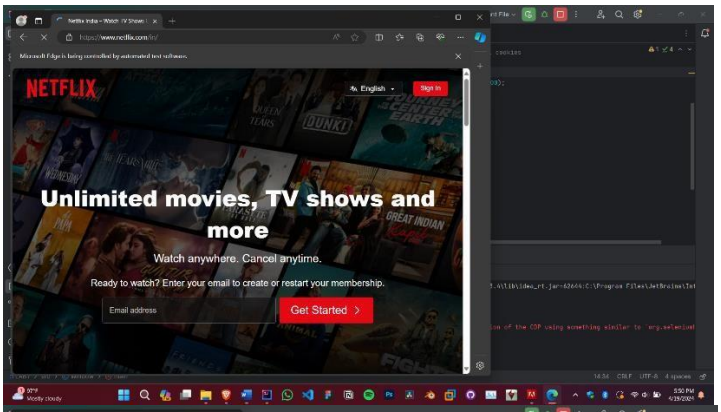
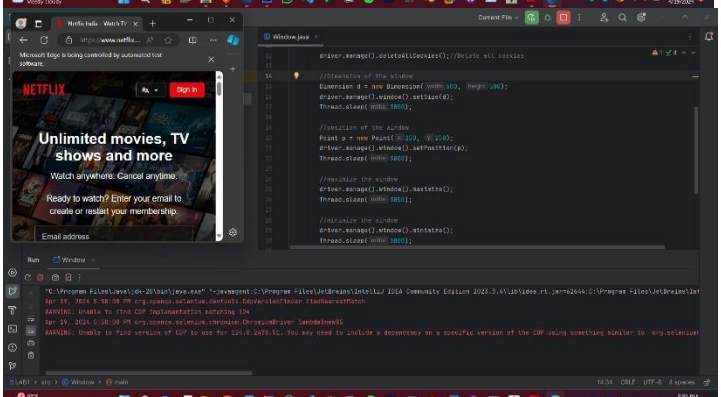
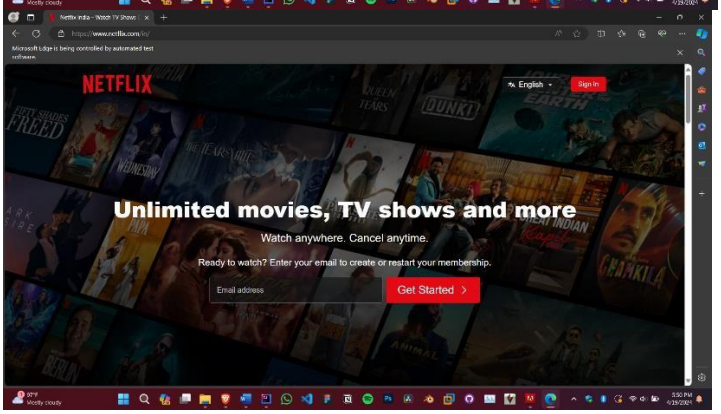
OUTPUT:

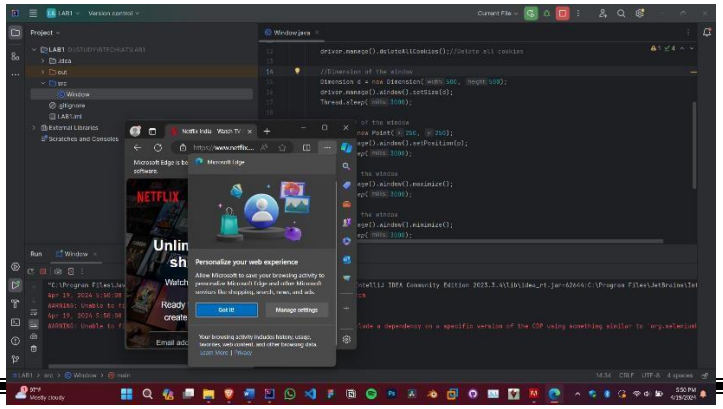
Aim:

Code:


NETFLIX
Unlimited movies, TV shows and more
Watch anywhere. Cancel anytime.
Ready to watch? Enter your email to create or restart your membership.
Email address
Get Started


NETFLIX
Unlimited movies, TV shows and more
Watch anywhere. Cancel anytime.
Ready to watch? Enter your email to create or restart your membership.
Email address


NETFLIX
Unlimited movies, TV shows and more
Watch anywhere. Cancel anytime.
Ready to watch? Enter your email to create or restart your membership.
Email address
Get Started


Personalize your web experience

OUTPUT:

Program– 1

Write a selenium java program to demonstrate window operations.

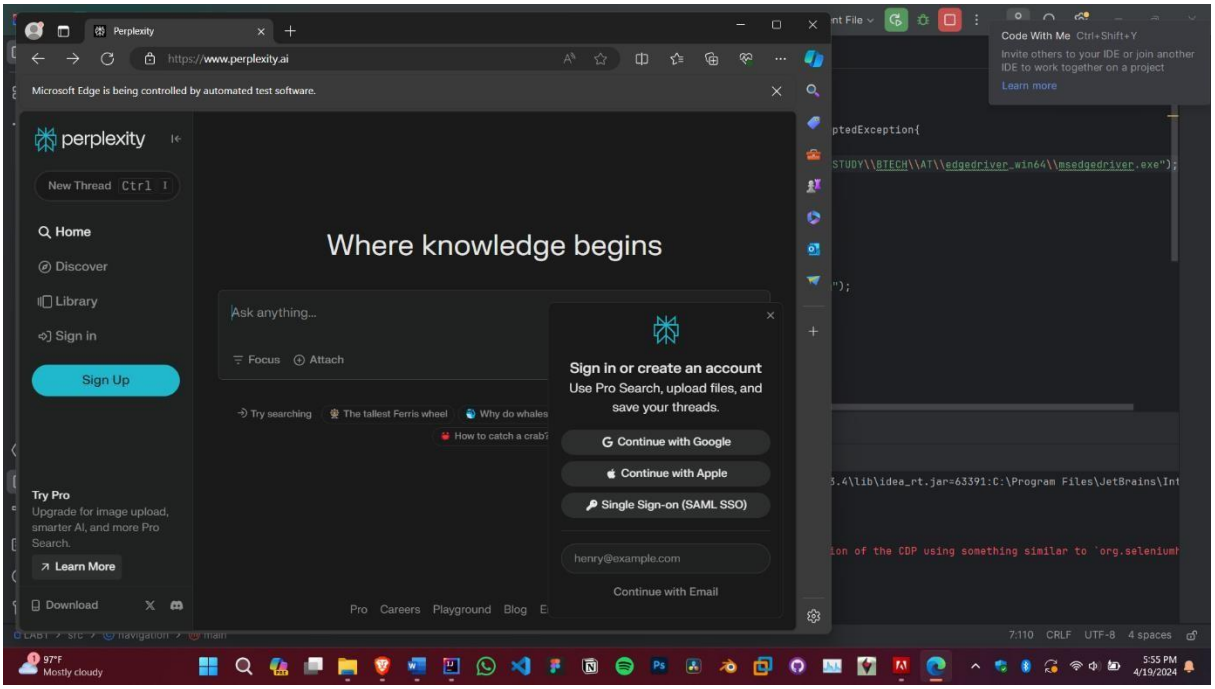
```
import org.openqa.selenium.*; import
org.openqa.selenium.edge.EdgeDriver; public
class Window {

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

      System.setProperty("webdriver.edge.driver",
D:\\STUDY\\BTECH\\AT\\edgedriver_win64\\msedgedriver.exe");
      WebDriver driver = new EdgeDriver();

      driver.get("https://www.netflix.com");

      driver.manage().deleteAllCookies();//Delete all cookies

      //Dimension of the window
      Dimension d = new Dimension(500, 500);
driver.manage().window().setSize(d);
      Thread.sleep(3000);

      //position of the window        Point p =
new Point(250, 250);
driver.manage().window().setPosition(p);
      Thread.sleep(3000);

      //maximize the window
      driver.manage().window().maximize();
      Thread.sleep(3000);

      //minimize the window
      driver.manage().window().minimize();
      Thread.sleep(3000);

      driver.quit();
```

