Module – 7 (Selenium Webdriver)

1. W.A.J.Script for Locating links by linkText() and partialLinkText()

```java
package Assigmentmodel7;

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

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

    System.setProperty("webdriver.chrome.driver","E:\\chrome
driver\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();
        driver.get("https://phptravels.com/demo/");
        Thread.sleep(2000);
        driver.manage().window().maximize();
        Thread.sleep(2000);
    driver.findElement(By.linkText("Product")).click();
     Thread.sleep(2000);

    driver.findElement(By.xpath("//*[@id=\"mynavbar\"]/ul/li[
2]/a/span")).click();
        Thread.sleep(2000);


    driver.findElement(By.linkText("CMSModules")).click()
        Thread.sleep(2000);

    driver.findElement(By.linkText("Company")).click();
        Thread.sleep(2000);


    driver.findElement(By.linkText("ContactUs")).click();
        Thread.sleep(2000);

        driver.clo11se();
    }
```

}

2. W.A.J.Script for Selecting multiple items in a drop dropdown.

package Assigmentmodel7;

```java
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;

public class dropdropdown {
    public static void main(String[] args) throws InterruptedException {
        System.setProperty("webdriver.chrome.driver","E:\\chrome
driver\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();
        driver.get("https://phptravels.com/demo/");
        Thread.sleep(2000);
        driver.manage().window().maximize();
        Thread.sleep(2000);
        driver.findElement(By.linkText("Product")).click();
        Thread.sleep(2000);

        driver.findElement(By.linkText("Themes")).click();
        Thread.sleep(2000);

        driver.findElement(By.linkText("Features")).click();
        Thread.sleep(2000);

        driver.findElement(By.linkText("CMS Modules")).click();
        Thread.sleep(2000);

        driver.findElement(By.linkText("Company")).click();
        Thread.sleep(2000);

        driver.close();
    }

}
```

3. W.A.J. script to use different methods to manage the windows-alerts and pop ups.

package Assigmentmodel7;

```java
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
```

```java
import org.openqa.selenium.support.ui.Select;

public class windowsalertsandpopups {
    public static void main(String[] args) throws InterruptedException {
        System.setProperty("webdriver.chrome.driver","E:\\chrome
driver\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();
        driver.get("https://www.parasoft.com/solutions/");
        Thread.sleep(2000);
        driver.manage().window().maximize();
        Thread.sleep(2000);
        driver.findElement(By.linkText("Contact Us")).click();
        Thread.sleep(2000);

        driver.findElement(By.id("email-7e18a454-1995-49f5-a907-
ddc7be450646")).sendKeys("khushi38@gamil.com");
        Thread.sleep(2000);

        driver.findElement(By.id("firstname-7e18a454-1995-49f5-a907-
ddc7be450646")).sendKeys("khushi");
        Thread.sleep(2000);

        driver.findElement(By.id("lastname-7e18a454-1995-49f5-a907-
ddc7be450646")).sendKeys("patel");
        Thread.sleep(2000);

        driver.findElement(By.id("company-7e18a454-1995-49f5-a907-
ddc7be450646")).sendKeys("TOPS");
        Thread.sleep(2000);

        driver.findElement(By.id("jobtitle-7e18a454-1995-49f5-a907-
ddc7be450646")).sendKeys("software testing and automaction");
        Thread.sleep(2000);

        driver.findElement(By.id("phone-7e18a454-1995-49f5-a907-
ddc7be450646")).sendKeys("9173816590");
        Thread.sleep(2000);

        driver.findElement(By.id("country-7e18a454-1995-49f5-a907-
ddc7be450646")).sendKeys("United States");
        Thread.sleep(2000);

    driver.close();
    }

}
```

