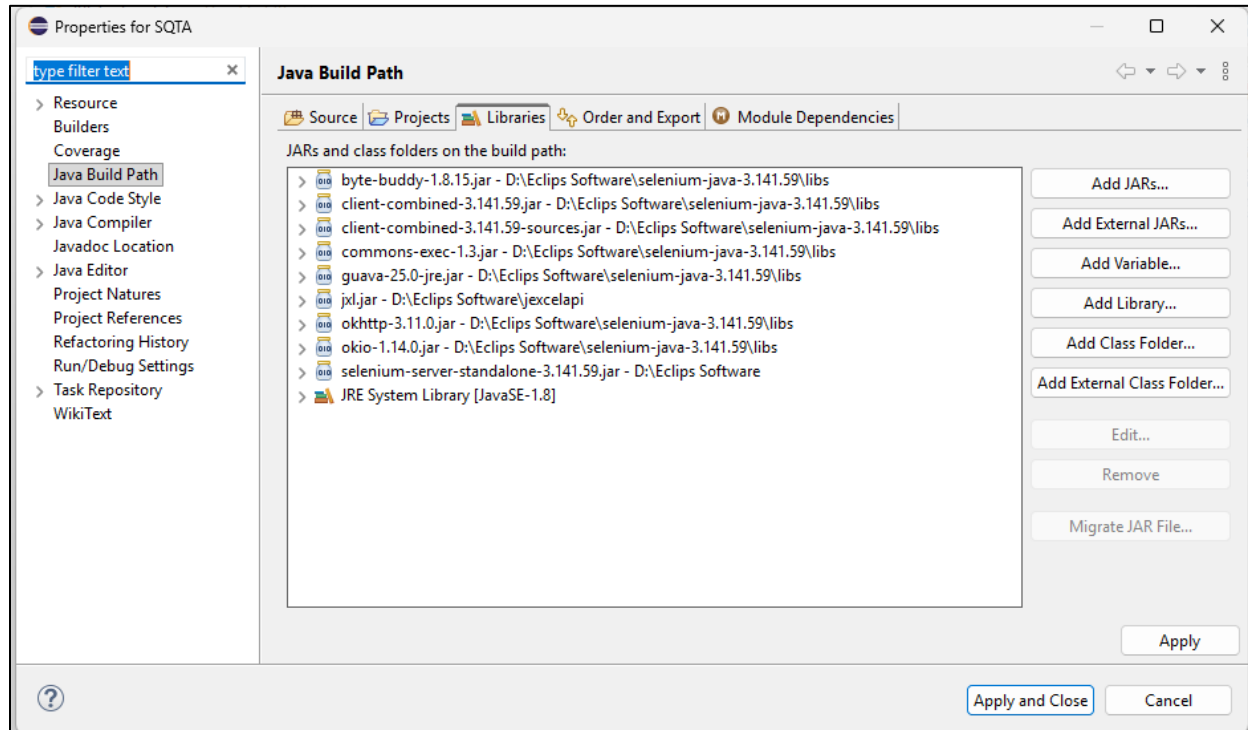
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8) Creating a link for HTML file(wherein calculation part is present):

(NOTE that this file will be run by the 'script in JAVA'(which we'll create later))

- Create a Notepad file with the following code and save it as "gcdhtml.html":

---(gcdhtml.html)---

```
<html>
<head>
<script type="text/javascript">
function gcd() {
    var x, y;
    x = parseInt(document.myform.n1.value);
    y = parseInt(document.myform.n2.value);
    while (x != y) {
        if (x > y) {
            x = x - y;
        } else {
            y = y - x;
        }
    }
}
```

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Class: TY.BSC.CS

Roll No: 13

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```
document.myform.result.value = x;
}
</script>
</head>
<body>
<center>
<h1>---Program to calculate GCD of two numbers---</h1>
<hr color="red" />
<form name="myform">
Enter Number 1: <input type="text" name="n1" value="" /> <br />
<br />
Enter Number 2: <input type="text" name="n2" value="" /> <br />
<br />
<input
  type="button"
  name="btn"
  value="Get GCD"
  onClick="gcd()"
/><br /><br />
GCD: <input type="text" name="result" value="" />
</form>
</center>
</body>
</html>
```

- Close the file. Then right-click > Open with > Firefox Browser
- Copy URL from the webpage:

---Program to calculate GCD of two numbers---

Enter Number 1:

Enter Number 2:

GCD:

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9) Creating the script in JAVA:

- Now we'll put the path of "chromedriver" in a String driverPath
- And we'll paste the copied URL in the .get() method of the WebDriver class

---(Test.java)---

```
package gcd;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;

public class gcdpackage {
    public static void main(String[] args) throws InterruptedException {
        // Set the correct path to ChromeDriver
        System.setProperty("webdriver.chrome.driver",
            "D:\\CS\\Sonali\\STQA\\Eclips Software\\chromedriver-win64\\chromedriver.exe");

        // Start Chrome
        WebDriver driver = new ChromeDriver();

        // Open your HTML file
        driver.get("file:///D:/CS/Sonali/STQA/Sonali/gcdhtml.html");
        driver.manage().window().maximize();

        // Fill form
        driver.findElement(By.name("n1")).sendKeys("24");
        driver.findElement(By.name("n2")).sendKeys("6");
        driver.findElement(By.name("btn")).click();