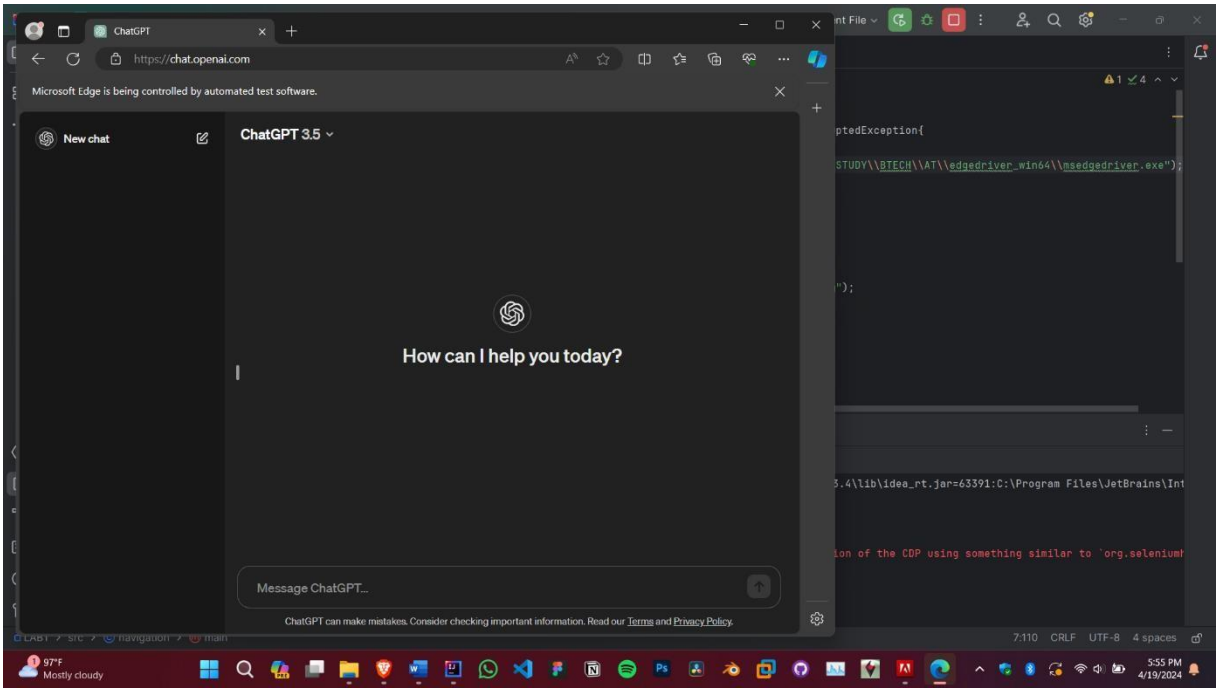
Aim:

Code:

```
    }
}
```

OUTPUT:





Program–2

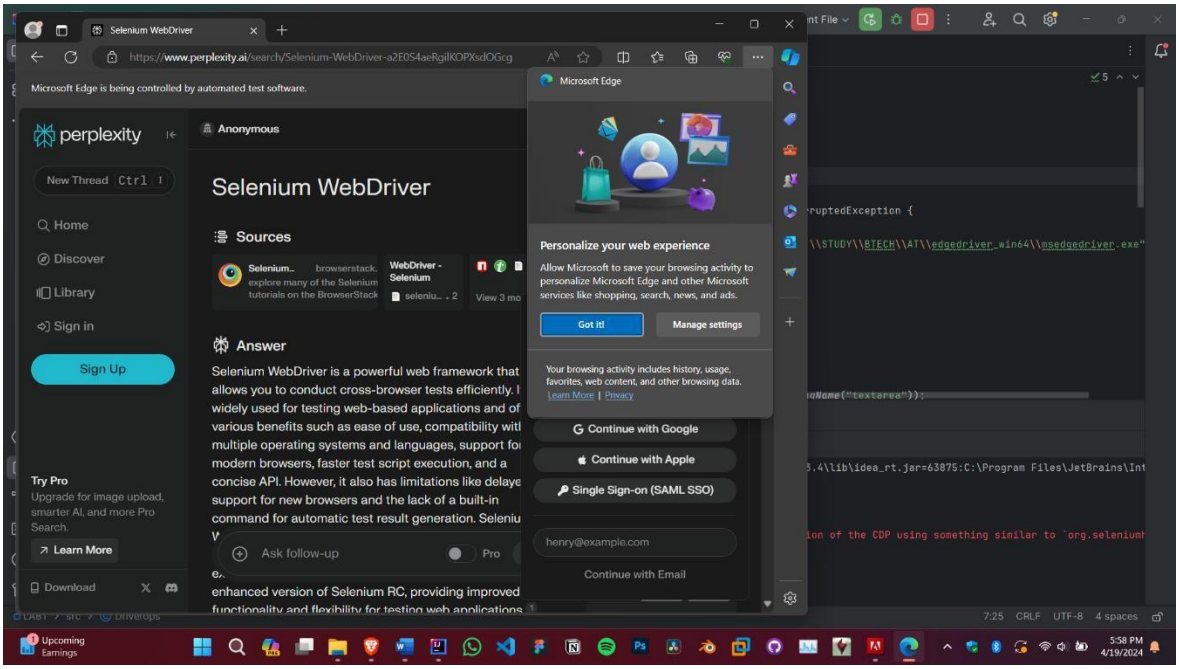
Write a selenium java program to demonstrate navigation.

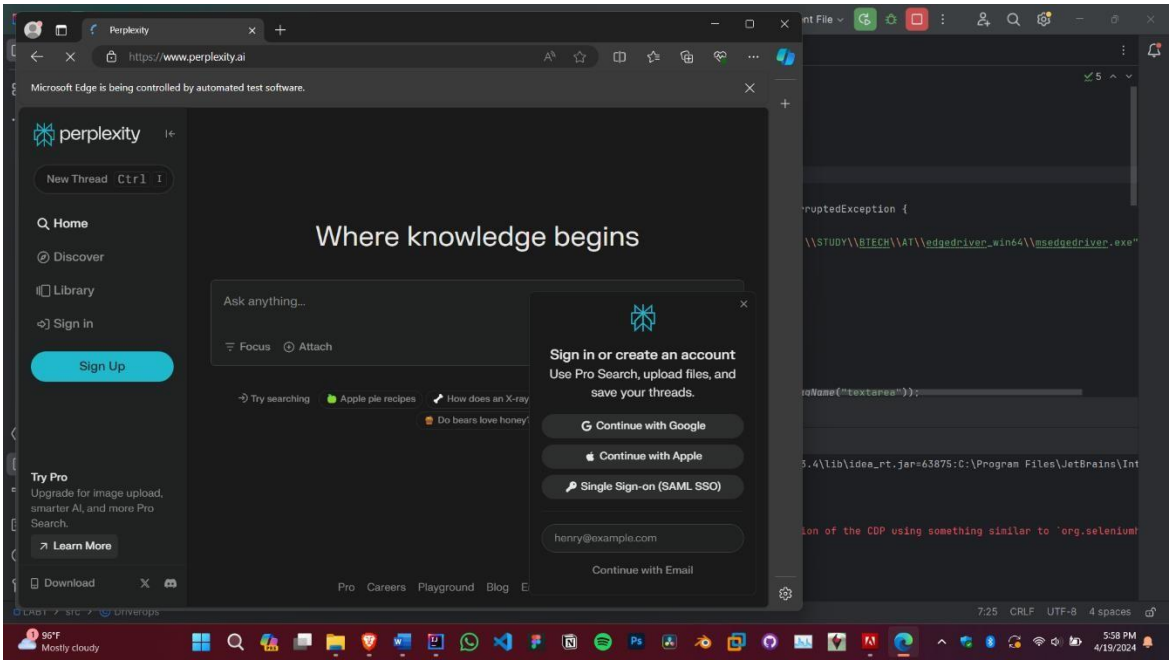
Aim:

Code:

```
import org.openqa.selenium.*;
import org.openqa.selenium.edge.EdgeDriver;

public class navigation{
   public static void main(String Args[]) throws InterruptedException{

      System.setProperty("webdriver.edge.driver",
"D:\\STUDY\\BTECH\\AT\\edgedriver_win64\\msedgedriver.exe");
      WebDriver driver = new EdgeDriver();

      driver.get("https://www.perplexity.ai");
      Thread.sleep(3000);

      //navigate to another site
      driver.navigate().to("https://chat.openai.com");
      Thread.sleep(3000);

      //Navigate back
driver.navigate().back();
      Thread.sleep(3000);

      //Navigate forward
driver.navigate().forward();
      Thread.sleep(3000);

      //Refresh
driver.navigate().refresh();
      Thread.sleep(5000);

      driver.quit();
   } }
```

OUTPUT:






```
Page Title: Selenium WebDriver
Current URL: https://www.perplexity.ai/search/Selenium-WebDriver-a2E0S4aeRqilKOPXsdOGcg

Process finished with exit code 0
```

Aim:

Code:

Program–3

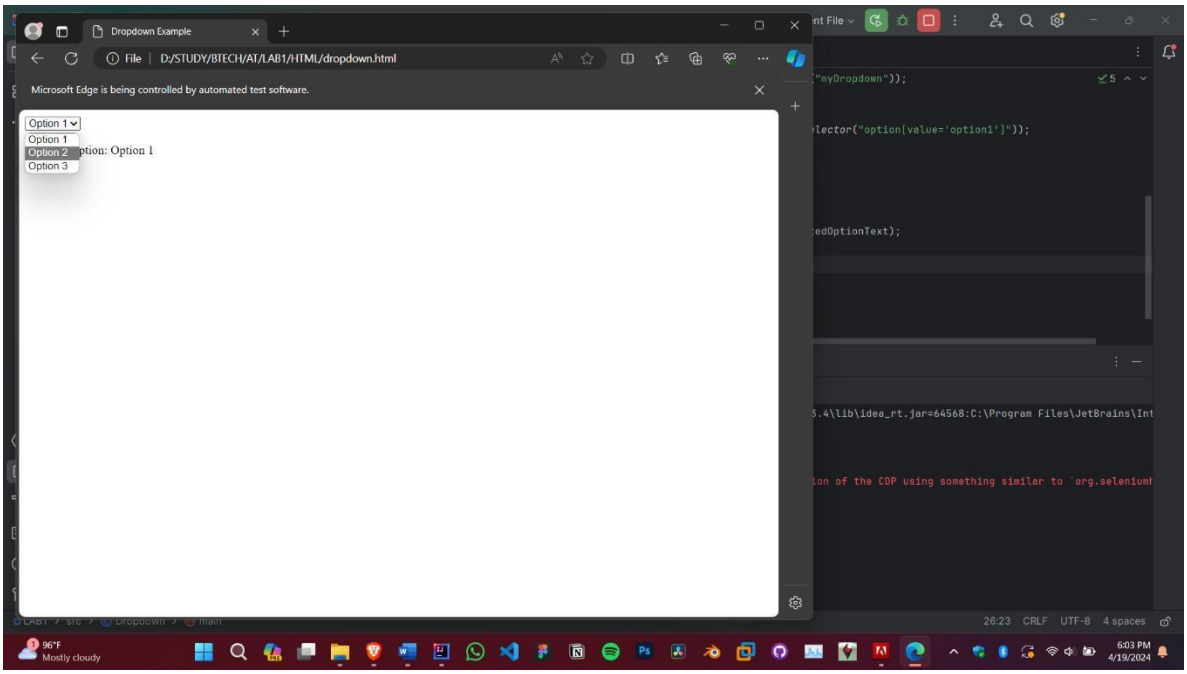
Write a selenium java program to demonstrate driver operations.

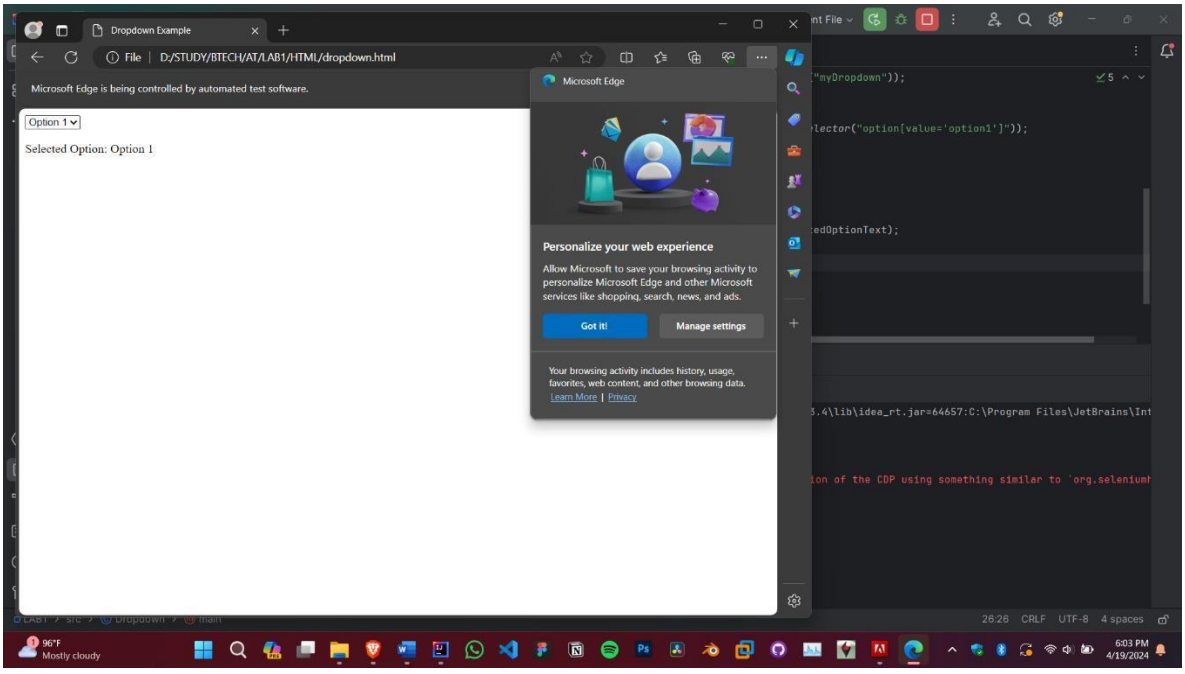
```
import org.openqa.selenium.By; import
org.openqa.selenium.Keys; import
org.openqa.selenium.WebDriver; import
org.openqa.selenium.WebElement;
import org.openqa.selenium.edge.EdgeDriver;

public class Driverops {

   public static void main(String[] args) throws InterruptedException {
System.setProperty("webdriver.edge.driver",

"D:\\STUDY\\BTECH\\AT\\edgedriver_win64\\msedgedriver.exe");
      WebDriver driver = new EdgeDriver();
      driver.get("https://www.perplexity.ai");

      WebElement searchBox = driver.findElement(By.tagName("textarea"));
searchBox.sendKeys("Selenium WebDriver");
      searchBox.sendKeys(Keys.ENTER);

      Thread.sleep(5000);

      String pageTitle = driver.getTitle();
      System.out.println("Page Title: " + pageTitle);

      String currentUrl = driver.getCurrentUrl();
      System.out.println("Current URL: " + currentUrl);


      Thread.sleep(5000);
driver.quit();
   } }
```

OUTPUT:

Aim:

Code:






```
Selected Option: Option 1


Process finished with exit code 0
```

Aim:

Program–4

Write a selenium java program to demonstrate dropdown or list.

