WRITE A TEST SUITE TO TEST GOOGLE WITH TEST CASES USING SELENIUM IDE.

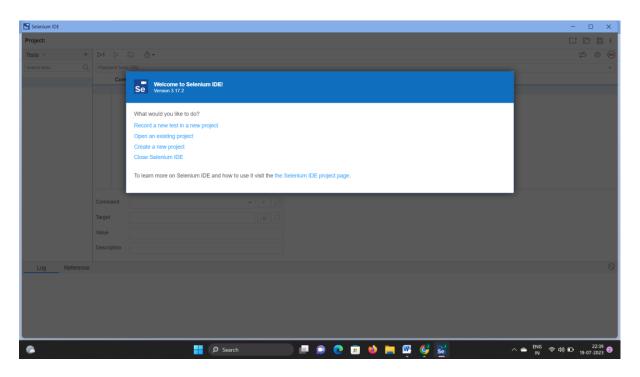
Aim:

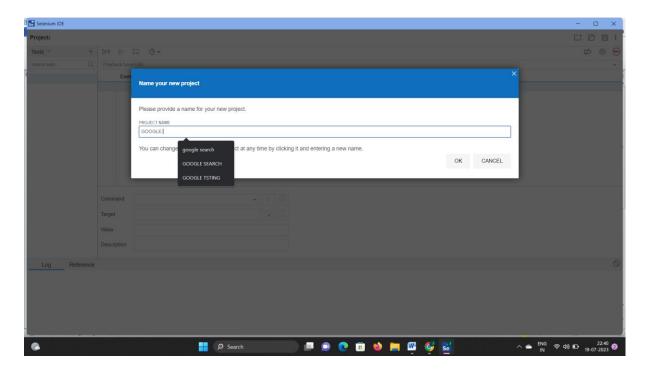
To test Google using Selenium IDE.

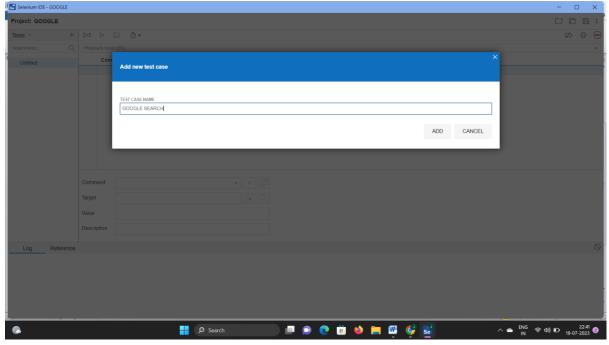
Procedure:

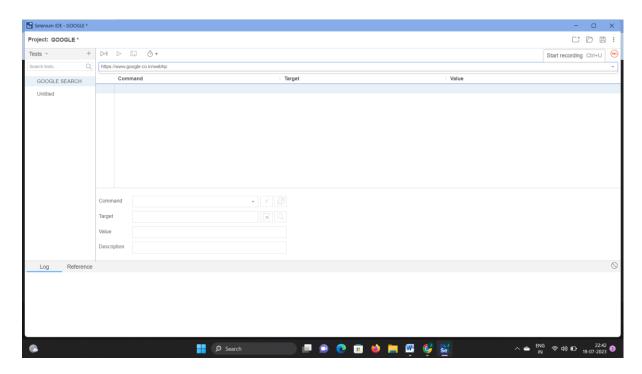
- 1. Open Selenium IDE in Google chrome Extension.
- 2. Create a new project and give project name . Add new test and give testcase name.
- 3. Copy the google URL and paste it in the playback base URL.
- 4. Start record and the Google search window will be displayed.
- 5. Search anything in it and go back to selenium IDE and stop the record.
- 6. Run the record and the process is displayed in the command, target and value.
- 7. Right click the test case and give export and choose the programming language.