        // Output result
        String result = driver.findElement(By.name("result")).getAttribute("value");
        System.out.println("GCD = " + result);
        try {
            Thread.sleep(10000); // waits for 10 seconds (10,000 ms)
        } catch (InterruptedException e) {
            e.printStackTrace();
        }
        Thread.sleep(10000);
        //Close browser
        driver.quit();
    }
}
```

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}

}

10) Run the file from Eclipse IDE:

OUTPUT:

---Program to calculate GCD of two numbers---

Enter Number 1:

Enter Number 2:

GCD:

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Practical No. 4A

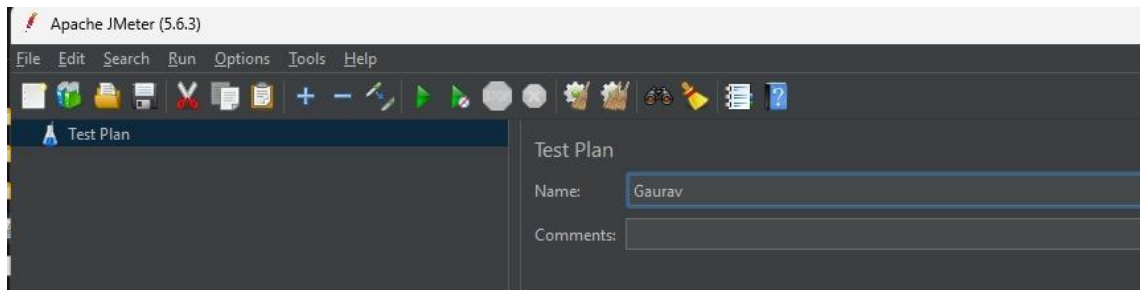
AIM: Load Testing using JMeter.

PRE-REQUISITES:

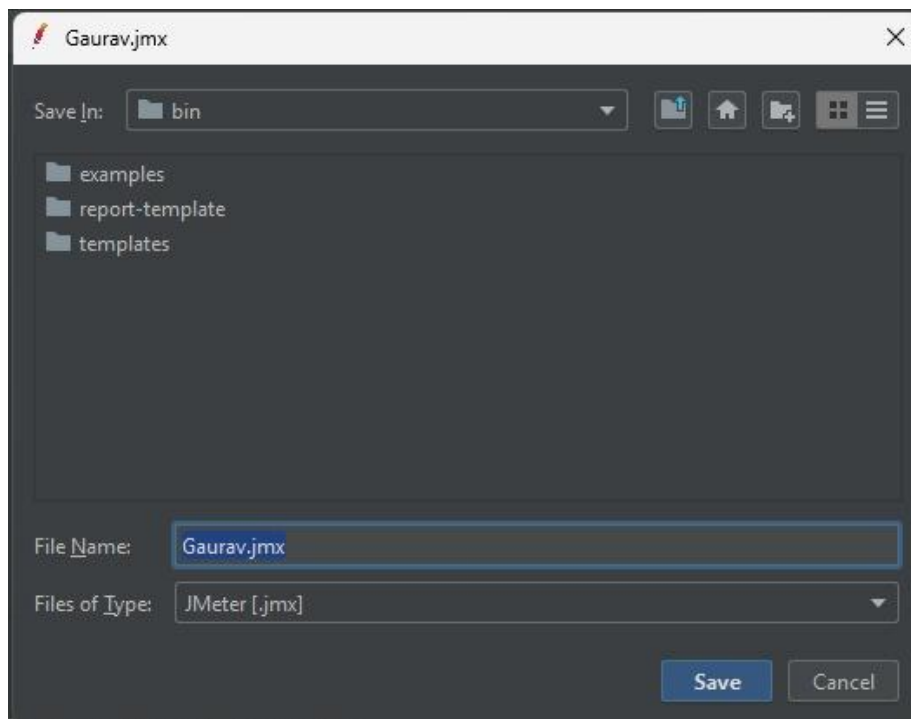
- 1) To Download “JDK”:
- 2) To Download “Apache JMeter”:

STEPS:

- 1) Open “ApacheJMeter.jar” file. Name your Test Plan as “hello”:



- 2) Save(CTRL+S) your Test Plan. It will be saved as “.jmx”(i.e. Java Management Extensions):



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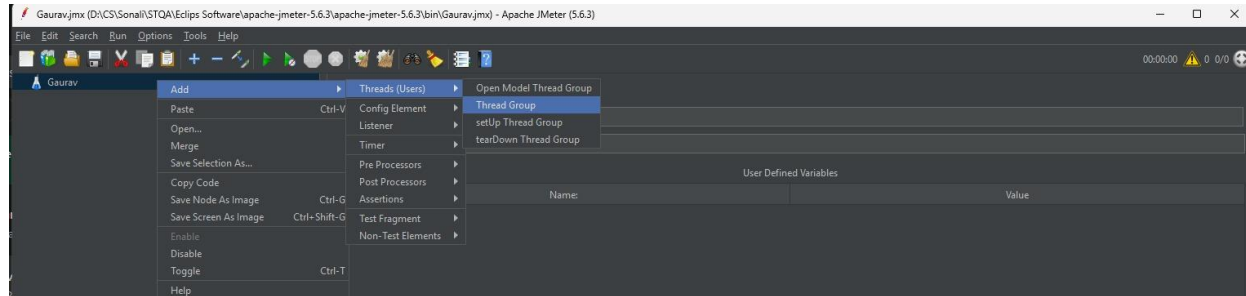
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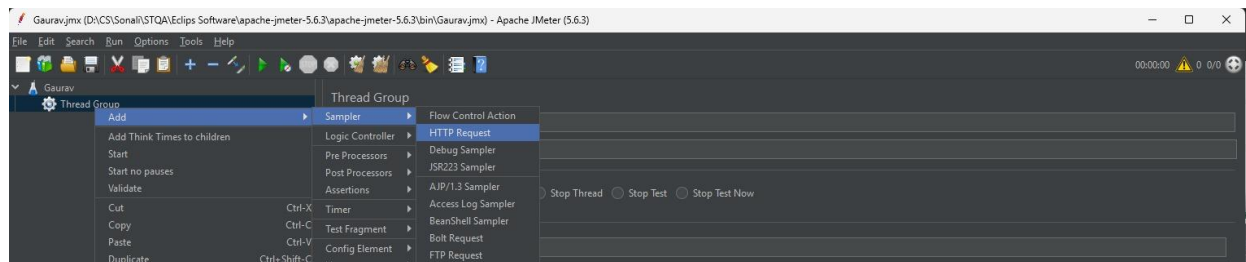
3) Create a Thread Group

(right-click over “hello(Test Plan)” > Add > Thread(Users) > Thread Group > Name your Thread Group as “myThread1” > Save(CTRL+S)):

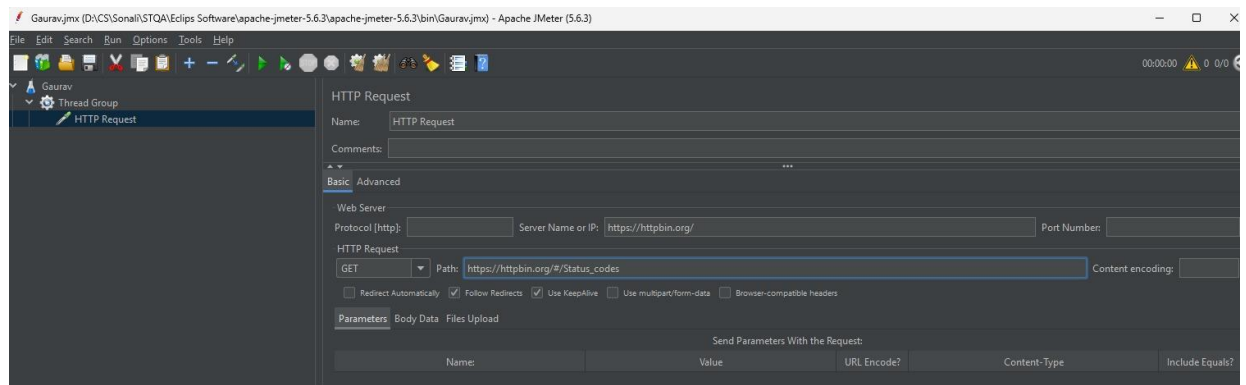


4) Under Thread Group(myThread1), add a “Sampler”, namely HTTP Request:

(right-click over “myThread1(Thread Group)” > Add > Sampler > HTTP Request):



5) Now visit any website page with a next path. Then set website name as “Server Name or IP” & next path as “Path” in the Basic panel:



6) Under HTTP Request Sampler, add 2 “Listeners”, namely View Results Tree & View Results

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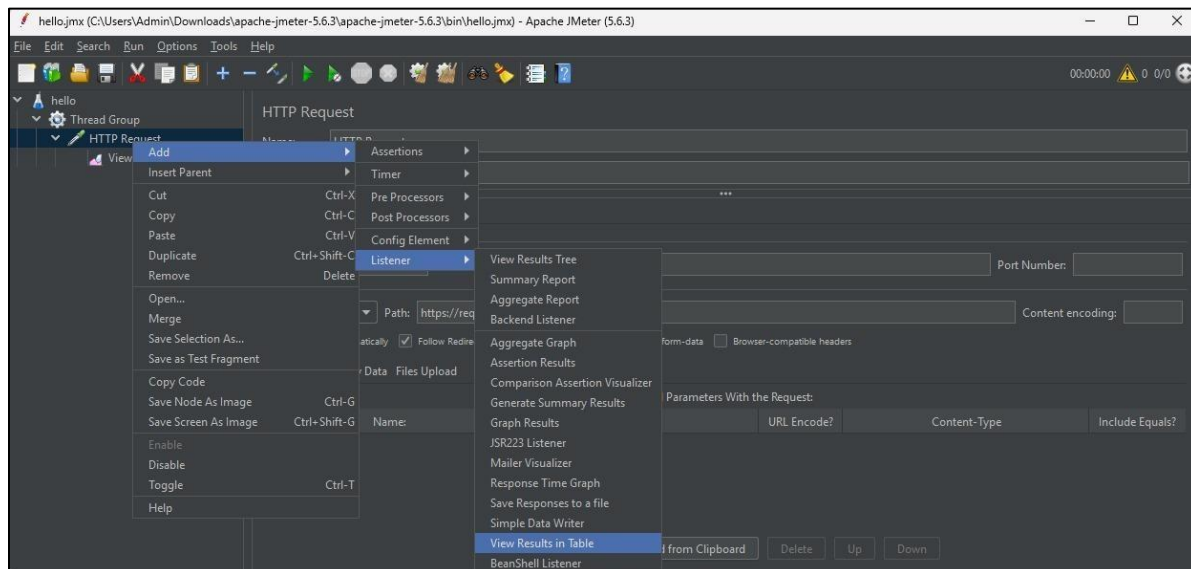
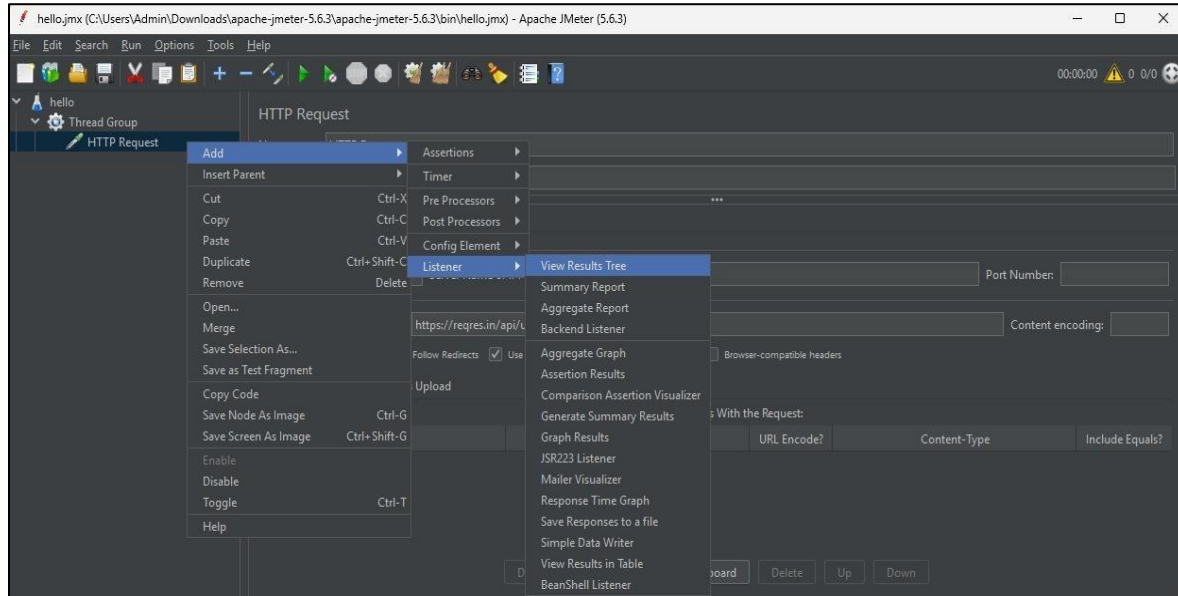
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in Table:

(right-click over HTTP Request(Sampler) > Add > Listener > View Results Tree) &

(right-click over HTTP Request(Sampler) > Add > Listener > View Results in Table):



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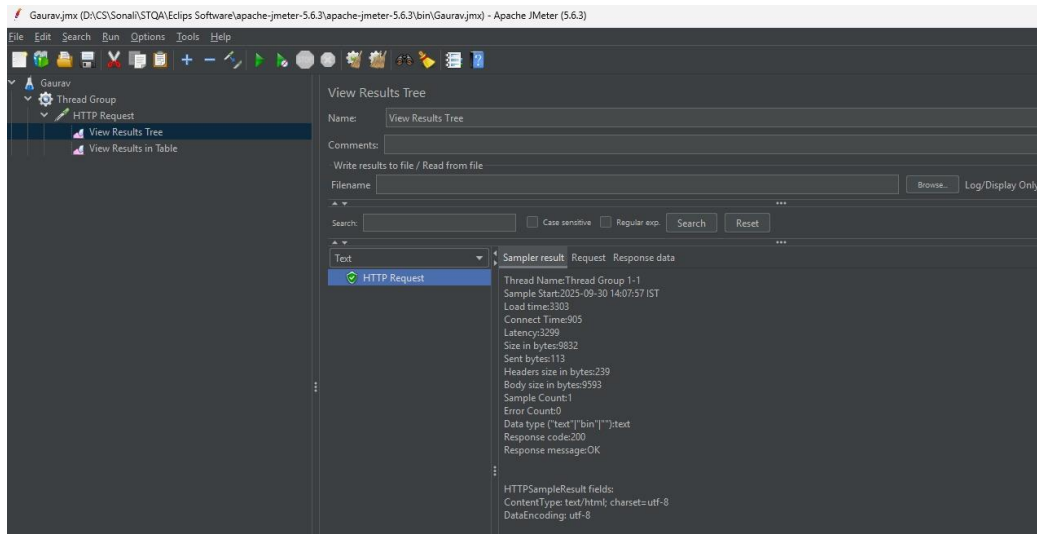
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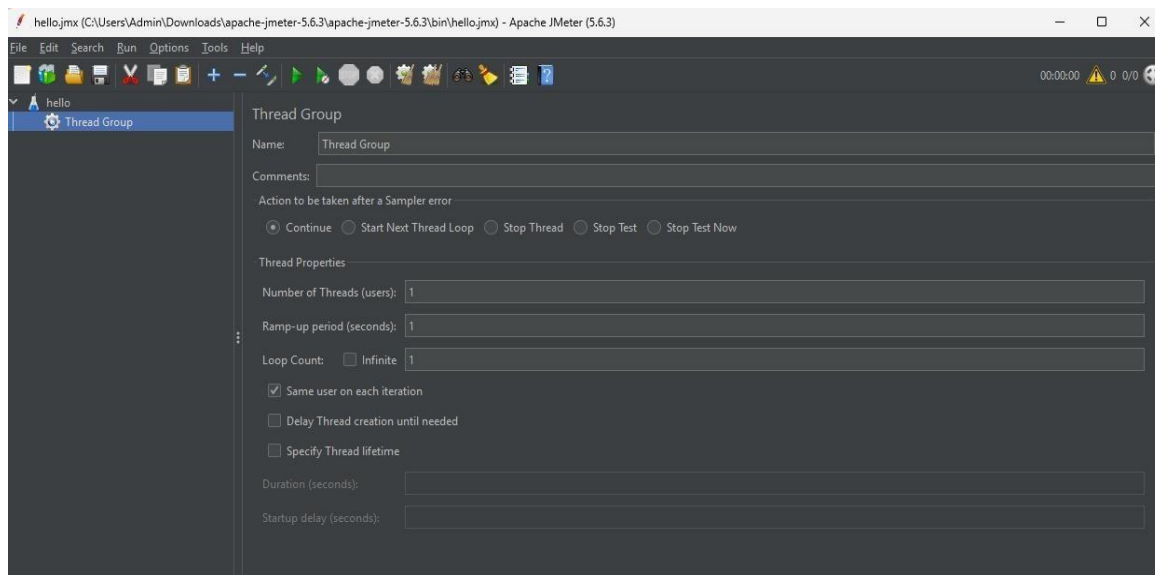
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7) Save(CTRL+S) & Run(CTRL+R) the file and wait for a while. You'll see some:

OUTPUT:



8) Now change some Thread Properties(users=10; ramp-up period=20; loop count=Forever):



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9) Save(CTRL+S) & Run(CTRL+R) the file and wait for a while. You'll see some infinite:

OUTPUT:

Sample #	Start Time	Thread Name	Label	Sample Time(ms)	Status	Bytes	Sent Bytes	Latency	Connect Time(ms)
1	14:07:57.349	Thread Group 1-1	HTTP Request	3303	Success	9832	113	3299	905

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Practical No. 4B

AIM: To study Bugzilla(demo site).

REQUIREMENTS:

- 1) A stable internet connection.
- 1) Create account and Login:
 - a) Visit this demo site: https://bugs.freedesktop.org/enter_bug.cgi
 - b) Click on “New Account” in the main menu:
 - c) Enter email-id:
 - d) Open the link from your email inbox, and then fill details, then click “Create”:
 - e) You’ll see that you’re logged-in:
- 2) Creating and submitting a Bug-report:

The screenshot shows the Bugzilla demo site interface for filing a web compatibility issue. At the top, there is a navigation bar with links for Home, Search, Contribute, All issues, and Login. Below this is a progress bar with steps 1 through 7: Web address, Issue, Details, Testing, Description, Screenshot, and Send report. The main heading is "Filing a web compatibility issue". The form asks the user to enter the URL where they encountered the issue, with the example "https://www.flipkart.com/" entered and a green checkmark indicating it is valid. Below the input field is a "Confirm" button and a link to "Learn more about web compatibility". A note states: "All information included in this report will be publicly visible. [Learn More](#)". The next section asks "What is wrong with the page at www.flipkart.com?" and provides five options with corresponding icons: "Desktop site instead of mobile site" (selected with a green checkmark), "Site is not usable", "Design is broken", "Video or audio doesn't play", and "Something else".

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1234567

Web addressIssueDetailsTestingDescriptionScreenshotSend report

What is wrong with the page at www.flipkart.com?

Desktop site instead of mobile site

Site is not usable

Design is broken

Video or audio doesn't play

Something else

How is the design broken?

Images not loaded

Items are overlapped

Items are misaligned

Items not fully visible

Did you encounter the issue on this device (Windows 10) using this browser (Chrome 140.0.0)?

1234567

Web addressIssueDetailsTestingDescriptionScreenshotSend report

Did you encounter the issue on this device (Windows 10) using this browser (Chrome 140.0.0)?

Yes

I encountered the issue on a [different device or browser](#)

Please select another browser you have tested on

Firefox

Edge

Safari

Opera

Internet Explorer

Other

Confirm

[I have only tested on this browser \(Chrome 140.0.0\)](#)

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Web address

Issue


Details

Testing

Description

Screenshot

7Send report



OK, now the vital part!
Please describe what happened, including any steps you took before you saw the problem.

Order button is not working....

Minimum 30 characters

Continue

Image uploaded.


Uploaded images are publicly viewable.
Avoid uploading images that contain sensitive information or violate our [Terms of Service](#).

RT

Continue

Delete this image

[Upload a different image](#)



Your report is ready to send!

Good job! You can report via GitHub or report anonymously.

Report via GitHub

Report anonymously

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Practical No. 5

AIM: Write and test a program to update 10 student records into Excel file(table).

PRE-REQUISITES:

- 1) Check that you have Eclipse IDE.
- 2) To Download “JXL.JAR”:

STEPS:

- 1) Open Eclipse. Select your workspace directory. Click Launch:
- 2) Create a Project(File > New > Java Project):
- 3) Name the project as “p5” > click Finish > click Don't Create module:
- 4) Close the “Welcome” tab.
- 5) Create a Package(right-click on Project Name > New > Package > Name it > Finish):
- 6) Create a Class(right-click on Project Name > New > Class > Name it > Finish):
- 7) Adding “JXL(JAR file)” in Eclipse IDE:
 - right-click on Project Name > Build Path > Configure Build Path...
 - now go under: Java Build Path > Libraries > Classpath > click Add External JARs...
 - Browse and add JAR file > click Apply and Close :
- 8) Creating the script in JAVA:

---(Excelwriter.java)---

