

Software Testing - CA1

Question 1:

Code:

```
package com.rithik.ca1;

import org.junit.Assert;
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.chrome.ChromeOptions;

import io.github.bonigarcia.wdm.WebDriverManager;

public class question1 {
    public static void main(String[] args) {
        // Setting up driver
        WebDriverManager.chromedriver().setup();
        ChromeOptions co = new ChromeOptions();
        co.addArguments("--remote-allow-origins=*");
        WebDriver driver = new ChromeDriver(co);

        String url = "https://www.saucedemo.com/";

        driver.get(url);

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

        // Login
        WebElement userName = driver.findElement(By.id("user-name"));
        userName.sendKeys("standard_user");

        WebElement password = driver.findElement(By.id("password"));
        password.sendKeys("secret_sauce");

        WebElement loginButton = driver.findElement(By.id("login-
button"));
        loginButton.click();
    }
}
```

```
        // Click add to cart
        WebElement addToCart = driver.findElement(By.id("add-to-cart-
sauce-labs-backpack"));
        addToCart.click();
        System.out.println("* User can add the product");

        WebElement cart =
driver.findElement(By.className("shopping_cart_link"));
        cart.click();

        // Check if cart contents displayed
        WebElement cartList =
driver.findElement(By.className("cart_list"));
        Assert.assertTrue(cartList.isDisplayed());
        System.out.println("* Cart contents displayed");

        // Click checkout
        WebElement checkout = driver.findElement(By.id("checkout"));
        checkout.click();

        // Check if info is asked
        String currentUrl = driver.getCurrentUrl();
        String expectedUrl = "https://www.saucedemo.com/checkout-step-
one.html";
        Assert.assertEquals(currentUrl, expectedUrl);
        System.out.println("* Your Information is displayed");

        // Fill form
        WebElement fName = driver.findElement(By.id("first-name"));
        fName.sendKeys("FirstName");

        WebElement lName = driver.findElement(By.id("last-name"));
        lName.sendKeys("LastName");

        WebElement zCode = driver.findElement(By.id("postal-code"));
        zCode.sendKeys("123456");

        WebElement continueBtn = driver.findElement(By.id("continue"));
        continueBtn.click();

        // Check product overview is displayed
```

```
        WebElement cartItem =
driver.findElement(By.className("cart_item"));
        Assert.assertTrue(cartItem.isDisplayed());
        System.out.println("* Product Overview is displayed");

        // Name and price of the product
        WebElement itemName =
driver.findElement(By.className("inventory_item_name"));
        System.out.println("Product name : " + itemName.getText());

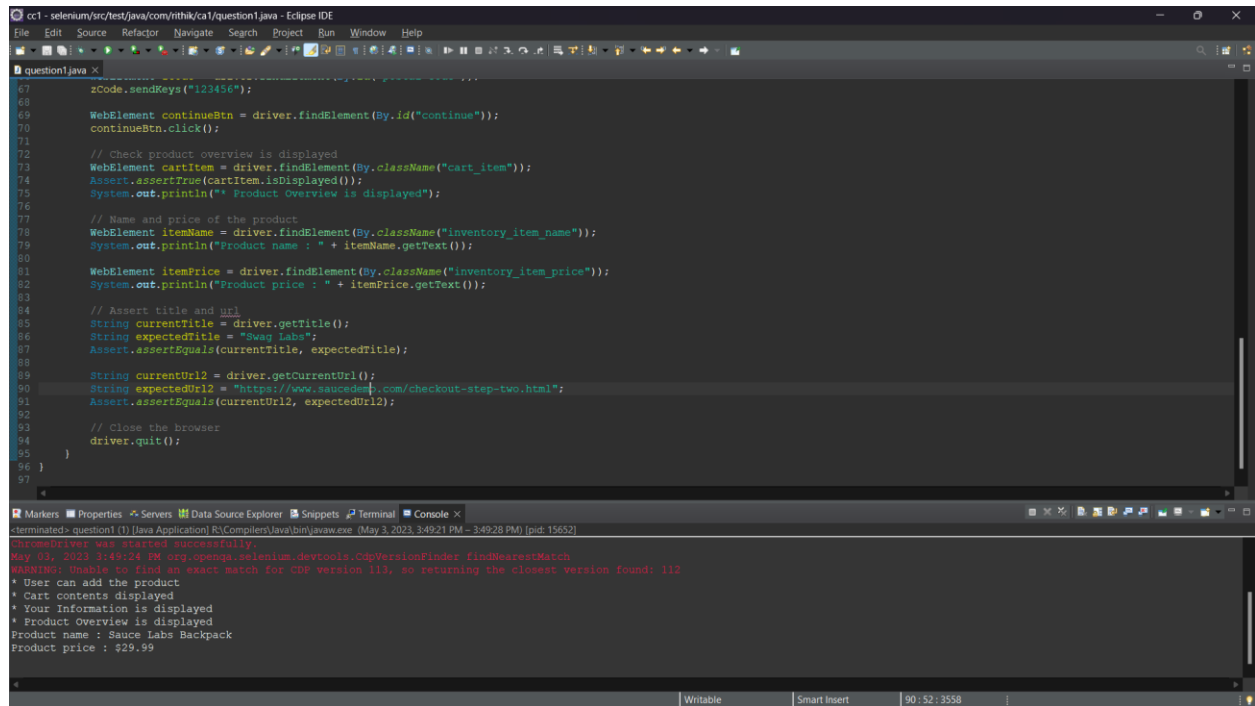
        WebElement itemPrice =
driver.findElement(By.className("inventory_item_price"));
        System.out.println("Product price : " + itemPrice.getText());

        // Assert title and url
        String currentTitle = driver.getTitle();
        String expectedTitle = "Swag Labs";
        Assert.assertEquals(currentTitle, expectedTitle);

        String currentUrl2 = driver.getCurrentUrl();
        String expectedUrl2 = "https://www.saucedemo.com/checkout-step-
two.html";
        Assert.assertEquals(currentUrl2, expectedUrl2);

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

Screenshot:



The screenshot shows the Eclipse IDE interface. The top pane displays the source code for `question1.java`, which is a Selenium test script. The code includes steps for sending keys, clicking a 'continue' button, checking if the product overview is displayed, finding and asserting the product name and price, and finally asserting the title and URL before closing the browser.