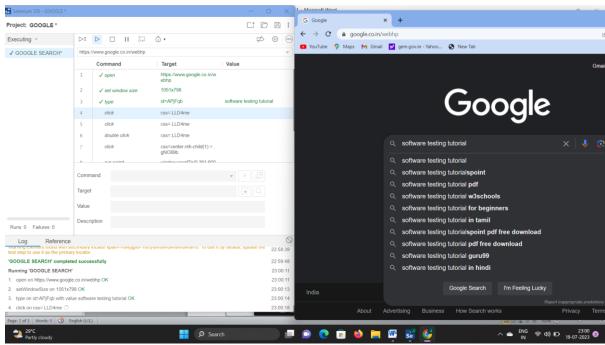
Output:

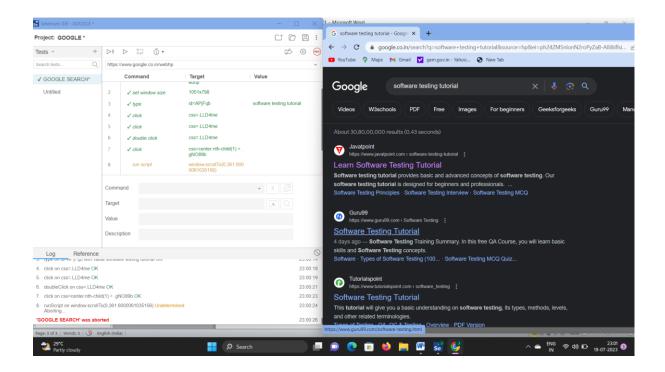


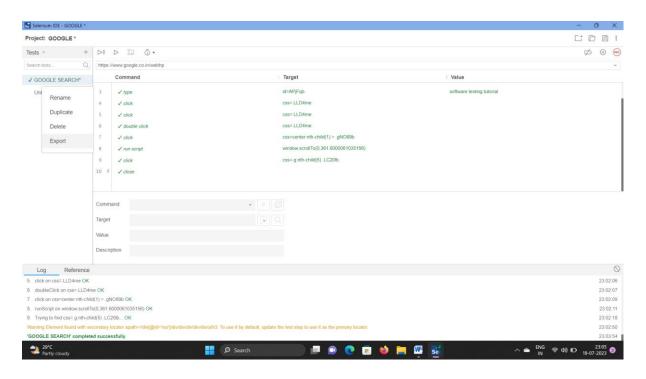


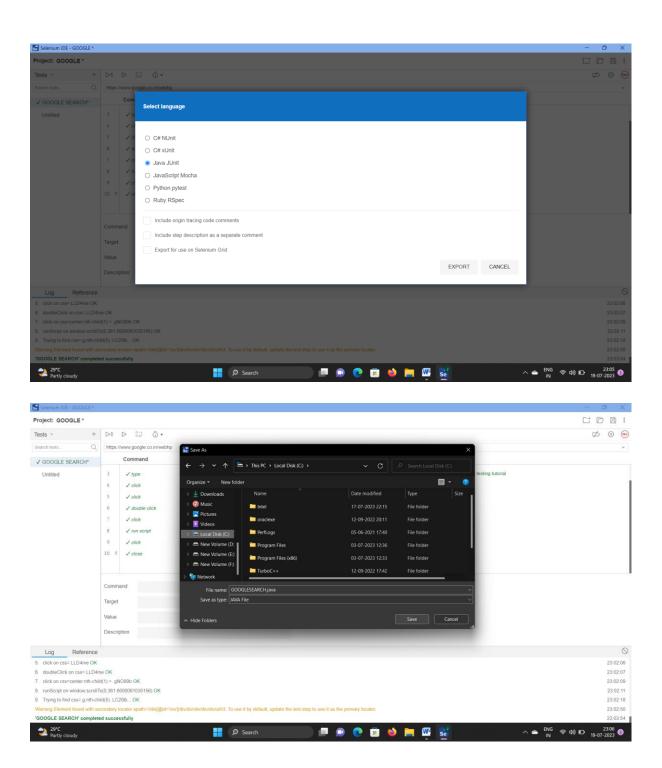


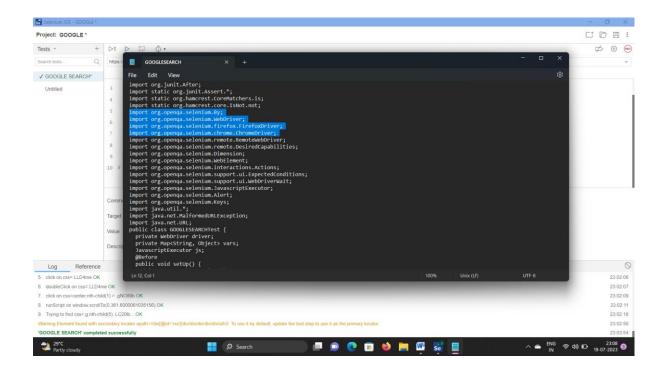












RESULT:

Thus Selenium IDE has been executed successfully with the test cases.

WRITE A SCRIPT TO LAUNCH CHROME BROWSER AND OPEN WEB SITE USING CHROME BROWSER.

```
package googledemo;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
public class CHROMEBROWSER {
      public static void main(String[] args) {
// LAUNCH BROWSER
      System.setProperty("webdriver.chrome.driver", "D:\\SUBA\\DRIVERS\\
      chromedriver-win32\\chromedriver.exe");
      WebDriver driver=new ChromeDriver();
// to open URL
           System.out.println("Browser Opened");
           driver.get("http://www.javatpoint.com/");
// to Maximize the window
            driver.manage().window().maximize();
// to get the titile of the web page
            System.out.println("Page title is : " + driver.getTitle());
//Close Browser