```
package SQTAPACKAGE;
import jxl.*;
import jxl.write.*;
import jxl.write.Number;
import java.io.*;
import java.util.Locale;
public class ExcelWriter {
    public static void main(String[] args) throws IOException, WriteException {
```

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```
int r = 0, c = 0;
String[] header = {"Student Name", "Subject1", "Subject2", "Subject3", "Total"};
String[] sname = {"Gaurav", "Karthik", "Keziah", "Sakshi"};
int[] marks = {50, 45, 60, 55, 70, 45, 67, 78, 89, 90, 30, 40}; // 4 students × 3 subjects = 12
marks
File file = new File("student.xls");
WorkbookSettings wbSettings = new WorkbookSettings();
wbSettings.setLocale(new Locale("en", "EN"));
WritableWorkbook workbook = Workbook.createWorkbook(file, wbSettings);
WritableSheet excelSheet = workbook.createSheet("Report", 0);
// Create header
for (c = 0; c < header.length; c++) {
    Label l = new Label(c, 0, header[c]);
    excelSheet.addCell(l);
}
int markIndex = 0; // to track index in marks[]
// Fill student data
for (r = 1; r <= sname.length; r++) {
    // Student Name
    Label nameLabel = new Label(0, r, sname[r - 1]);
    excelSheet.addCell(nameLabel);
    int total = 0;
    // Subjects 1 to 3
    for (c = 1; c <= 3; c++) {
        int mark = marks[markIndex++];
        total += mark;
        Number markCell = new Number(c, r, mark);
        excelSheet.addCell(markCell);
    }
}
```