4. W.A.J.script to register your self in Gmail.

```java
package Assigmentmodel7;

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

public class Gmailmyself {
    public static void main(String[] args) throws InterruptedException {
        System.setProperty("webdriver.chrome.driver","E:\\chrome
driver\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();

    driver.get("https://accounts.google.com/v3/signin/challenge/pwd?TL=ALgCv
6wPuTK6lGpzH_FK_EtotMKqS3Yjt7j72WOy1J5J-aHR6qaR9qkDNmKT-v-
X&checkConnection=youtube%3A528&checkedDomains=youtube&cid=1&contin
ue=https%3A%2F%2Fmail.google.com%2Fmail%2F&dsh=S-
801826232%3A1752214991630212&flowEntry=ServiceLogin&flowName=GlifWe
bSignIn&hl=en&ifkv=AdBytiMDIxbaO7mF_JpUz-Rn0kNA98fZxuN-
c1Cb_srH4zrS_UQ1iGhG4z6uUHyOvN-RZs29SRBeJQ&pstMsg=1");
        Thread.sleep(2000);
        driver.manage().window().maximize();
        Thread.sleep(2000);

    driver.findElement(By.id("identifierId")).sendKeys("Topstesting825@gmail.co
m");
        Thread.sleep(2000);


    driver.findElement(By.xpath("//*[@id=\"identifierNext\"]/div/button/span"))
.click();
        Thread.sleep(2000);

        driver.findElement(By.xpath("//*[@id=\"next\"]/div/div/a")).click();


    driver.findElement(By.id("identifierId")).sendKeys("Topstesting825@gmail.co
m");
        Thread.sleep(2000);


    driver.findElement(By.xpath("//*[@id=\"identifierNext\"]/div/button/span"))
.click();
        Thread.sleep(2000);
        driver.findElement(By.xpath("//*[@id=\"next\"]/div/div/a")).click();
```

```
        driver.findElement(By.xpath("//*[@id=\"password\"]/div[1]/div/div[1]/input
")).sendKeys("tops@12345");
            Thread.sleep(2000);


        driver.findElement(By.xpath("//*[@id=\"passwordNext\"]/div/button/div[3]"
)).click();
            Thread.sleep(2000);

            driver.close();
    }

}
```

5. W.A.J. Script To perform the radio button to select one by one in loop https://demo.automationtesting.in/Register.html.

```java
package Assigmentmodel7;

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;
import java.util.concurrent.TimeUnit;

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

        System.setProperty("webdriver.chrome.driver","E:\\ch
rome driver\\chromedriver.exe");
            WebDriver driver=new ChromeDriver();
            driver.manage().window().maximize();


        driver.get("https://demo.automationtesting.in/Regist
er.html");
            List<WebElement> radios =
driver.findElements(By.name("radiooptions"));
            for (WebElement radio : radios)
```

```java
        {
            radio.click();
            System.out.println("Selected: " +
    radio.getAttribute("value"));
            Thread.sleep(1000);
        }
        driver.close();
    }

}
```

6. W.A.J. script To write the script for image of logo facebook using xpath.

```java
package Assigmentmodel7;

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



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

   System.setProperty("webdriver.chrome.driver","E:\\chrome
driver\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();
        driver.get("https://www.facebook.com");
        Thread.sleep(2000);
        driver.manage().window().maximize();
        Thread.sleep(2000);
        WebElement
logo=driver.findElement(By.xpath("//*[@id=\"content\"]/div/d
iv/div/div[1]/div"));

        if(logo.isDisplayed())
        {
            System.out.println("Facebook logo is
visible.");
        }
        else {
            System.out.println("Facebook logo is not
visible");
        }
```

```
        driver.close();
    }

}
```