            driver.close();
            System.out.println("Browser Closed");
      }
}
```

```
Problems @ Javadoc Declaration Console X Coverage

<terminated > CHROMEBROWSER [Java Application] C:\Users\RAD-198\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.3.v20220515-1416\;jre\bin\javaw.exe (07-Sep-2023, 6:53: Starting ChromeDriver 116.0.5845.96 (1a391816688002153ef791ffe60d9e899a71a037-refs/branch-heads/5845@(#1382}) on port 4397

Only local connections are allowed.

Please see https://chromedriver.chromium.org/security-considerations for suggestions on keeping ChromeDriver safe.

ChromeDriver was started successfully.

Sep 07, 2023 6:53:316 PM org.openqa.selenium.remote.ProtocolHandshake createSession

INFO: Detected dialect: W3C

Browser Opened

Page title is: Tutorials List - Javatpoint

Browser Closed
```

RESULT:

WRITE A SCRIPT TO LAUNCH FIREFOX BROWSER AND OPEN WEB SITE USING FIREFOX BROWSER.

CODE:

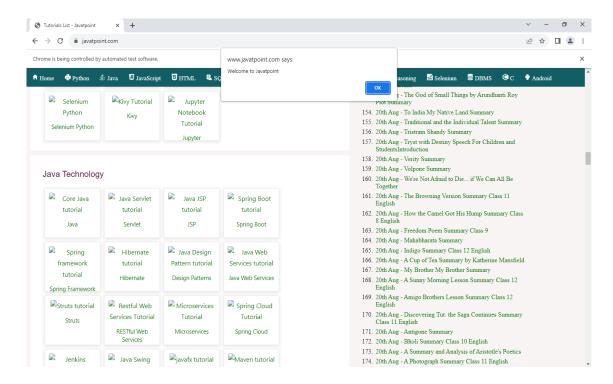
OUTPUT:

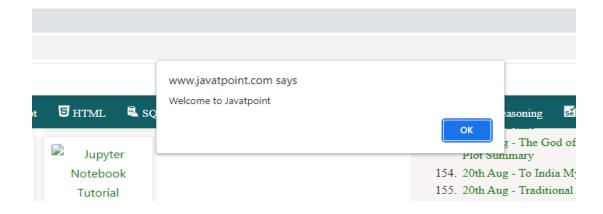


RESULT:

WRITE A SCRIPT TO TEST THE WEBPAGE AND DISPLAY RESULT USING JAVASCRIPT CODE.

```
package googledemo;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
public class script {
      public static void main(String[] args) {
// To Launch Browser
            System.setProperty("webdriver.chrome.driver", "D:\\SUBA\\DRIVERS
           \\chromedriver-win32\\chromedriver.exe");
            WebDriver driver=new ChromeDriver();
// to maximize the window
            driver.manage().window().maximize();
// open url
            driver.get("https://www.javatpoint.com/");
// Javascript Code to display message
            JavascriptExecutor is = (JavascriptExecutor) driver;
             js.executeScript("window.scrollBy(0,4550)");
             js.executeScript("alert('Welcome to Javatpoint');");
// to close Browser
            driver.close();
      }
}
```



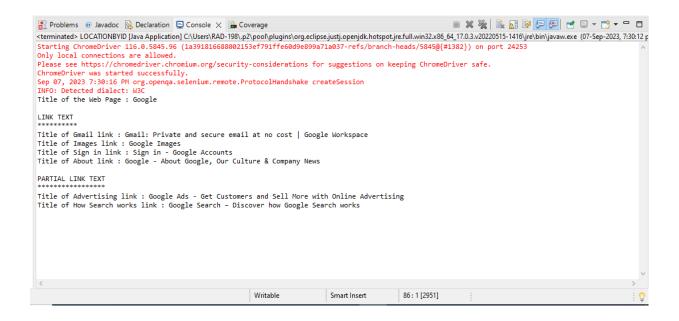


RESULT:

WRITE A SCRIPT TO TEST THE WEBPAGE WITH LINKTEXT, PARTIALLINKTEXT AND NAVIGATE METHOD.

```
package googledemo;
      import org.openqa.selenium.*;
      import org.openga.selenium.WebDriver;
      import org.openga.selenium.WebElement;
      import org.openqa.selenium.chrome.ChromeDriver;
      import java.time.Duration;
      import java.util.*;
      import java.util.concurrent.TimeUnit;
      public class LOCATIONBYID {
            public static void main(String[] args) {
//launch web browser
            System.setProperty("webdriver.chrome.driver", "D:\\SUBA\\DRIVERS\\chro
            medriver-win32\\chromedriver-win32\\chromedriver.exe");
            WebDriver driver=new ChromeDriver();
// to maximize the window
            driver.manage().window().maximize();
// to open url
            driver.get("https://www.google.com/");
// to get the title of the web page
            System.out.println("Title of the Web Page: " + driver.getTitle()+"\n");
//link text by selecting Gmail
                  System.out.println("LINK TEXT");
                  System.out.println("********"):
                  WebElement g=driver.findElement(By.linkText("Gmail"));
                  g.click();
                  System.out.println("Title of Gmail link: " + driver.getTitle());
                  driver.navigate().back();
                  driver.navigate().refresh();
                  driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);
```

```
//link text by selecting Images
                   WebElement i=driver.findElement(By.linkText("Images"));
                   i.click();
                   System.out.println("Title of Images link: " + driver.getTitle());
                   driver.navigate().back();
                   driver.navigate().refresh();
                   driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);
//link text by selecting Sign in
                   driver.findElement(By.linkText("Sign in")).click();
                   System.out.println("Title of Sign in link : " + driver.getTitle());
                   driver.navigate().back();
                   driver.navigate().refresh();
                   driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);
//link text by selecting About
                   driver.findElement(By.linkText("About")).click();
                   System.out.println("Title of About link : " + driver.getTitle());
                   driver.navigate().back();
                   driver.navigate().refresh();
                   driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);
//partial link text by selecting Advertisement
                   System.out.println("\n"+"PARTIAL LINK TEXT");
                  System.out.println("*************);
                   driver.findElement(By.partialLinkText("Advert")).click();
                   System.out.println("Title of Advertising link : " + driver.getTitle());
                   driver.navigate().back();
                   driver.navigate().refresh();
                   driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);
//partial link text by selecting Google Search
                   driver.findElement(By.partialLinkText("Search")).click();
                   System.out.println("Title of How Search works link: " +
                   driver.getTitle());
                   driver.navigate().back();
                   driver.navigate().refresh();
                   driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);
// to close the browser
                   driver.close();
      }
}
```



RESULT:

WRITE A SCRIPT TO TEST THE WEBPAGE WITH GETMETHOD().