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```
}  
// Total  
Number totalCell = new Number(4, r, total);  
excelSheet.addCell(totalCell);  
}  
workbook.write();  
workbook.close();  
System.out.println("Excel File Created!!!!");  
}  
}
```

9) Run the file from Eclipse IDE:

OUTPUT:

The screenshot shows a Microsoft Excel spreadsheet titled 'student.xls'. The data is organized as follows:

Student Name	Subject1	Subject2	Subject3	Total
Gaurav	50	45	60	155
Karthik	55	70	45	170
Keziah	67	78	89	234
Sakshi	90	30	40	160

The screenshot shows the Eclipse IDE console with the following output:

```
<terminated> ExcelWriter [Java Application] C:\Program Files (x86)\Java\jre1.8.0_461\bin\javaw.exe (Oct 1, 2025)  
Excel File Created!!!!
```

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Practical 6

AIM: Write and test a program to select the number of students from Excel file(table) who have scored 60 or more in any one subject(or all subjects).

PRE-REQUISITES:

- 1) Check that you have Eclipse IDE.
- 2) Check that you have JXL.JAR.
- 3) Check that you've the Excel file("student.xls") that we'll be working on for reading data.

STEPS:

- 1) Open Eclipse. Select your workspace directory. Click Launch:
- 2) Create a Project(File > New > Java Project):
- 3) Name the project as "p6" > click Finish > click Don't Create module:
- 4) Close the "Welcome" tab.
- 5) Create a Package(right-click on Project Name > New > Package > Name it > Finish):
- 6) Create a Class(right-click on Project Name > New > Class > Name it > Finish):
- 7) Adding "JXL(JAR file)" in Eclipse IDE:
 - right-click on Project Name > Build Path > Configure Build Path...
 - now go under: Java Build Path > Libraries > Classpath > click Add External JARs...
 - Browse and add JAR file > click Apply and Close :
- 8) Creating the script in JAVA:

---(Excelreader.java)---

```
package SQTAPACKAGE;
import java.io.File;
import java.io.IOException;
import jxl.Cell;
import jxl.Sheet;
import jxl.Workbook;
import jxl.read.biff.BiffException;
public class Excelreader {
    private String inputFile;
    public void setInputFile(String inputFile) {
```

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```
this.inputFile = inputFile;
}

public void read() throws IOException {
    File inputWorkbook = new File(inputFile);
    Workbook w;
    int count = 0;
    try {
        w = Workbook.getWorkbook(inputWorkbook);
        Sheet sheet = w.getSheet(0);
        // Skip header row (start from row 1)
        for (int row = 1; row < sheet.getRows(); row++) {
            boolean hasMarkAbove60 = false;
            // Check only Subject1, Subject2, Subject3 (columns 1, 2, 3)
            for (int col = 1; col <= 3; col++) {
                Cell cell = sheet.getCell(col, row);
                try {
                    int mark = Integer.parseInt(cell.getContents());
                    if (mark >= 60) {
                        hasMarkAbove60 = true;
                        break; // No need to check other subjects
                    }
                } catch (NumberFormatException e) {
                    // Not a number, skip
                }
            }
            if (hasMarkAbove60) {
                count++;
            }
        }
        System.out.println("Total number of students who scored 60 or more in one or more
subjects: " + count);

    } catch (BiffException e) {
        e.printStackTrace();
    }
}

public static void main(String[] args) throws IOException {
    Excelreader test = new Excelreader();
    test.setInputFile("C:\\Users\\gaura\\eclipse-workspace\\SQTA\\student.xls");
}
```

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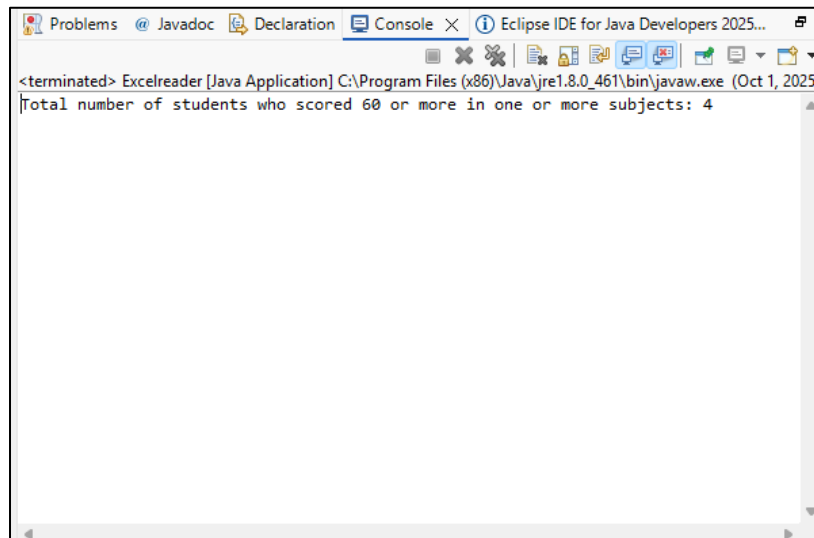
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```
test.read();  
}  
}
```

9) Run the file from Eclipse IDE:

OUTPUT:



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Practical No. 7

AIM: Write and test a program for logging in facebook webpage.

PRE-REQUISITES:

- 1) Check that you have JDK.
- 2) Check that you have Eclipse IDE.
- 3) Check that you have Selenium Server Driver and Client Driver (JAR files).
- 4) Check that you have ChromeDriver.
- 5) Check that you have a stable Internet connection.

STEPS:

- 1) Open Eclipse. Select your workspace directory. Click Launch:
- 2) Create a Project(File > New > Java Project):
- 3) Name the project as “p7” > click Finish > click Don't Create module:
- 4) Close the “Welcome” tab.
- 5) Create a Package(right-click on Project Name > New > Package > Name it > Finish):
- 6) Create a Class(right-click on Project Name > New > Class > Name it > Finish):
- 7) Adding “JXL(JAR file)” in Eclipse IDE:
 - right-click on Project Name > Build Path > Configure Build Path...
 - now go under: Java Build Path > Libraries > Classpath > click Add External JARs...
 - Browse and add JAR file > click Apply and Close :
- 8) Creating the script in JAVA:

- Now we'll put the path of “chromedriver” in a String driverPath
- And in here, we'll put the ID's in the .id() method respectively.

---(FB_login.java)---

```
package p7;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import java.util.Scanner;
public class FB_login {
    public static void main(String[] args) {
```

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```
// Set the path to ChromeDriver
System.setProperty("webdriver.chrome.driver", "D:\\CS\\Sonali\\STQA\\Eclips
Software\\chromedriver-win64\\chromedriver.exe");
// Initialize WebDriver
WebDriver driver = new ChromeDriver();
driver.manage().window().maximize();
// Open Facebook login page
driver.get("https://www.facebook.com");
// Enter email
WebElement emailBox = driver.findElement(By.id("email"));
emailBox.sendKeys("your_email_here@gmail.com");
// Enter password
WebElement passBox = driver.findElement(By.id("pass"));
passBox.sendKeys("your_password_here");
// Click Login button
WebElement loginBtn = driver.findElement(By.name("login"));
loginBtn.click();
// Wait to allow page to load
try {
    Thread.sleep(50000); // Wait 5 seconds
} catch (InterruptedException e) {
    e.printStackTrace();
}
// Check if login was successful
if (driver.getCurrentUrl().contains("login") ||
driver.getPageSource().toLowerCase().contains("incorrect")) {
    System.out.println("Login failed. Please check credentials.");
} else {
    System.out.println("Login successful.");
}
// Pause before closing browser
System.out.println("Press Enter to close browser...");
//new Scanner(System.in).nextLine();
// Close browser
driver.quit();
}
```