7. W.A.J.Script To write a script for drop down.

```java
package Assigmentmodel7;

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 dropdownautomactiontesting {
    public static void main(String[] args) throws
InterruptedException {
    System.setProperty("webdriver.chrome.driver","E:\\chrome
driver\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();

driver.get("https://demo.automationtesting.in/Register.html"
);
        Thread.sleep(2000);
        driver.manage().window().maximize();
        Thread.sleep(2000);
    driver.findElement(By.xpath("//*[@id=\"Skills\"]"));
        Thread.sleep(2000);
          WebElement skillsElement =
driver.findElement(By.id("Skills"));
          Select skills = new Select(skillsElement);
          skills.selectByVisibleText("Android");
          Thread.sleep(2000);
        driver.close();
    }

}
```

8. W.A.J.Script To use Mouse and Keyboard event using Action class
1. Mouse Hover Even

```java
package Assigmentmodel7;

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

    System.setProperty("webdriver.chrome.driver","E:\\ch
rome driver\\chromedriver.exe");
            WebDriver driver=new ChromeDriver();

driver.get("https://demo.automationtesting.in/Register.ht
ml");
            Thread.sleep(2000);
            driver.manage().window().maximize();
            Thread.sleep(2000);

        driver.findElement(By.xpath("//*[@id=\"Skills\"]"));
            Thread.sleep(2000);
              WebElement skillsElement =
driver.findElement(By.id("Skills"));
                Select skills = new Select(skillsElement);
                skills.selectByVisibleText("Android");
                Thread.sleep(2000);
            driver.close();
    }

}
```

2. Keyboard event

```
package Assigmentmodel7;

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.interactions.Actions;

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

    System.setProperty("webdriver.chrome.driver","E:\\chrome
driver\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();

    driver.get("https://demo.automationtesting.in/SignIn.html
");
        Thread.sleep(2000);
        driver.manage().window().maximize();
        Thread.sleep(2000);


    driver.findElement(By.xpath("/html/body/div/div/div[2]/in
put")).sendKeys("khushi");
        Thread.sleep(2000);

    driver.findElement(By.xpath("/html/body/div/div/div[3]/in
put")).sendKeys("12345");
        Thread.sleep(2000);

        driver.close();
    }

}
```

9. W.A.J. Script How to handled Alert in selenium

https://demo.automationtesting.in/Alerts.html

```
package Assigmentmodel7;
```

```java
import org.openqa.selenium.Alert;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.interactions.Actions;

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

    System.setProperty("webdriver.chrome.driver","E:\\chrome
driver\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();

    driver.get("https://demo.automationtesting.in/Alerts.html
");
        Thread.sleep(2000);
        driver.manage().window().maximize();
        Thread.sleep(2000);


    driver.findElement(By.xpath("/html/body/div[1]/div/div/di
v/div[1]/ul/li[2]/a")).click();
        Thread.sleep(2000);

    driver.findElement(By.xpath("//*[@id=\"CancelTab\"]/butto
n")).click();
        Thread.sleep(2000);
        Alert alert = driver.switchTo().alert();
        String alertMessage = alert.getText();
        System.out.println("Alert Message: " +
alertMessage);


        driver.close();
    }

}
```

10. W.A.J. Script To find the total hyperlink from this web page https://qavbox.github.io/demo/webtable/

package Assigmentmodel7;

```java
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;

public class hyperlinkDemo {
    public static void main(String[] args) throws InterruptedException {
        System.setProperty("webdriver.chrome.driver","E:\\chrome
driver\\chromedriver.exe");
        WebDriver driver=new ChromeDriver();
        driver.get("https://qavbox.github.io/demo/webtable/");
        driver.manage().window().maximize();

    driver.findElement(By.xpath("//*[@id=\"table01\"]/tbody/tr[1]/td[1]/input")
).click();
        Thread.sleep(2000);
     driver.findElement(By.id("btn")).click();
     Thread.sleep(2000);

        driver.close();
    }

}
```