CODE:

```
HTML Program [success.html]
```

```
<html>
           <title>Log in Page</title>
           <form action="linktext.html" method="post">
                 <label for="uname"><b>Username</b></label>
                 <input type="text" placeholder="Enter Username" id="uname"><br>
           <label for="psw"><b>Password</b></label>
           <input type="password" placeholder="Enter Password" id="psw"><br>
        <button type="submit" id="SubmitLogin">Login</button><br>
     </form>
     </html>
Web Driver Program
     package googledemo;
     import java.awt.*;
```

```
import org.openqa.selenium.By;
import org.openga.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openga.selenium.chrome.ChromeDriver;
public class getmethods_prg {
      public static void main(String[] args) {
```

// To launch web browser

System.setProperty("webdriver.chrome.driver", "D:\\SUBA\\DRIVERS\\chro medriver-win32\\chromedriver-win32\\chromedriver.exe");

WebDriver driver=new ChromeDriver();

// to maximize the window

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

```
// open url
             driver.get("file:///D:/SUBA/selenium%20html%20programs/success.html");
//getting current web site
             System.out.println("Current Website openend: " + driver.getCurrentUrl());
//get title of the web page
             System.out.println("Title of the Web Page: " + driver.getTitle());
// get Attribute value of the specific id
            WebElement gt = driver.findElement(By.id("uname"));
            System.out.println("Text of the username: "+gt.getAttribute("placeholder"));
// get tag name of the specific id
            System.out.println("Tag of the username: " +gt.getTagName());
// get the source code
             System.out.println("Get Source of the Web Page : \n\n" +
             driver.getPageSource());
      }
}
```

```
Current Website openend : file:///D:/SUBA/selenium%20html%20programs/success.html
Title of the Web Page : Log in Page
Text of the username : Enter Username
Tag of the username : input
Get Source of the Web Page :

<hre>
<hrе>
<h
```

RESULT:

WRITE A SCRIPT TO TEST GOOGLE WITH TEST CASES USING SUBMIT BUTTON.

CODE: package googledemo; **import** java.util.concurrent.TimeUnit; **import** org.openqa.selenium.By; import org.openqa.selenium.WebDriver; **import** org.openqa.selenium.WebElement; **import** org.openga.selenium.chrome.ChromeDriver; public class submitkey { public static void main(String[] args) { System.setProperty("webdriver.chrome.driver","D:\\SUBA\\DRIVERS\\ chromedriver-win32\\chromedriver-win32\\chromedriver.exe"); WebDriver driver=**new** ChromeDriver(); driver.manage().window().maximize(); driver.get("https://www.google.com/"); System.out.println("Title : " + driver.getTitle()); WebElement g=driver.findElement(By.id("APjFqb")); g.sendKeys("software testing"); g.submit(); WebElement **g1**=driver.findElement(By.partialLinkText("Software Testing")); g1.click(); System.out.println("Title: " + driver.getTitle()); driver.navigate().back(); driver.navigate().refresh(); driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS); System.out.println("Title : " + driver.getTitle()); driver.navigate().back(); driver.navigate().refresh(); driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS); System.out.println("Title : " + driver.getTitle());

driver.close();

}

Sep 14, 2023 5:46:39 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: W3C
Title: Google
Title: What is Software Testing and How Does it Work? | IBM
Title: software testing - Google Search
Title: Google

RESULT:

WRITE A SCRIPT TO TEST GOOGLE WITH TEST CASES USING ENTER KEY.

```
package googledemo;
import java.util.concurrent.TimeUnit;
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.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;
import org.openqa.selenium.Keys;
public class enterkey {
      public static void main(String[] args) {
// To Launch web browser
      System.setProperty("webdriver.chrome.driver","D:\\SUBA\\DRIVERS\\
      chromedriver-win32\\chromedriver.exe");
            WebDriver driver=new ChromeDriver();
// to maximize the window
            driver.manage().window().maximize();
            driver.get("https://www.google.com/");
            System.out.println("Title : " + driver.getTitle());
      driver.findElement(By.id("APjFqb")).sendKeys("Software Testing",
                                                        Kevs.ENTER);
      WebElement g1=driver.findElement(By.partialLinkText("Software
                                                        Testing"));
      g1.click();
      System.out.println("Title: " + driver.getTitle());
            driver.navigate().back();
            driver.navigate().refresh();
            driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);
            System.out.println("Title : " + driver.getTitle());
            driver.navigate().back();
            driver.navigate().refresh();
            driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);
```

```
System.out.println("Title : " + driver.getTitle());
driver.close();
}
```

```
<terminateg> enterkey [Java Application] C:\Users\кар-198\.pz\pool\plugins\org.eciipse.justj.openjak.notspot.jre.tuii.win3
Sep 14, 2023 5:55:07 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: W3C
Title: Google
Title: What is Software Testing and How Does it Work? | IBM
Title: Software Testing - Google Search
Title: Google
```

RESULT:

WRITE A SCRIPT TO TEST LOG IN PAGE.

CODE:

```
HTML Program [success.html]
```

Web Driver Program

```
package googledemo;

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

import java.time.Duration;
import java.util.*;
import java.util.concurrent.TimeUnit;

public class logincheck {
    public static void main(String[] args) {
```

//launch browser

System.setProperty("webdriver.chrome.driver","D:\\SUBA\\DRIVERS\\chromedriver-win32\\chromedriver.exe");

WebDriver driver=new ChromeDriver();

```
// to open url
            driver.get("file:///D:/SUBA/selenium%20html%20programs/success.html");
// to maximize the window
            driver.manage().window().maximize();
// Get the WebElement corresponding to the username Field
            WebElement un = driver.findElement(By.id("uname"));
// Get the WebElement corresponding to the Password Field
            WebElement pass = driver.findElement(By.id("psw"));
            driver.manage().timeouts().implicitlyWait(60, TimeUnit.SECONDS);
// Pass values to username and password using sendkeys
            un.sendKeys("mrityunjayarasu@gmail.com");
            pass.sendKeys("Happy");
// GetAttribute value of username and password
            var un1=un.getAttribute("value");
            var pass1=pass.getAttribute("value");
            System.out.println("Username passed in text box: "+un1);
            System.out.println("Password passed in text box : "+pass1);
//Check Passing values using sendkeys and Attribute values are equal
if(un1.contentEquals("mrityunjayarasu@gmail.com") && pass1.contentEquals("Happy"))
                driver.manage().timeouts().implicitlyWait(60, TimeUnit.SECONDS);
                WebElement login = driver.findElement(By.id("SubmitLogin"));
                login.click();
                driver.manage().timeouts().implicitlyWait(60, TimeUnit.SECONDS);
                System.out.println("Match Occurs - Login Done with Click");
           }
else
                  System.out.println("Not Match - Username or Password Incorrect");
           }
}
```

Starting ChromeDriver 116.0.5845.96 (1a391816688002153ef791ffe60d9e899a71a037-refs/branch-heads/5845@{#1382}) on port 25372

Only local connections are allowed.

Please see https://chromedriver.chromium.org/security-considerations for suggestions on keeping ChromeDriver safe.

ChromeDriver was started successfully.

Sep 08, 2023 7:18:37 PM org.openqa.selenium.remote.ProtocolHandshake createSession

INFO: Detected dialect: W3C

Username passed in text box : mrityunjayarasu@gmail.com

Password passed in text box : Happy Match Occurs - Login Done with Click

RESULT:

WRITE A SCRIPT TO TEST THE DESIGNED WEB SITE USING VERIFICATION POINT WITH GETTITLE().

```
package googledemo;
      import org.openqa.selenium.JavascriptExecutor;
      import org.openqa.selenium.WebDriver;
      import org.openqa.selenium.chrome.ChromeDriver;
public class googleurl {
      public static void main(String[] args) {
//launch browser
            System.setProperty("webdriver.chrome.driver", "D:\\SUBA\\DRIVERS\\
            chromedriver-win32\\chromedriver.exe");
            WebDriver driver=new ChromeDriver();
// to maximize the window
            driver.manage().window().maximize();
// open url
            driver.get("https://www.javatpoint.com/");
//getting current web site
            System.out.println("Current Website openend: " + driver.getCurrentUrl());
// getting title of the web page
            String actualres = driver.getTitle();
            System.out.println("Title of the Web Page - Actual Result: " + actualres);
             String expres = "Google";
             System.out.println("Title of the Web Page - Expected Result: " + expres);
//check test case pass and fail
            if (actualres.contentEquals(expres))
                         System.out.println("Test case Passed Successfully");
            else
                        System.out.println("Test case failed");
            driver.close();
```

```
}
```

```
Problems @ Javadoc Declaration C:\Users\RAD-198\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.3.v20220515-1416\jre\bin\javaw.exestarting ChromeDriver 116.0.5845.96 (1a391816688002153ef791ffe60d9e899a71a037-refs/branch-heads/5845@{#1382}) on port 39552 Only local connections are allowed.

Please see https://chromedriver.chromium.org/security-considerations for suggestions on keeping ChromeDriver safe.

ChromeDriver was started successfully.

Sep 08, 2023 7:58:41 PM org.openqa.selenium.remote.ProtocolHandshake createSession

INFO: Detected dialect: W3C

Current Website openend: https://www.javatpoint.com/

Title of the Web Page - Actual Result: Tutorials List - Javatpoint

Title of the Web Page - Expected Result: Google

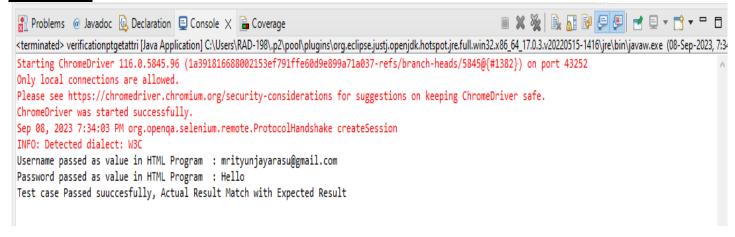
Test case failed
```

RESULT:

WRITE A SCRIPT TO TEST THE LOG IN PAGE USING VERIFICATION POINT WITH GETATTRIBUTE().

```
HTML Program [success1.html]
      <html>
      <title>Log in Page</title>
      <form action="linktext.html" method="post">
        <label for="uname"><b>Username</b></label>
        <input type="text" placeholder="Enter Username" id="uname"</pre>
                                          value="mrityunjayarasu@gmail.com"><br>
        <label for="psw"><b>Password</b></label>
   <input type="password" placeholder="Enter Password" id="psw" value="Hello"><br>
        <button type="submit" id="SubmitLogin">Login</button><br>
      </form>
      </html>
Web Driver Program
      package googledemo;
     import java.util.concurrent.TimeUnit;
     import org.openqa.selenium.By;
     import org.openqa.selenium.WebDriver;
     import org.openga.selenium.WebElement;
      import org.openqa.selenium.chrome.ChromeDriver;
public class verificationptgetattri {
      public static void main(String[] args) {
//launch browser
           System.setProperty("webdriver.chrome.driver", "D:\\SUBA\\DRIVERS\\
           chromedriver-win32\\chromedriver.exe");
            WebDriver driver=new ChromeDriver();
           driver.get("file:///D:/SUBA/selenium%20html%20programs/success1.html");
// to maximize the window
            driver.manage().window().maximize();
```

```
// Get the WebElement corresponding to the username Field
            WebElement un = driver.findElement(By.id("uname"));
// Get the WebElement corresponding to the Password Field
            WebElement pass = driver.findElement(By.id("psw"));
          driver.manage().timeouts().implicitlyWait(60, TimeUnit.SECONDS);
// GetAttribute value of username and password
            var un1=un.getAttribute("value");
            var pass1=pass.getAttribute("value");
            System.out.println("Username passed as value in HTML Program: "+un1);
            System.out.println("Password passed as value in HTML Program: "+pass1);
// Check Verification point of Actual result match with Expected Result
if(un1.contentEquals("mrityunjayarasu@gmail.com") && pass1.contentEquals("Hello"))
                  driver.manage().timeouts().implicitlyWait(60, TimeUnit.SECONDS);
                  WebElement login = driver.findElement(By.id("SubmitLogin"));
                  login.click();
                  driver.manage().timeouts().implicitlyWait(60, TimeUnit.SECONDS);
                  System.out.println("Test case Passed suuccesfully, Actual Result
                                          Match with Expected Result");
           }
else
            System.out.println("Test case Failed, Actual Result Not Match with
                              Expected Result");
            driver.quit();
}
      }
```