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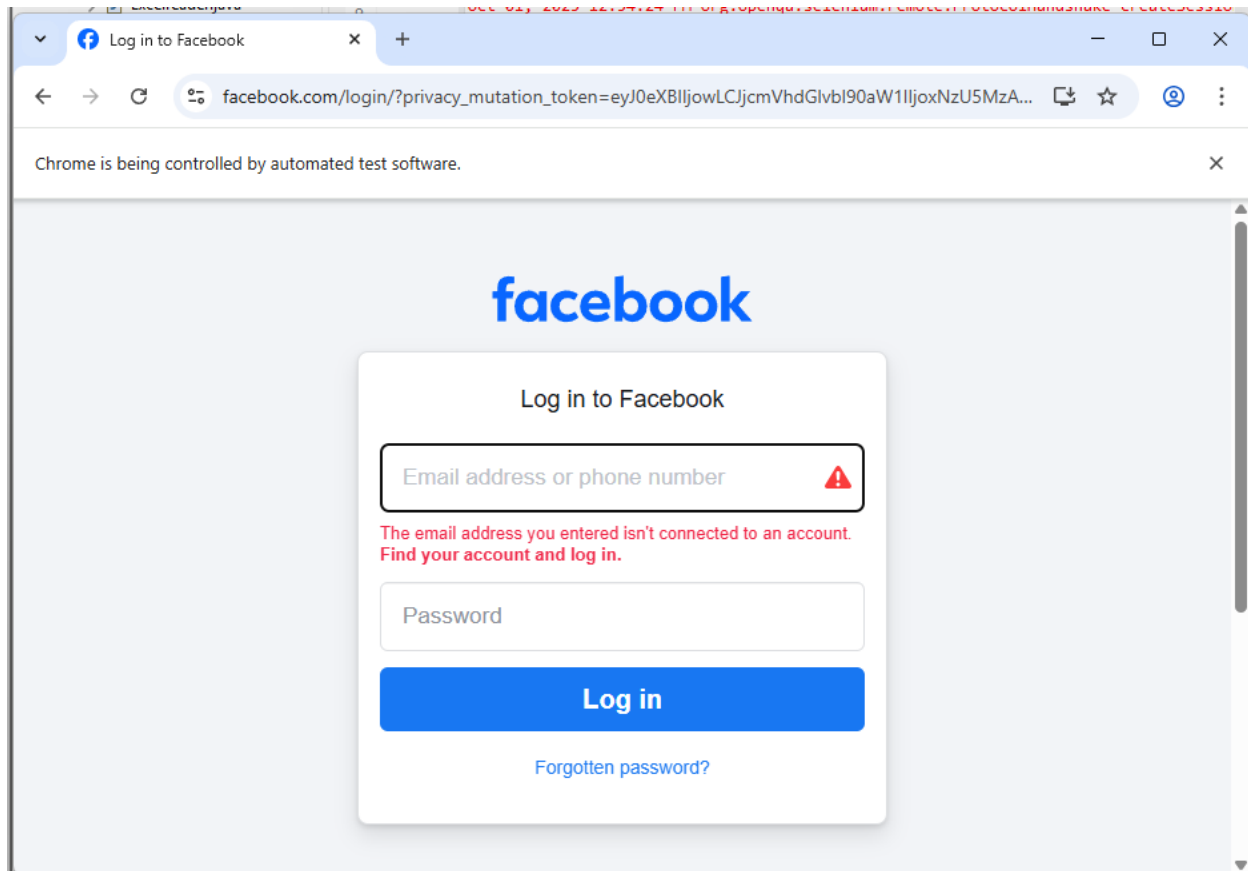
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9) Run the file from Eclipse IDE:

OUTPUT:



```
FB_login [Java Application] C:\Program Files (x86)\Java\jre1.8.0_461\bin\javaw.exe (Oct 1, 2025, 12:54:19 PM elapsed)
Starting ChromeDriver 139.0.7258.67 (1f3fda458c93780ea4f84ffc95e719bddea52a8d-refs)
Only local connections are allowed.
Please see https://chromedriver.chromium.org/security-considerations for suggestions
ChromeDriver was started successfully on port 20990.
[1759303463.851][WARNING]: This version of ChromeDriver has not been tested with C
Oct 01, 2025 12:54:24 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: W3C
Login failed. Please check credentials or CAPTCHA.
Press Enter to close browser...
```

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Practical 8

AIM: Write and test a program to provide total number of objects present/available on webpage.

PRE-REQUISITES:

- 1) Check that you have JDK.
- 2) Check that you have Eclipse IDE.
- 3) Check that you have Selenium Server Driver and Client Driver(JAR files).
- 4) Check that you have Chrome Driver.
- 5) Check that you have a stable Internet connection.

STEPS:

- 1) Open Eclipse. Select your workspace directory. Click Launch:
- 2) Create a Project(File > New > Java Project):
- 3) Name the project as “p8” > click Finish > click Don't Create module:
- 4) Close the “Welcome” tab.
- 5) Create a Package(right-click on Project Name > New > Package > Name it > Finish):
- 6) Create a Class(right-click on Project Name > New > Class > Name it > Finish):
- 7) Adding “JXL(JAR file)” in Eclipse IDE:
 - right-click on Project Name > Build Path > Configure Build Path...
 - now go under: Java Build Path > Libraries > Classpath > click Add External JARs...
 - Browse and add JAR file > click Apply and Close :
- 8) Creating the script in JAVA:
 - Now we'll put the path of “chromedriver” in a String driverPath

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---(FindAllLinks.java)---

```
package SQTAPACKAGE;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import java.util.List;

public class FindAllLinks {

    static String driverPath = "D:\\TYCS\\Eclips Software\\chromedriver-win64\\chromedriver-
win64\\chromedriver.exe";

    public static void main(String[] args) {

        System.setProperty("webdriver.chrome.driver", driverPath);

        WebDriver driver = new ChromeDriver();

        driver.manage().window().maximize();

        driver.get("https://www.google.co.in/");

        try {

            Thread.sleep(3000); // wait for page to load

        } catch (InterruptedException e) {

            e.printStackTrace();

        }

        List<WebElement> links = driver.findElements(By.tagName("a"));

        int visibleCount = 0;

        System.out.println("Visible Links:\n");

        for (WebElement link : links) {

            String linkText = link.getText().trim();

            if (!linkText.isEmpty()) {

                System.out.println((visibleCount + 1) + ". " + linkText);

                visibleCount++;

            }

        }

    }

}
```