11. W.a.junit program to handled Assert class with all method to check its pass or fail.

```java
package Assignment.testing;

import org.testng.annotations.Test;
import org.junit.Assert;

public class AssertclassDemo {
  @Test
  public void testAssertEquals() {

    Assert.assertEquals("Checking if values are equal", 5, 5);

  }

  @Test
  public void testAssertNotEquals() {

    Assert.assertNotEquals("Checking if values are not equal", 5, 10);

  }

  @Test
```

```java
    public void testAssertTrue() {

        Assert.assertTrue("Should be true", 10 > 5);

    }

    @Test
    public void testAssertFalse() {

        Assert.assertFalse("Should be false", 5 > 10);

    }

    @Test
    public void testAssertNull() {

        Assert.assertNull("Should be null", null);

    }

    @Test
    public void testAssertNotNull() {

        Assert.assertNotNull("Should not be null", "JUnit");

    }

    @Test
    public void testAssertSame() {
        String str = "hello";
        String sameStr = str;

        Assert.assertSame("Both references should point to same object", str,
sameStr);

    }

    @Test
    public void testAssertNotSame() {
        String str1 = new String("hello");
        String str2 = new String("hello");

        Assert.assertNotSame("Should not be same reference", str1, str2);

    }

    @Test
```

```
public void testAssertArrayEquals() {
    int[] expected = {1, 2, 3};
    int[] actual = {1, 2, 3};

    Assert.assertArrayEquals("Arrays should be equal", expected, actual);

  }
}
```

12. W.a. junit program to perform test with webdriver to login process of facebook.

```java
package Assignment.testing;

import org.junit.*;
import org.openqa.selenium.*;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;


public class FacebookLoginTestDemo {

  WebDriver driver;
  WebDriverWait wait;

  @BeforeClass
  public void beforeClass() throws InterruptedException {

System.setProperty("webdriver.chrome.driver","E:\\chrome
driver\\chromedriver.exe");
      driver = new ChromeDriver();
      driver.manage().window().maximize();
      Thread.sleep(2000);
      driver.get("https://www.facebook.com");
  }
  @Test
  public void  testFacebookLoginInvalid() {

driver.findElement(By.id("email")).sendKeys("invaliduser@exa
mple.com");

driver.findElement(By.id("pass")).sendKeys("invalidpassword"
);
      driver.findElement(By.name("login")).click();

      try {
```

```
            WebElement error =
wait.until(ExpectedConditions.visibilityOfElementLocated(
            By.xpath("//div[contains(text(), \"The
email\")] | //div[contains(text(), \"incorrect\")]")
        ));

            Assert.assertTrue("Error message displayed",
error.isDisplayed());

    } catch (TimeoutException e) {
        Assert.fail("Error message did not appear -
possible UI/DOM change or timing issue.");
    }
}

  @AfterClass
  public void afterClass() {

        driver.quit();
  }

}
```

13. W.a. junit program to check gmail login using with @before,@after,@Test.

```
package Assignment.testing;

import org.testng.annotations.Test;
import org.testng.annotations.BeforeClass;
import org.testng.annotations.AfterClass;
import org.junit.*;
import org.openqa.selenium.*;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.ui.ExpectedConditions;
import org.openqa.selenium.support.ui.WebDriverWait;

public class gmailloginDemo {
    WebDriver driver;
    WebDriverWait wait;

  @Test
  public void setUp() throws InterruptedException {

System.setProperty("webdriver.chrome.driver","E:\\chrome
driver\\chromedriver.exe");
        driver = new ChromeDriver();
        driver.manage().window().maximize();
        Thread.sleep(2000);
```

```
        driver.get("https://accounts.google.com/");
    }
    @BeforeClass
    public void beforeClass() {
        WebElement emailField =
wait.until(ExpectedConditions.visibilityOfElementLocated(By.
id("identifierId")));
        emailField.sendKeys("invalidemail@gmail.com");
        driver.findElement(By.id("identifierNext")).click();

        WebElement error =
wait.until(ExpectedConditions.visibilityOfElementLocated(
            By.xpath("//div[contains(text(),'Couldn't find
your Google Account')]")
        ));

        Assert.assertTrue("Error message should be displayed
for invalid login", error.isDisplayed());
    }



 @AfterClass
 public void afterClass() {
 driver.quit();
 }

}
```