HTML code:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Dropdown Example</title>
</head>
<body>
<select id="myDropdown" onchange="showSelectedOption()">
<option value="option1">Option 1</option>
<option value="option2">Option 2</option>
<option value="option3">Option 3</option>
</select>

<p id="selectedOption"></p>

<script>
   // Set the default selected option
   document.getElementById("myDropdown").value = "option2";

   // Function to display the selected option
function showSelectedOption() {
      var dropdown = document.getElementById("myDropdown");        var
selectedOption = dropdown.options[dropdown.selectedIndex].text;
      document.getElementById("selectedOption").innerText = "Selected Option: " + selectedOption;
   }
</script>
</body>
</html>
```

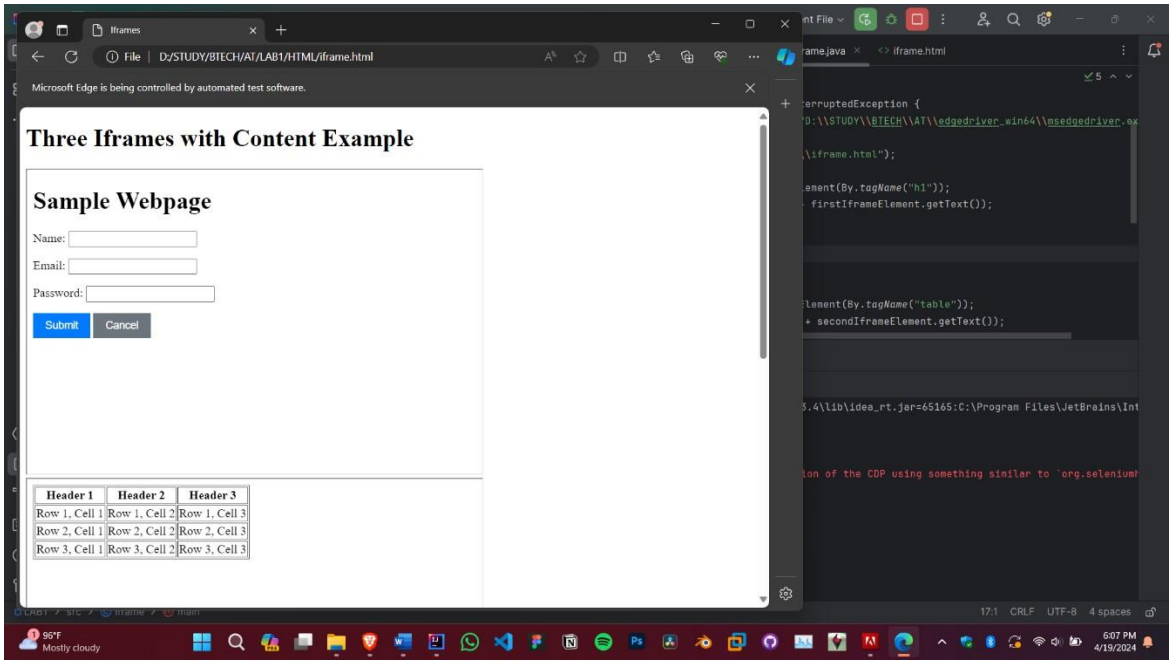
Java Code:

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

```
import org.openqa.selenium.edge.EdgeDriver;

public class Dropdown {
```

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

        System.setProperty("webdriver.edge.driver",
"D:\\STUDY\\BTECH\\AT\\edgedriver_win64\\msedgedriver.exe");
        WebDriver driver = new EdgeDriver();

        driver.get("D:\\STUDY\\BTECH\\AT\\LAB1\\HTML\\dropdown.html");

        WebElement dropdown = driver.findElement(By.id("myDropdown"));
dropdown.click();

        WebElement option = driver.findElement(By.cssSelector("option[value='option1']"));
option.click();

        Thread.sleep(3000);

        String selectedOptionText = option.getText();
        System.out.println("Selected Option: " + selectedOptionText);

        Thread.sleep(2000);

        driver.quit();
    } }
```

OUTPUT:




```
First Iframe Content: Sample Webpage
Second Iframe Content: Header 1 Header 2 Header 3
Row 1, Cell 1 Row 1, Cell 2 Row 1, Cell 3
Row 2, Cell 1 Row 2, Cell 2 Row 2, Cell 3
Row 3, Cell 1 Row 3, Cell 2 Row 3, Cell 3
Third Iframe Content: Result Page

Process finished with exit code 0
```

Program–5

Aim: Write a selenium java program to demonstrate frame and iframe.

HTML code:

```
<!DOCTYPE html>
<head>
<title>Iframes</title>
</head>
<body>
<h1>Three Iframes with Content Example</h1>
<iframe src="test_page.html" width="600" height="400" title="First iframe">
</iframe>

<iframe src="table.html" width="600" height="400" title="Second iframe">
</iframe>

<iframe src="result.html" width="600" height="400" title="Third iframe">
```