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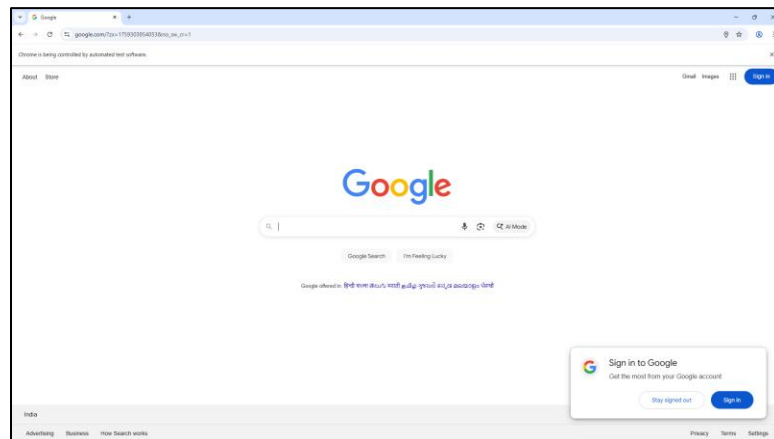
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```
}  
}  
System.out.println("\nTotal number of <a> tags: " + links.size());  
System.out.println("Visible links with text: " + visibleCount);  
driver.quit();  
}  
}
```

9) Run the file from Eclipse IDE:

OUTPUT:



```
<terminated> FindAllLinks [Java Application] C:\Program Files (x86)\Java\jre1.8.0_461\bin\javaw.exe (Oct 1, 2022)  
3. Gmail  
4. Images  
5. Sign in  
6. हिन्दी  
7. বাংলা  
8. తెలుగు  
9. मराठी  
10. தமிழ்  
11. ગુજરાતી  
12. ಕನ್ನಡ  
13. മലയാളം  
14. ਪੰਜਾਬੀ  
15. Advertising  
16. Business  
17. How Search works  
18. Privacy  
19. Terms  
  
Total number of <a> tags: 25  
Visible links with text: 19
```

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Practical No. 9

AIM: Write and test a program to get the number of items in a list/combo box.

PRE-REQUISITES:

- 1) Check that you have JDK.
- 2) Check that you have Eclipse IDE.
- 3) Check that you have Selenium Server Driver and Client Driver(JAR files).
- 4) Check that you have Chrome Driver.
- 5) Check that you have a stable Internet connection.

STEPS:

- 1) Open Eclipse. Select your workspace directory. Click Launch:
 - 2) Create a Project(File > New > Java Project):
 - 3) Name the project as “p9” > click Finish > click Don't Create module:
 - 4) Close the “Welcome” tab.
 - 5) Create a Package(right-click on Project Name > New > Package > Name it > Finish):
 - 6) Create a Class(right-click on Project Name > New > Class > Name it > Finish):
 - 7) Adding “JXL(JAR file)” in Eclipse IDE:
 - right-click on Project Name > Build Path > Configure Build Path...
 - now go under: Java Build Path > Libraries > Classpath > click Add External JARs...
 - Browse and add JAR file > click Apply and Close :
 - 8) Create HTML file in a notepad > Save it > Open it in browser > Copy the URL:
- (NOTE THAT: as this is our LOCAL FILE, this file will be opened thru STATIC URL in script)

---(combobox.html)---

```
<select id="continents">
    <option value="Asia">Asia</option>
    <option value="Europe">Europe</option>
    <option value="Africa">Africa</option>
</select>
```

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9) Creating the script in JAVA:

- Now we'll put the path of our LOCAL FILE(combobox.html) in a string
- Also put the path of "chromedriver" in a String driverPath

```
package SQTAPACKAGE;
import java.util.List;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.ui.Select;
public class combobox {
    // Path to your ChromeDriver
    static String driverPath = "D:\\TYCS\\Eclips Software\\chromedriver-win64\\chromedriver-
win64\\chromedriver.exe";
    public static void main(String[] args) {
        // Set ChromeDriver system property
        System.setProperty("webdriver.chrome.driver", driverPath);
        // Launch Chrome browser
        WebDriver driver = new ChromeDriver();
        // Open the local HTML file
        String appUrl = "file:///D:/STUDY/RTCCS/Gaurav/combobox.html";
        driver.get(appUrl);
        // Maximize browser window
        driver.manage().window().maximize();
        // Wait for page to load
        try {
            Thread.sleep(2000); // Simple static wait
        } catch (InterruptedException e) {
            e.printStackTrace();
        }

        // Locate dropdown using ID
        WebElement dropdownElement = driver.findElement(By.id("continents"));
        // Create Select object
        Select oSelect = new Select(dropdownElement);
        // Get all dropdown options
        List<WebElement> options = oSelect.getOptions();
        int optionCount = options.size();
    }
}
```

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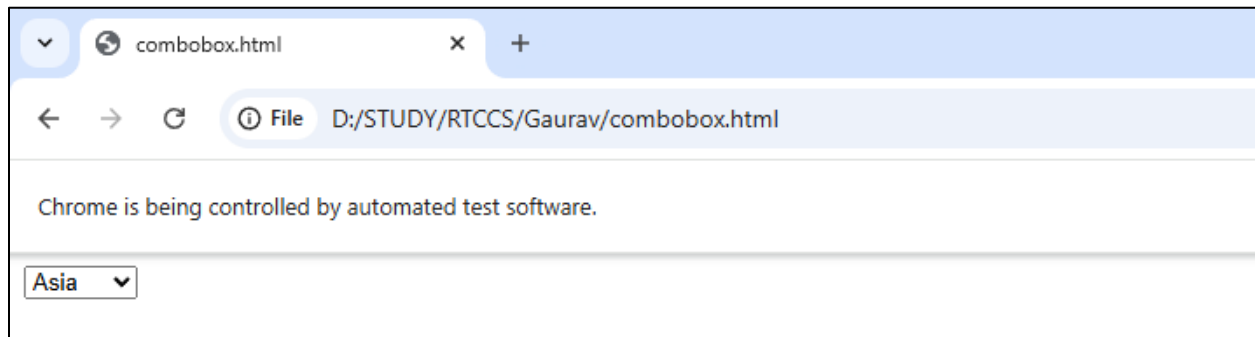
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```
// Print all options
System.out.println("Dropdown Options:");
for (int i = 0; i < optionCount; i++) {
    String optionText = options.get(i).getText();
    System.out.println((i + 1) + ". " + optionText);
}
// Print total number of options
System.out.println("Total No. of Items in Dropdown: " + optionCount);
// Close the browser
driver.quit();
}
```

10) Run the file from Eclipse IDE:

OUTPUT:



```
{terminated> combobox [Java Application] C:\Program Files (x86)\Java\jre1.8.0_461\bin\javaw.exe (Oct 1, 2025,
Starting ChromeDriver 139.0.7258.67 (1f3fda458c93780ea4f84ffc95e719bddea52a8d-refs
Only local connections are allowed.
Please see https://chromedriver.chromium.org/security-considerations for suggestio
ChromeDriver was started successfully on port 52122.
[1759304085.636][WARNING]: This version of ChromeDriver has not been tested with C
Oct 01, 2025 1:04:45 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: W3C
Dropdown Options:
1. Asia
2. Europe
3. Africa
Total No. of Items in Dropdown: 3
```

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Practical No. 10

AIM: Write and test a program to count the number of check boxes on the page checked and unchecked count.