14. W.a. junit program to use parameterized demo with multiple parameter of Facebook login in junit.

```
package Assignment.testing;

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.*;
import org.testng.Assert;
import org.testng.annotations.*;

import java.util.concurrent.TimeoutException;
public class FacebookLoginParameterizedDemo {

    WebDriver driver;
      WebDriverWait wait;
```

```java
@BeforeClass
    public void beforeClass() throws InterruptedException {

            System.setProperty("webdriver.chrome.driver",
    "path/to/chromedriver"); // Set correct path
            driver = new ChromeDriver();
            driver.manage().window().maximize();
            Thread.sleep(2000);
            driver.get("https://www.facebook.com/");
}


        @DataProvider(name = "loginData")
    public Object[][] loginData() {
return new Object[][] {
    { "invalid1@example.com", "wrongpass1" },
    { "invalid2@example.com", "wrongpass2" },
        { "invalid3@example.com", "wrongpass3" }
    };
    }
    @Test(dataProvider = "loginData")
    public void testFacebookLoginInvalid(String email, String password) throws
    TimeoutException {
        driver.findElement(By.id("email")).sendKeys(email);
        driver.findElement(By.id("pass")).sendKeys(password);
        driver.findElement(By.name("login")).click();

        WebElement error =
    wait.until(ExpectedConditions.visibilityOfElementLocated(
            By.xpath("//div[contains(text(), \"email\")] | //div[contains(text(),
    \"incorrect\")]")
        ));
        Assert.assertTrue(error.isDisplayed(), "Error message is not displayed.");
    }

    @AfterClass
    public void afterClass() {
        driver.quit();
    }

    }
```

15. W.a. TestNG program to perform test with webdriver to login processof facebook.

```java
package Assignment.testing;
```

```java
import org.testng.annotations.Test;
import org.testng.annotations.BeforeClass;
import org.testng.annotations.AfterClass;

import org.openqa.selenium.*;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.ui.*;
import org.testng.Assert;
//import org.testng.annotations.*;

public class facebookTestDemo {
    WebDriver driver;
     WebDriverWait wait;


  @BeforeClass
  public void beforeClass() throws InterruptedException {
      System.setProperty("webdriver.chrome.driver","E:\\chrome
driver\\chromedriver.exe");
    driver = new ChromeDriver();
    driver.manage().window().maximize();
    Thread.sleep(2000);
    driver.get("https://www.facebook.com/");
 }
 @Test
 public void testInvalidFacebookLogin() {
     WebElement emailField = driver.findElement(By.id("email"));
    WebElement passwordField = driver.findElement(By.id("pass"));
    WebElement loginButton = driver.findElement(By.name("login"));

    emailField.sendKeys("invalid@example.com");
    passwordField.sendKeys("invalidPassword123");
    loginButton.click();

    try {
      WebElement error =
wait.until(ExpectedConditions.visibilityOfElementLocated(
        By.xpath("//div[contains(text(),'email')] |
//div[contains(text(),'incorrect')]")
      ));
      Assert.assertTrue(error.isDisplayed(), "Error message should be visible for
invalid login.");
    } catch (TimeoutException e) {
      Assert.fail("Login error message not found. Facebook may have updated
the UI.");
    }
```

```
    }
    @AfterClass
    public void afterClass() {
        if (driver != null) {
          driver.quit();
    }

}
}
```