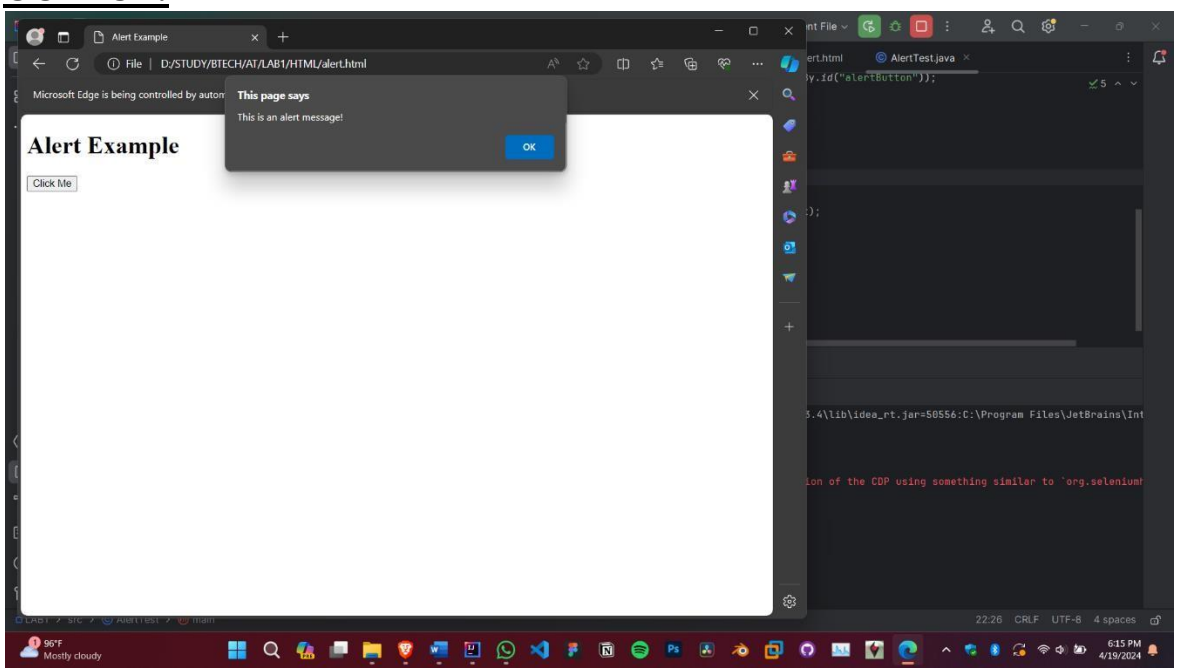
```
</iframe>
</body> </html>
```

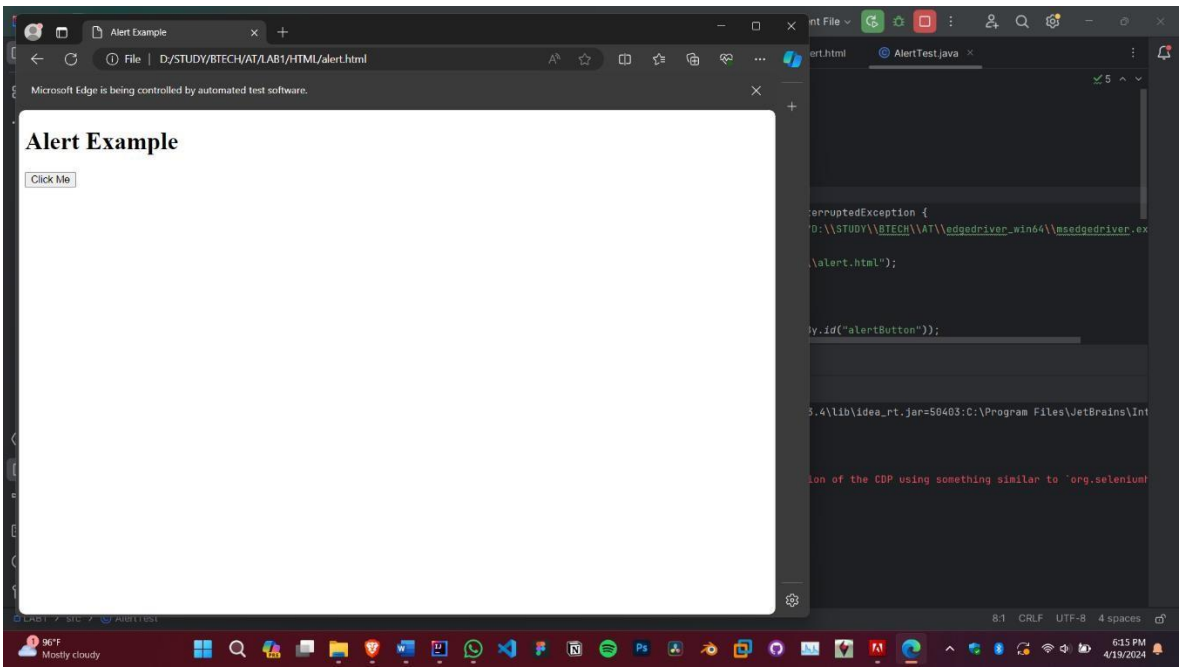
Java Code:

```
import org.openqa.selenium.By; import
org.openqa.selenium.WebDriver; import
org.openqa.selenium.WebElement;
import org.openqa.selenium.edge.EdgeDriver;

public class Iframe {

   public static void main(String[] args) throws InterruptedException {
      System.setProperty("webdriver.edge.driver",
"D:\\STUDY\\BTECH\\AT\\edgedriver_win64\\msedgedriver.exe");
      WebDriver driver = new EdgeDriver();
      driver.get("D:\\STUDY\\BTECH\\AT\\LAB1\\HTML\\iframe.html");
driver.switchTo().frame(0);
      WebElement firstIframeElement = driver.findElement(By.tagName("h1"));
      System.out.println("First Iframe Content: " + firstIframeElement.getText());

      Thread.sleep(3000); driver.switchTo().defaultContent();
```

```
        driver.switchTo().frame(1);
        WebElement secondIframeElement = driver.findElement(By.tagName("table"));
        System.out.println("Second Iframe Content: " + secondIframeElement.getText());

        Thread.sleep(3000);

        driver.switchTo().defaultContent();
driver.switchTo().frame(2);
        WebElement thirdIframeElement = driver.findElement(By.tagName("h1"));
        System.out.println("Third Iframe Content: " + thirdIframeElement.getText());

        Thread.sleep(3000);

        driver.quit();
    } }
```

OUTPUT:






```
Alert Text: This is an alert message!

Process finished with exit code 0
```

Program–6

Aim: Write a selenium java program to demonstrate alert.

HTML code:

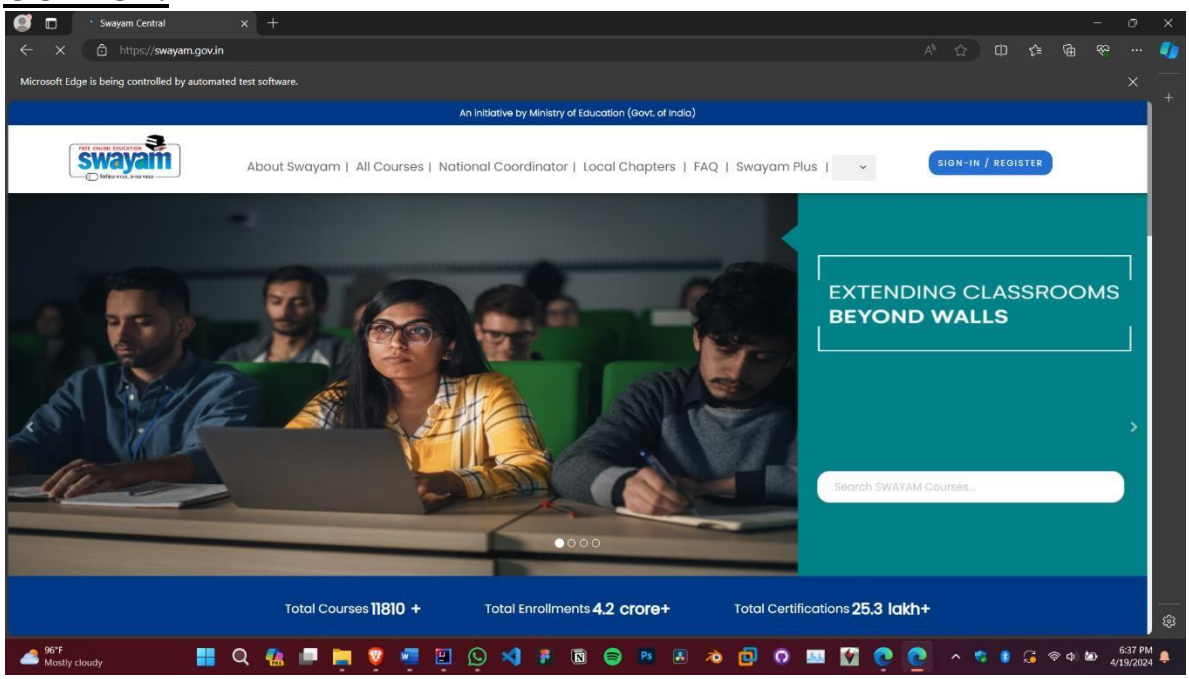
```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Alert Example</title>
</head>
<body>
<h1>Alert Example</h1>
<button id="alertButton" onclick="showAlert()">Click Me</button>

<script>     function
showAlert() {
        alert("This is an alert message!");
    }
</script>
</body> </html>
```

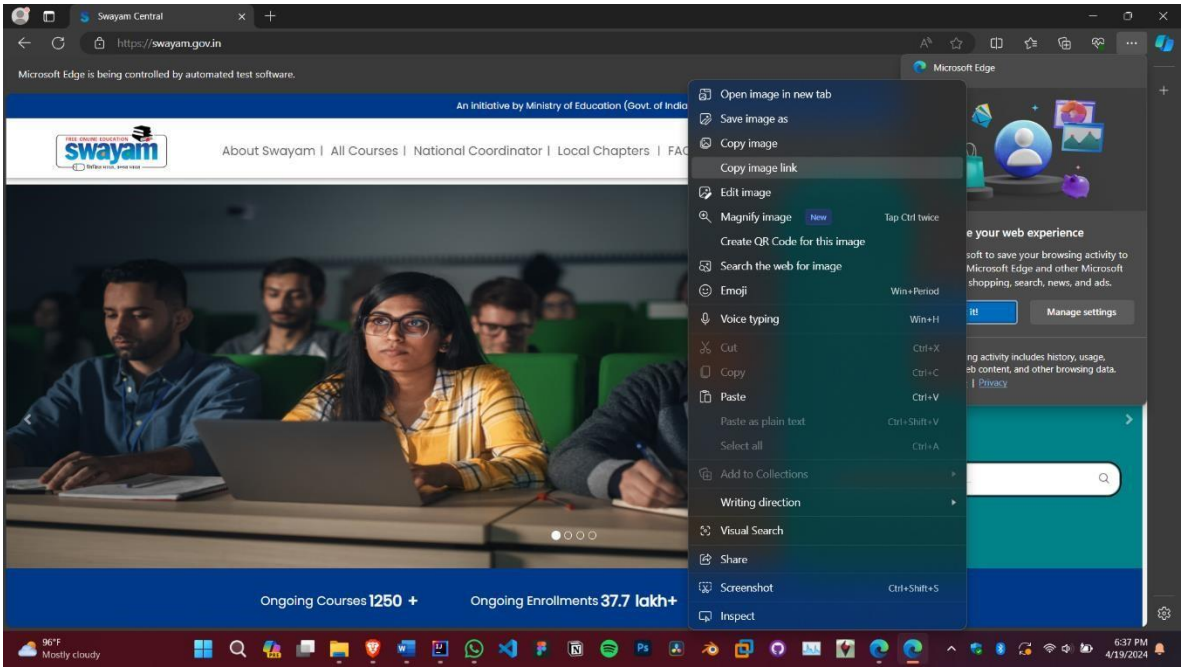
Java Code:

```
import org.openqa.selenium.By; import
org.openqa.selenium.WebDriver; import
org.openqa.selenium.WebElement; import
org.openqa.selenium.edge.EdgeDriver; import
org.openqa.selenium.Alert;

public class AlertTest {

    public static void main(String[] args) throws InterruptedException {
        System.setProperty("webdriver.edge.driver",
"D:\\STUDY\\BTECH\\AT\\edgedriver_win64\\msedgedriver.exe");
        WebDriver driver = new EdgeDriver();
        driver.get("D:\\STUDY\\BTECH\\AT\\LAB1\\HTML\\alert.html");

        Thread.sleep(3000);
```

```
        WebElement alertButton = driver.findElement(By.id("alertButton"));
alertButton.click();

        Alert alert = driver.switchTo().alert();
        String alertText = alert.getText();

        System.out.println("Alert Text: " + alertText);
alert.accept();         driver.quit();
    } }
```