PRE-REQUISITES:

- 1) Check that you have JDK.
- 2) Check that you have Eclipse IDE.
- 3) Check that you have Selenium Server Driver and Client Driver(JAR files).
- 4) Check that you have Chrome Driver.
- 5) Check that you have a stable Internet connection.

STEPS:

- 1) Open Eclipse. Select your workspace directory. Click Launch:
 - 2) Create a Project(File > New > Java Project):
 - 3) Name the project as “p9” > click Finish > click Don't Create module:
 - 4) Close the “Welcome” tab.
 - 5) Create a Package(right-click on Project Name > New > Package > Name it > Finish):
 - 6) Create a Class(right-click on Project Name > New > Class > Name it > Finish):
 - 7) Adding “JXL(JAR file)” in Eclipse IDE:
 - right-click on Project Name > Build Path > Configure Build Path...
 - now go under: Java Build Path > Libraries > Classpath > click Add External JARs...
 - Browse and add JAR file > click Apply and Close :
 - 8) Create HTML file in a notepad > Save it > Open it in browser > Copy the URL:
- (NOTE THAT: as this is our LOCAL FILE, this file will be opened thru STATIC URL in script)

---(multicheckbox.html)---

```
<input type="checkbox" value="A">A<br>
<input type="checkbox" value="B" CHECKED>B<br>
<input type="checkbox" value="C">C<br>
<input type="checkbox" value="D" CHECKED>D<br>
<input type="checkbox" value="E">E<br>
```

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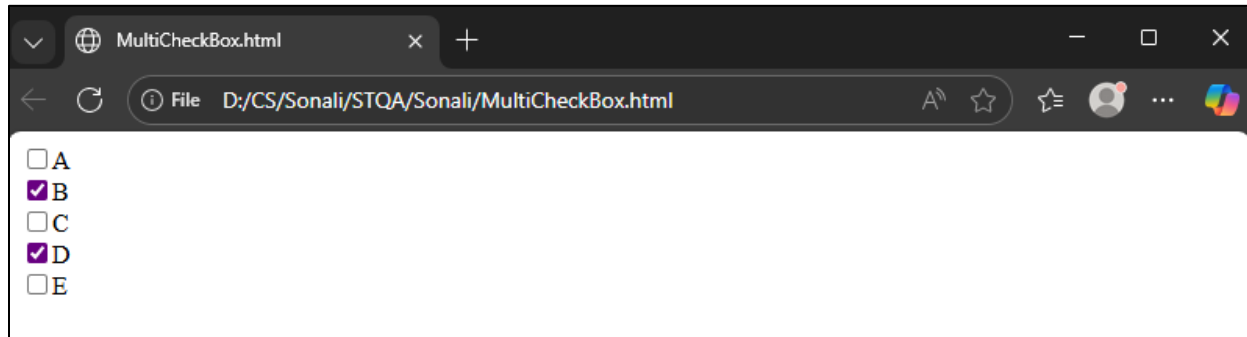
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9) Creating the script in JAVA:

- Now we'll put the path of our LOCAL FILE(multicheckbox.html) in a string
- Also put the path of "chromedriver" in a String driverPath

---(MultiCheckBox.java)---

```
package SQTAPACKAGE;
import java.util.List;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
public class multicheckbox {
    static String driverPath = "D:\\TYCS\\Eclips Software\\chromedriver-win64\\chromedriver-win64\\chromedriver.exe";
    public static void main(String[] args) {
        // Set system property for ChromeDriver
        System.setProperty("webdriver.chrome.driver", driverPath);
        // Launch Chrome browser
        WebDriver driver = new ChromeDriver();
        // Open local HTML file
        String appUrl = "file:///D:/STUDY/RTCCS/Gaurav/multicheckbox.html";
        driver.get(appUrl);
```

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```
// Maximize the window
driver.manage().window().maximize();

// Find all checkboxes on the page
List<WebElement> checkBoxes =
driver.findElements(By.cssSelector("input[type='checkbox']"));

int checkedCount = 0;
int uncheckedCount = 0;

// Iterate through each checkbox
for (int i = 0; i < checkBoxes.size(); i++) {
    boolean isSelected = checkBoxes.get(i).isSelected();
    System.out.println("Checkbox " + (i + 1) + " is selected: " + isSelected);
    if (isSelected) {
        checkedCount++;
    } else {
        uncheckedCount++;
    }
}

// Print totals
System.out.println("Number of selected checkboxes: " + checkedCount);
System.out.println("Number of unselected checkboxes: " + uncheckedCount);

// Close browser
driver.quit();
}
}
```

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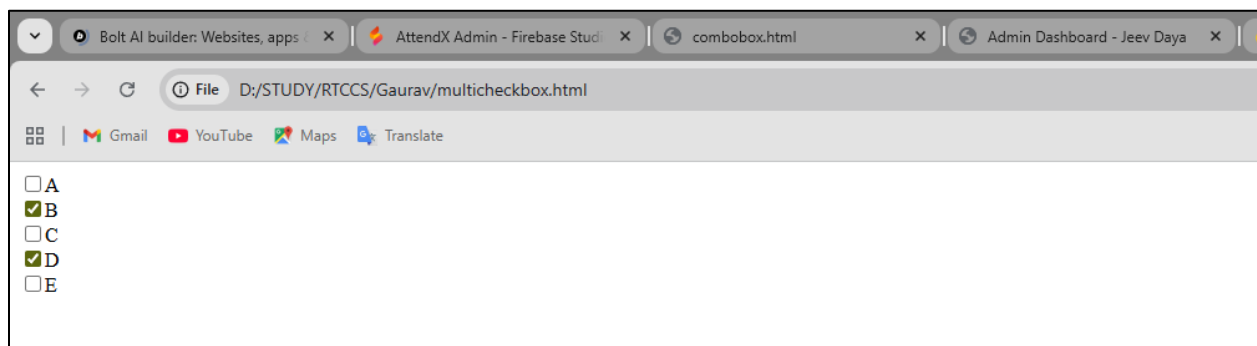
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OUTPUT:

```
Problems @ Javadoc Declaration Console X Eclipse IDE for Java Developers 2025...
<terminated> multichexbox [Java Application] C:\Program Files (x86)\Java\jre1.8.0_461\bin\javaw.exe (Oct 1, 2
Starting ChromeDriver 139.0.7258.67 (1f3fda458c93780ea4f84ffc95e719bddea52a8d-refs
Only local connections are allowed.
Please see https://chromedriver.chromium.org/security-considerations for suggestio
ChromeDriver was started successfully on port 18640.
[1759304758.648][WARNING]: This version of ChromeDriver has not been tested with C
Oct 01, 2025 1:15:58 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: W3C
Checkbox 1 is selected: false
Checkbox 2 is selected: true
Checkbox 3 is selected: false
Checkbox 4 is selected: true
Checkbox 5 is selected: false
Number of selected checkboxes: 2
Number of unselected checkboxes: 3
```



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