```
67 zCode.sendKeys("123456");
68
69 WebElement continueBtn = driver.findElement(By.id("continue"));
70 continueBtn.click();
71
72 // Check product overview is displayed
73 WebElement cartItem = driver.findElement(By.className("cart_item"));
74 Assert.assertTrue(cartItem.isDisplayed());
75 System.out.println("** Product Overview is displayed");
76
77 // Name and price of the product
78 WebElement itemName = driver.findElement(By.className("inventory_item_name"));
79 System.out.println("Product name : " + itemName.getText());
80
81 WebElement itemPrice = driver.findElement(By.className("inventory_item_price"));
82 System.out.println("Product price : " + itemPrice.getText());
83
84 // Assert title and URL
85 String currentTitle = driver.getTitle();
86 String expectedTitle = "Swag Labs";
87 Assert.assertEquals(currentTitle, expectedTitle);
88
89 String currentUrl2 = driver.getCurrentUrl();
90 String expectedUrl2 = "https://www.saucedemo.com/checkout-step-two.html";
91 Assert.assertEquals(currentUrl2, expectedUrl2);
92
93 // Close the browser
94 driver.quit();
95 }
96 }
97
```

The bottom pane shows the console output, which includes the following log messages:

```
<terminated> question1 (1) [Java Application] R:\Compilers\Java\bin\javaw.exe (May 3, 2023, 3:49:21 PM - 3:49:28 PM) [pid: 15632]
ChromeDriver was started successfully.
May 03, 2023 3:49:24 PM org.openqa.selenium.devtools.CdpVersionFinder findNearestMatch
WARNING: Unable to find an exact match for CDP version 113, so returning the closest version found: 112
* User can add the product
* Cart contents displayed
* Your Information is displayed
* Product Overview is displayed
Product name : Sauce Labs Backpack
Product price : $29.99
```

Question 2:

Code:

```
package com.rithik.cal;

import java.util.List;

import org.junit.Assert;
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.chrome.ChromeOptions;
import org.openqa.selenium.support.ui.Select;

import io.github.bonigarcia.wdm.WebDriverManager;

public class question1 {
    public static void main(String[] args) throws InterruptedException {
        // Setting up driver
        WebDriverManager.chromedriver().setup();
        ChromeOptions co = new ChromeOptions();
        co.addArguments("--remote-allow-origins=*");
        WebDriver driver = new ChromeDriver(co);

        String url = "https://www.saucedemo.com/";

        driver.get(url);

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

        // Login
        WebElement userName = driver.findElement(By.id("user-name"));
        userName.sendKeys("standard_user");

        WebElement password = driver.findElement(By.id("password"));
        password.sendKeys("secret_sauce");

        WebElement loginButton = driver.findElement(By.id("login-button"));
        loginButton.click();

        // Verify if A-Z and Z-A filters available
    }
}
```

```

        Select filter = new
Select(driver.findElement(By.xpath("//*[@id=\"header_container\"]/div[2]/div/span/select")));
        List<WebElement> li = filter.getOptions();
        int count=0;

        for(WebElement x : li) {
            if(x.getText().equals("Name (A to Z)") ||
x.getText().equals("Name (Z to A)"))
                count++;
        }

        Assert.assertEquals(count, 2);

        System.out.println("* User is able to apply filter name wise from
A-Z and Z-A");

        WebElement firstName;
        // First product name in asc
        filter.selectByIndex(0);
        firstName =
driver.findElement(By.className("inventory_item_name"));
        System.out.println("First Product Name (A-Z) : " +
firstName.getText());

        // First product name in desc
        filter.selectByIndex(1);
        firstName =
driver.findElement(By.className("inventory_item_name"));
        System.out.println("First Product Name (Z-A) : " +
firstName.getText());

        // Verify if price filters available
        Select filter2 = new
Select(driver.findElement(By.xpath("//*[@id=\"header_container\"]/div[2]/div/span/select")));
        List<WebElement> li2 = filter2.getOptions();

        int count2=0;

        for(WebElement x : li2) {
            if(x.getText().equals("Price (low to high)") ||
x.getText().equals("Price (high to low)"))

```