OUTPUT:





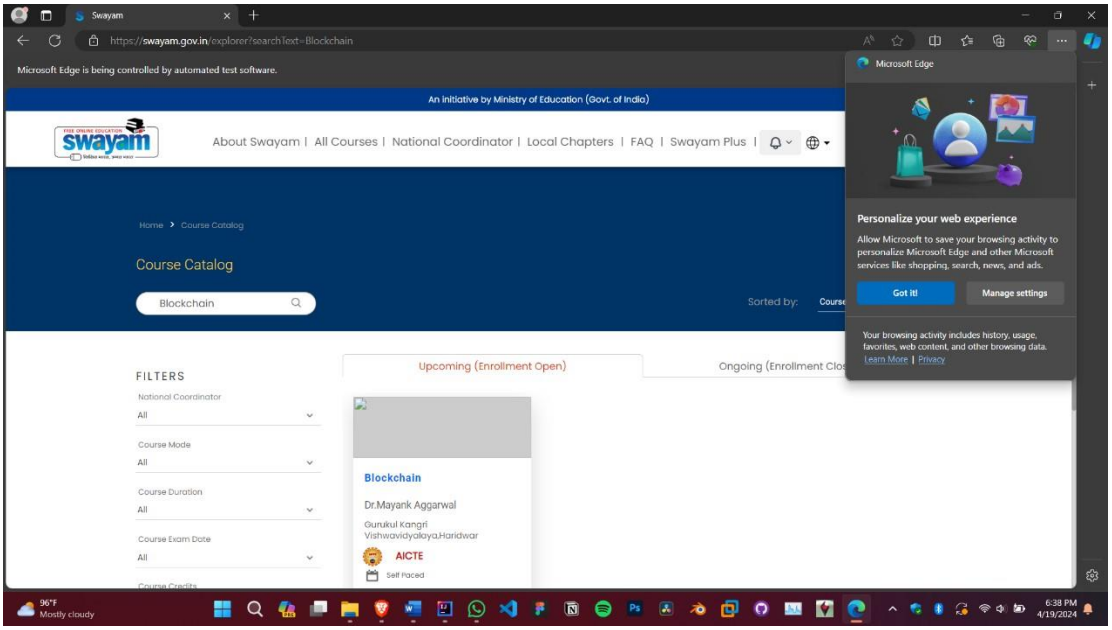
Program–7

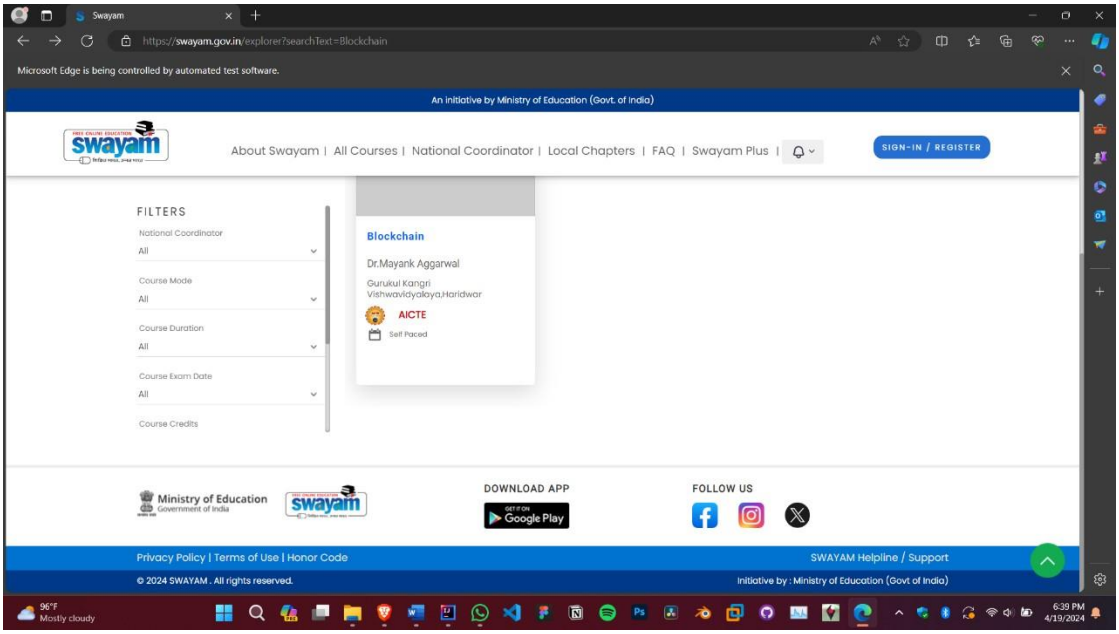
Aim: Write a selenium java program to demonstrate actions(Mouse and Keyboard).

Code:

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

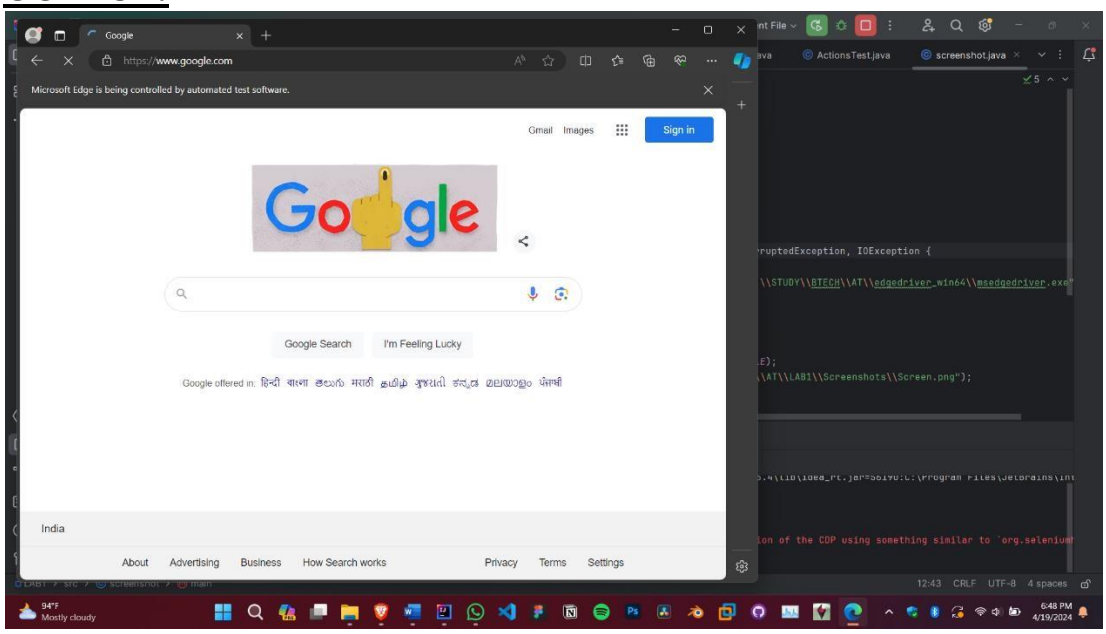
```
org.openqa.selenium.WebDriver; import
org.openqa.selenium.WebElement; import
org.openqa.selenium.edge.EdgeDriver; import
org.openqa.selenium.interactions.Actions;

public class ActionsTest {

    public static void main(String[] args) throws InterruptedException{
        System.setProperty("webdriver.edge.driver",
"D:\\STUDY\\BTECH\\AT\\edgedriver_win64\\msedgedriver.exe");
        WebDriver driver = new EdgeDriver();
driver.manage().window().maximize();         driver.get("https://swayam.gov.in/");

        WebElement element =
driver.findElement(By.xpath("/html/body/div[3]/section/div/form/div/input"));

        Actions actions = new Actions(driver);

        actions.moveToElement(element).perform();
        Thread.sleep(2000);

        actions.contextClick(element).perform();
        Thread.sleep(2000);

        actions.sendKeys("Blockchain");
        Thread.sleep(2000);

        WebElement element2 = driver.findElement(By.xpath("//section/div/form/div/span"));
actions.moveToElement(element2).click().perform();
        Thread.sleep(8000);

        WebElement element3 = driver.findElement(By.xpath("//div[2]/div/div[2]/div[2]/course-card-
grouper/div[1]/course-cards/div/div/course-card"));
actions.moveToElement(element3).perform();
```



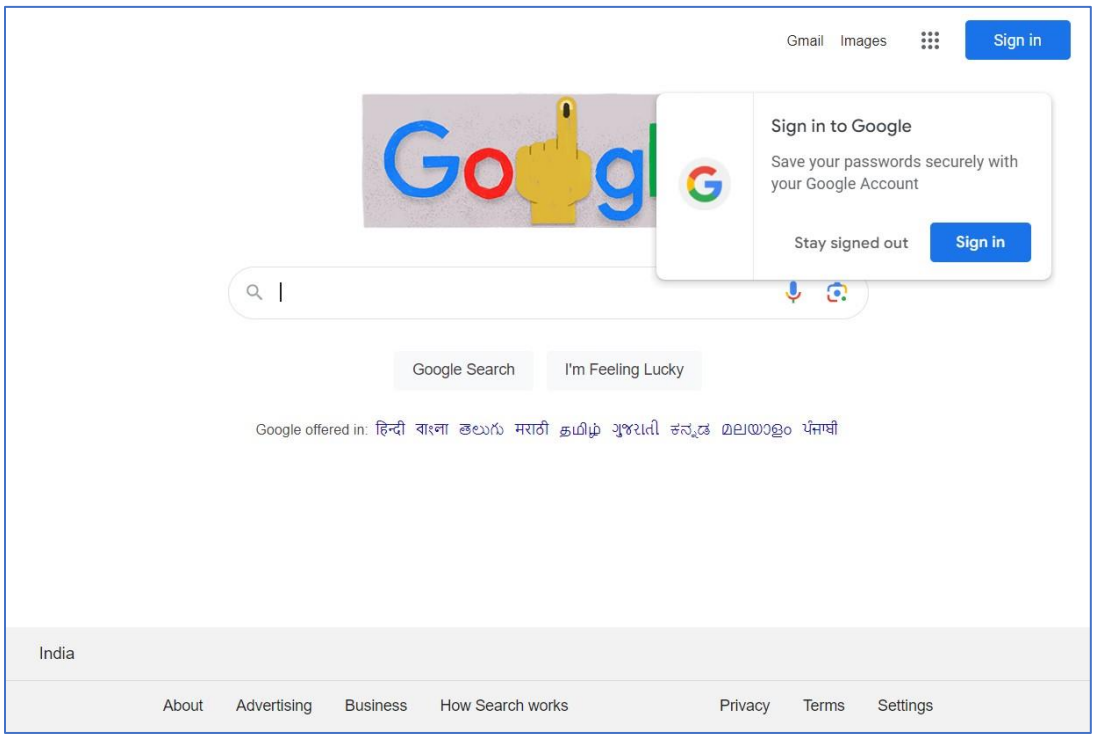



```
Thread.sleep(2000);

        actions.keyDown(Keys.CONTROL).sendKeys(Keys.END).perform();
Thread.sleep(2000);

actions.sendKeys(Keys.BACK_SPACE);

Thread.sleep(3000);

        driver.quit();
    } }
```

OUTPUT:




```
Screenshot is captured

Process finished with exit code 0
```



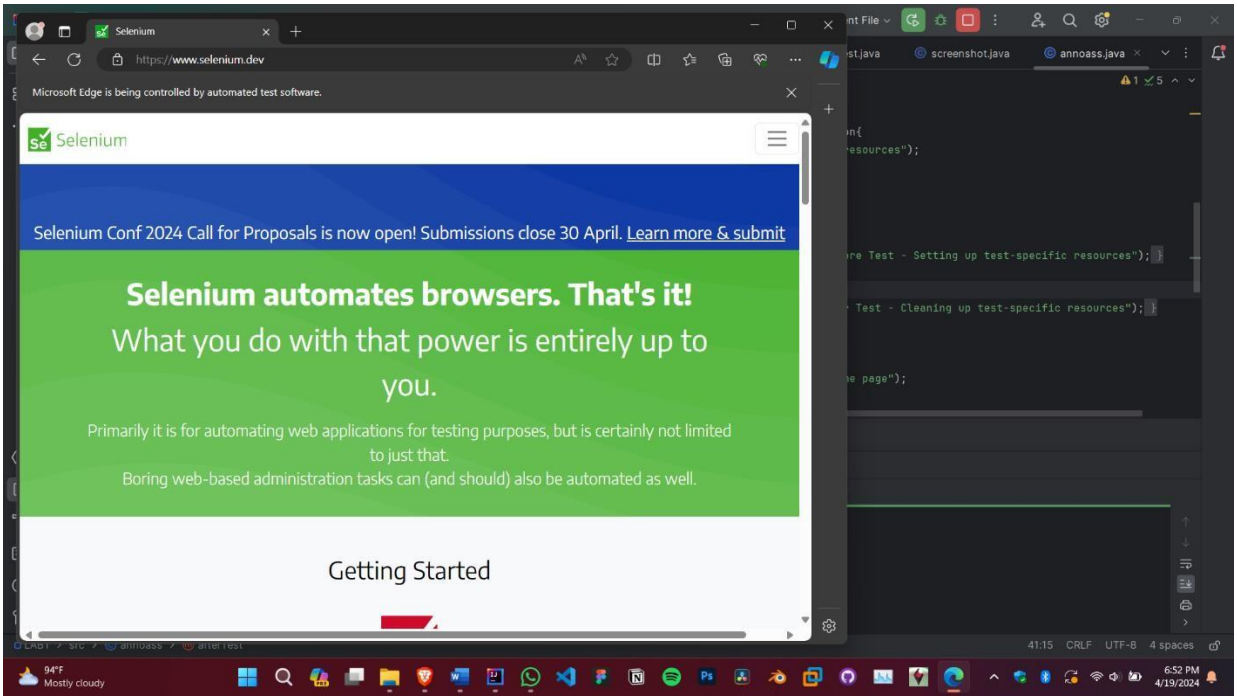
Program–8

Aim: Write a selenium java program to demonstrate Screenshot.

Code:

```
import java.io.File; import
java.io.IOException; import
org.openqa.selenium.io.FileHandler; import
org.openqa.selenium.OutputType; import
org.openqa.selenium.TakesScreenshot; import
org.openqa.selenium.WebDriver;
import org.openqa.selenium.edge.EdgeDriver;

public class screenshot {

   public void sshot() throws InterruptedException, IOException {

      System.setProperty("webdriver.edge.driver",
"D:\\STUDY\\BTECH\\AT\\edgedriver_win64\\msedgedriver.exe");
      WebDriver driver = new EdgeDriver();
      driver.get("https://www.google.com/");

      TakesScreenshot tk = (TakesScreenshot)driver;
      File source = tk.getScreenshotAs(OutputType.FILE);
      File des = new File("D:\\STUDY\\BTECH\\AT\\LAB1\\Screenshots\\Screen.png");
FileHandler.copy(source, des);

      System.out.println("Screenshot is captured");
      Thread.sleep(5000);
driver.quit();

   }

}
```

OUTPUT:




```
Before Suite - Setting up environment variables
Before Test - Setting up test-specific resources
Before Class - Initializing resources
Test Method - Verifying home page
After Class - Cleaning up resources
After Test - Cleaning up test-specific resources
After Suite - Cleaning up after all tests

===============================================
Default Suite
Total tests run: 1, Passes: 1, Failures: 0, Skips: 0
===============================================


Process finished with exit code 0
```

Program–9

Aim: Write a selenium java program to demonstrate Testing – Assertions and Annotations.