16. W.a. junit program to check gmail login using with @before,@after,@Test.

```java
package Assignment.testing;

import org.testng.annotations.Test;
import org.testng.annotations.BeforeClass;
import org.testng.annotations.AfterClass;
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 java.time.Duration;

import static org.junit.Assert.assertTrue;
public class gmailloginDemo {
    WebDriver driver;
    WebDriverWait wait;

    @BeforeClass
     public void beforeClass() throws InterruptedException {

System.setProperty("webdriver.chrome.driver","E:\\chrome
driver\\chromedriver.exe");
        driver = new ChromeDriver();
        driver.manage().window().maximize();
        Thread.sleep(2000);
        driver.get("https://accounts.google.com/");
    }

    @Test
    public void setUp() throws InterruptedException  {
```

```java
        WebElement emailField =
driver.findElement(By.id("identifierId"));
        emailField.sendKeys("khushigodhani38@gmail.com");

        driver.findElement(By.id("identifierNext")).click();
        Thread.sleep(3000);

        WebElement passwordField =
driver.findElement(By.name("password"));
        passwordField.sendKeys("khushi@#3110");

        driver.findElement(By.id("passwordNext")).click();
        Thread.sleep(5000);

        String currentUrl = driver.getCurrentUrl();
        assertTrue("Login may have failed",
currentUrl.contains("myaccount") ||
currentUrl.contains("google.com"));

    }

    @AfterClass
    public void afterClass() {

        if (driver != null) {
            driver.quit();
        }
    }

}
```

17. W.a. TestNG program to use parameterized demo with multiple parameter of Facebook login with TestNG.

```java
package Assignment.testing;

import org.testng.annotations.Test;
import org.testng.annotations.BeforeClass;
import org.testng.annotations.AfterClass;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.testng.annotations.Parameters;

public class multipleFacebooklogin {
    WebDriver driver;
```

```java
    @BeforeClass
    public void beforeClass() throws InterruptedException {

System.setProperty("webdriver.chrome.driver","E:\\chrome
driver\\chromedriver.exe");
        driver = new ChromeDriver();
        Thread.sleep(2000);
        driver.manage().window().maximize();
        driver.get("https://www.facebook.com/");
    }
    @Test
    @Parameters({"email", "password"})
    public void loginToFacebook(String email, String password)
{
        WebElement emailField =
driver.findElement(By.id("email"));
        WebElement passwordField =
driver.findElement(By.id("pass"));
        WebElement loginButton =
driver.findElement(By.name("login"));

        emailField.sendKeys("khushi38@gmail.com");
        passwordField.sendKeys("khushi3110");
        loginButton.click();

        System.out.println("Login attempted with: " + email);
    }
    @AfterClass
    public void afterClass() {
        driver.quit();
    }

}
```

18. W.a. TestNG program to create group with testing.xml file

```java
package Assignment.testing;

import org.testng.annotations.Test;

public class UserActionsTestDemo {

    @Test(groups = "login")
      public void loginTest() {
          System.out.println("Executing Login Test");
      }
```

```java
        @Test(groups = "logout")
        public void logoutTest() {
            System.out.println("Executing Logout Test");
        }

        @Test(groups = "signup")
        public void signupTest() {
            System.out.println("Executing Signup Test");
        }

        @Test(groups = {"login", "security"})
        public void twoFactorTest() {
            System.out.println("Executing Two-Factor
Authentication Test");
        }

        @Test
        public void generalTest() {
            System.out.println("Executing General Test (no
group)");
        }
    }
```

19.   w.a. TestNG program to create dataprovider.

```java
package Assignment.testing;

import org.testng.annotations.DataProvider;
import org.testng.annotations.Test;

public class LoginDataProviderTestDemo {

    @Test(dataProvider = "loginData")
        public void loginTest(String username, String
password) {
            System.out.println("Testing login with:");
            System.out.println("Username: " + username + ",
Password: " + password);
        }

        @DataProvider(name = "loginData")
        public Object[][] getData() {
            return new Object[][] {
                {"user1@example.com", "pass123"},
                {"user2@example.com", "test456"},
                {"admin@example.com", "admin@2024"}
        };
    }
```

```
}
```