```

        count2++;
    }

    Assert.assertEquals(count2, 2);

    System.out.println("* User is able to apply filter from low price
to high price and high price to low price");

    WebElement firstPrice;
    // First product price in asc
    filter2.selectByIndex(2);
    firstPrice =
driver.findElement(By.className("inventory_item_price"));
    System.out.println("First Product Price (low-high) : " +
firstPrice.getText());

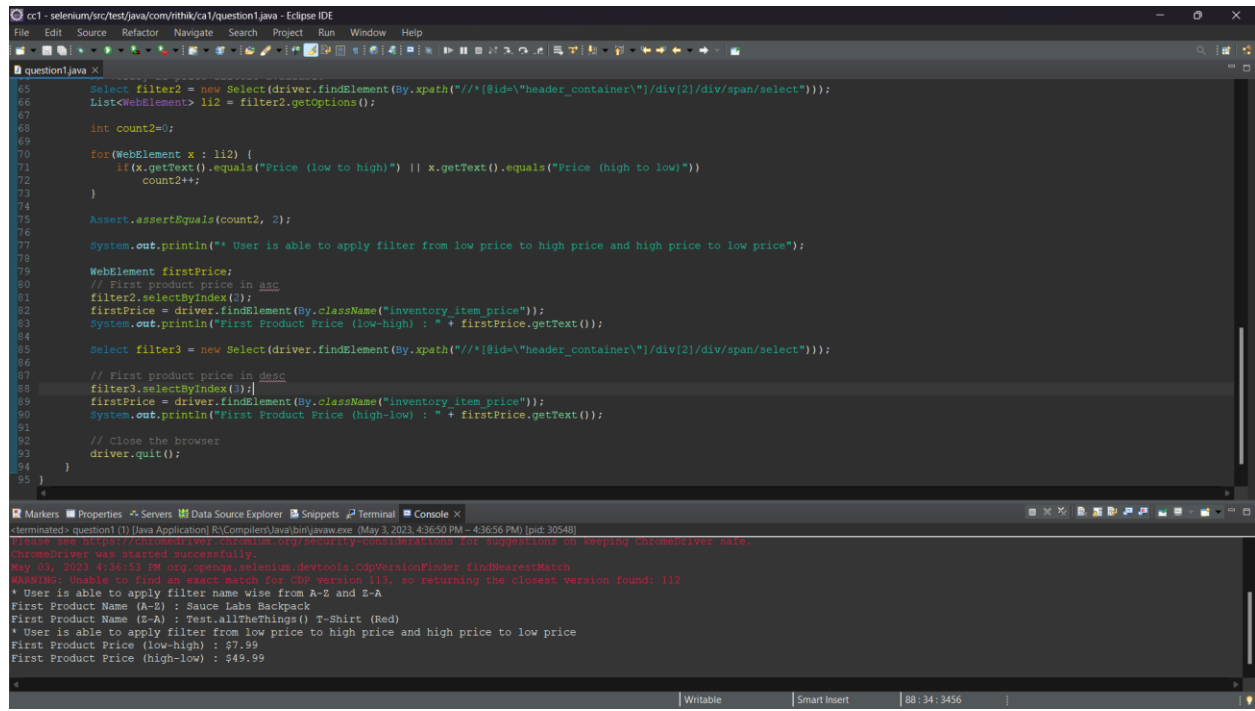
    Select filter3 = new
Select(driver.findElement(By.xpath("//*[@id=\"header_container\"]/div[2]/d
iv/span/select")));

    // First product price in desc
    filter3.selectByIndex(3);
    firstPrice =
driver.findElement(By.className("inventory_item_price"));
    System.out.println("First Product Price (high-low) : " +
firstPrice.getText());

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

```

Screenshot:



```
cc1 - selenium/src/test/java/com/rithik/ca1/question1.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
D question1.java X
65 Select filter2 = new Select(driver.findElement(By.xpath("//*[@id=\"header_container\"]/div[2]/div/span/select")));
66 List

Markers Properties Servers Data Source Explorer Snippets Terminal Console X



```
<terminated> question1 (1) [Java Application] R:\Compiler\Java\bin\javaw.exe (May 3, 2023, 4:36:50 PM - 4:36:56 PM) [pid: 30548]
Please see https://chromedriver.chromium.org/security-considerations for suggestions on keeping Chromedriver safe.
Chromedriver was started successfully.
May 03, 2023 4:36:53 PM org.openqa.selenium.devtools.CdpVersionFinder findNearestMatch
WARNING: Unable to find an exact match for CDP version 113, so returning the closest version found: 112
* User is able to apply filter name wise from A-Z and Z-A
First Product Name (A-Z) : Sauce Labs Backpack
First Product Name (Z-A) : Test.allTheThings() T-Shirt (Red)
* User is able to apply filter from low price to high price and high price to low price
First Product Price (low-high) : $7.99
First Product Price (high-low) : $49.99
```



Writable Smart Insert 88 : 34 : 3456


```