Code:

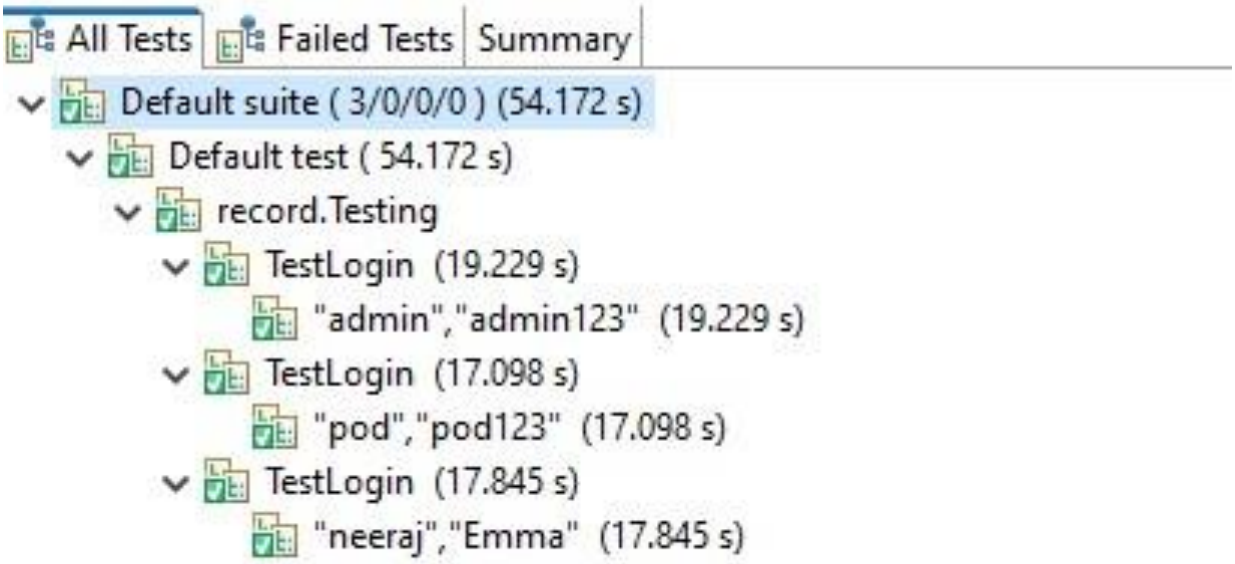
```
import org.openqa.selenium.WebDriver; import
org.openqa.selenium.edge.EdgeDriver;
import org.testng.Assert; import
org.testng.annotations.*;
```

```
public class annoass {
    WebDriver driver;
    String baseUrl = "https://www.selenium.dev/";

    @BeforeSuite
    public void beforeSuite() {
        System.out.println("Before Suite - Setting up environment variables");
    }

    @AfterSuite
    public void afterSuite() {
        System.out.println("After Suite - Cleaning up after all tests");
    }

    @BeforeClass
    public void beforeClass() {
        System.out.println("Before Class - Initializing resources");
        System.setProperty("webdriver.edge.driver",
"D:\\STUDY\\BTECH\\AT\\edgedriver_win64\\msedgedriver.exe");
driver = new EdgeDriver();
        driver.get(baseUrl);
    }

    @AfterClass
    public void afterClass() {
        System.out.println("After Class - Cleaning up resources");
driver.quit();
    }

    @BeforeTest
    public void beforeTest() {
        System.out.println("Before Test - Setting up test-specific resources");
    }
```

```
@AfterTest
   public void afterTest() {
      System.out.println("After Test - Cleaning up test-specific resources");
   }

   @Test
   public void verifyHome() {
      System.out.println("Test Method - Verifying home page");
      String expectedTitle = "Selenium";
      String actualTitle = driver.getTitle();
      Assert.assertEquals(actualTitle, expectedTitle);
   } }
```

OUTPUT:

```
PASSED: TestLogin("pod", "pod123")
PASSED: TestLogin("neeraj", "Emma")
PASSED: TestLogin("admin", "admin123")

===============================================
    Default test
    Tests run: 1, Failures: 0, Skips: 0
===============================================


===============================================
Default suite
Total tests run: 3, Passes: 3, Failures: 0, Skips: 0
===============================================
```



Program–10

Aim: Write a selenium java program to demonstrate Data Driven Testing.

Code:

Pom.xml:

```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/
XMLSchema-instance" xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">

  <modelVersion>4.0.0</modelVersion>
  <groupId>Test</groupId>
  <artifactId>Da_Dri</artifactId>
  <version>0.0.1-SNAPSHOT</version>
  <name>Data_Driven</name>

  <dependencies>
<dependency>
<groupId>org.testng</groupId>
<artifactId>testng</artifactId>
<version>7.4.0</version>
</dependency>

<dependency>
<groupId>io.github.bonigarcia</groupId>
<artifactId>webdrivermanager</artifactId>
<version>5.8.0</version>
</dependency>

<dependency>
<groupId>org.seleniumhq.selenium</groupId>
<artifactId>selenium-java</artifactId>
<version>4.19.1</version>
</dependency>

<dependency>
      <groupId>org.apache.poi</groupId>
      <artifactId>poi</artifactId>
      <version>4.1.1</version>
   </dependency>
   <dependency>
      <groupId>org.apache.poi</groupId>
      <artifactId>poi-ooxml</artifactId>
      <version>4.1.1</version>
   </dependency>
   <dependency>
```

```
    <groupId>org.slf4j</groupId>
   <artifactId>slf4j-api</artifactId>
    <version>1.7.5</version>
</dependency>
<dependency>
    <groupId>org.slf4j</groupId>
    <artifactId>slf4j-simple</artifactId>
    <version>1.7.5</version>
</dependency>


      </dependencies>
</project>
```

Testing.java:

```
package aditya; import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver; import
org.openqa.selenium.chrome.ChromeDriver;
import org.testng.Assert; import
org.testng.annotations.Test;
import io.github.bonigarcia.wdm.WebDriverManager;

public class Testing {

        @Test(dataProvider = "loginData", dataProviderClass = ExcelDataSupplier.class)
        public void TestLogin(String userName, String password) throws Exception {
                //WebDriverManager.chromedriver().setup();
WebDriver driver = new ChromeDriver();
                driver.manage().window().maximize();

                driver.get("https://github.com/login");
driver.findElement(By.name("login")).sendKeys(userName);
driver.findElement(By.name("password")).sendKeys(password);
                driver.findElement(By.name("commit")).click();
                Thread.sleep(5000);
                driver.quit();
        }

}
```

ExcelDataSupplier.java:

```
package aditya; import
java.io.File; import
java.io.FileInputStream;
import java.util.Arrays;

import org.apache.poi.ss.usermodel.DataFormatter;
import org.apache.poi.xssf.usermodel.XSSFSheet; import
org.apache.poi.xssf.usermodel.XSSFWorkbook;
import org.testng.annotations.DataProvider;

public class ExcelDataSupplier {

	@DataProvider(name="loginData")  public
String[][] getData() throws Exception {
		File excelFile = new File("./src/test/resources/Test.xlsx");
		FileInputStream fis = new FileInputStream(excelFile);
		XSSFWorkbook workbook = new XSSFWorkbook(fis);
	XSSFSheet sheet = workbook.getSheet("Sheet1");		int
noOfRows = sheet.getPhysicalNumberOfRows();
		int noOfColumns = sheet.getRow(0).getLastCellNum();

		String[][] data = new String[noOfRows-1][noOfColumns];
	for (int i = 0; i < noOfRows-1; i++) {			for
(int j = 0; j < noOfColumns; j++) {
DataFormatter df = new DataFormatter();
				data[i][j] =  df.formatCellValue(sheet.getRow(i+1).getCell(j));
			}
		}
		workbook.close();
		fis.close();

		for (String[] dataArr : data) {
			System.out.println(Arrays.toString(dataArr));
		}
		return data;
	}

}
```