RESULT:

WRITE A PROGRAM TO PERFORM ARITHMETIC OPERATIONS USING JUNIT

CODE: [Java Program] package testingprograms;

```
public class Junitarithmetic
{
    public static int add(int number1, int number2)
    {
        return number1 + number2;
    }

    public static int sub(int number1, int number2)
        {
        return number1 - number2;
        }

    public static int mul(int number1, int number2)
        {
        return number1 * number2;
        }
}
```

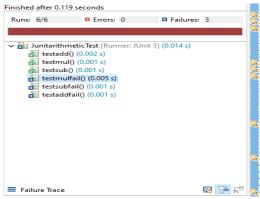
CODE: [JUNIT Program]

```
package testingprograms;
import static org.junit.Assert.assertEquals;
import static org.junit.jupiter.api.Assertions.*;
import org.junit.jupiter.api.Test;

class JunitarithmeticTest {
    Junitarithmetic a=new Junitarithmetic();

@Test
    void testadd()
    {
        assertEquals("error", 15, a.add(10,5));
        assertEquals("error", 25, a.add(10,15));
        assertEquals("error", 11, a.add(10,1));
    }
}
```

```
@Test
      void testsub()
             assertEquals("error", 8, a.sub(10,2));
             assertEquals("error", 10, a.sub(15,5));
             assertEquals("error", 11, a.sub(15,4));
@Test
      void testmul()
             assertEquals("error", 20, a.mul(10,2));
             assertEquals("error", 25, a.mul(5,5));
             assertEquals("error", 60, a.mul(15,4));
@Test
      void testaddfail()
             assertEquals("error", 17, a.add(10,5));
@Test
      void testsubfail()
             assertEquals("error", 18, a.sub(10,2));
@Test
      void testmulfail()
             assertEquals("error", 30, a.mul(10,2));
OUTPUT:
                             Finished after 0.119 seconds
```



RESULT:

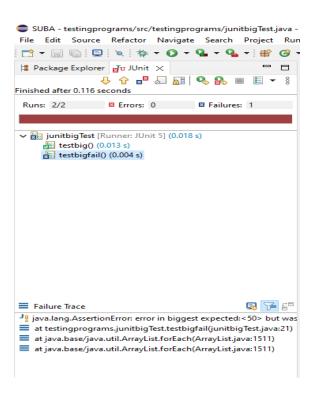
WRITE A PROGRAM TO FIND BIGGEST AMONG THREE **NUMBERS USING JUNIT**

CODE [Java Program]

```
package testingprograms;
      public class junitbig {
             public static int big (int a,int b,int c)
                   if ((a>b) && (a>c))
                          return a;
                   else if (b>c)
                          return b;
                   else
                          return c;
             }
      }
JUNIT Program
      package testingprograms;
      import static org.junit.Assert.assertEquals;
      import static org.junit.jupiter.api.Assertions.*;
```

```
import org.junit.jupiter.api.Test;
class junitbigTest {
      junitbig c=new junitbig();
      @Test
      public void testbig() {
             //fail("Not yet implemented");
             assertEquals("error in biggest", 20, c.big (20,10,5));
             assertEquals("error in biggest", 50, c.big (20,50,10));
             assertEquals("error in biggest", 80, c.big (10,20,80));
      }
      @Test
      public void testbigfail() {
      assertEquals("error in biggest", 50, c.big (10,50,60));
      assertEquals("error in biggest", 5, c.big (50,10,5));
```

```
assertEquals("error in biggest", 40, c.big (10,50,40));
```



RESULT: