Source Code- Automate an E-Commerce Web Application

1.FlipkartTestChrome.java:

```java
package coms.Phase5EndProject;

import java.io.File;
import java.io.IOException;
import org.openqa.selenium.WebElement;
import org.apache.commons.io.FileUtils;
import org.openqa.selenium.By;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.NoSuchElementException;
import org.openqa.selenium.OutputType;
import org.openqa.selenium.TakesScreenshot;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.testng.annotations.AfterClass;
import org.testng.annotations.BeforeClass;
import org.testng.annotations.Test;

public class FlipkartTestChrome2 { WebDriver driver;

@BeforeClass
public void beforeClass() {
        System.setProperty("webdriver.chrome.driver","C:\\Users\\surya\\Documents\\pha
se5 WorkSpace\\chromedriver-win64\\chromedriver.exe");
        driver = new ChromeDriver();
        driver.get("https://www.flipkart.com/");
        driver.manage().window().maximize();
        }

        @AfterClass
        public void afterClass() {
        driver = null;
        }

        @Test(priority = 1)


        public void closeLogin() throws  InterruptedException {

                try {
                System.out.println("\nChrome Browser Result:\n");
                System.out.println(driver.getTitle());
                driver.findElement(By.cssSelector("body > div._2Sn47c > div > div >
button")).click();
                Thread.sleep(1000);
                } catch (NoSuchElementException e)
                { e.printStackTrace();
                }
                screenshot(driver,"closelogin");
```

```java
        }


        @Test(priority = 2)



        public void searchProduct() throws InterruptedException {
                Thread.sleep(1000);
                WebElement search = driver.findElement(By.name("q"));
                search.sendKeys("iPhone 13");
                Thread.sleep(1000);
                search.submit();

                Thread.sleep(3000);
                By load = By.cssSelector("#container > div > div._36fx1h._6t1WkM._3HqJxg
 > div._1YokD2._2GoDe3 > div:nth-child(2) > div:nth-child(9) > div > div");
                long start = System.currentTimeMillis();
                driver.findElement(load).click();
                long    finish    =    System.currentTimeMillis();
                long totalTime = finish - start;
                System.out.println("\nTime to load page in millisecs - " + totalTime);
                screenshot(driver,"searchproduct");
        }
        @Test(priority = 3)



        public void scroll() throws      InterruptedException {

                Thread.sleep(2000);
                JavascriptExecutor js = (JavascriptExecutor) driver;
                js.executeScript("window.scrollBy(0,document.body.scrollHeight)");
                System.out.println("\nNavigated to bottom of the page");
                Thread.sleep(2000);
                js.executeScript("window.scrollBy(0,-document.body.scrollHeight)", "");
                System.out.println("\nScroll Feature available");
                Thread.sleep(2000);
                screenshot(driver,"scroll");
        }

        public static void screenshot(WebDriver driver,String screenshotName){
                TakesScreenshot ts = (TakesScreenshot)driver;
                File scr = ts.getScreenshotAs(OutputType.FILE);
                try {
                        FileUtils.copyFile(scr, new File(screenshotName+".png"));
                        System.out.println("Screenshot taken");
                } catch (IOException e) {
                        e.printStackTrace();
                }
        }
}
```

2.FlipkartTestEdge.java:

```java
package coms.Phase5EndProject;

import org.openqa.selenium.By;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.edge.EdgeDriver;
import org.testng.annotations.Test;

import io.github.bonigarcia.wdm.WebDriverManager;


public class FlipkartTestEdge {

    @Test

    public void f() throws InterruptedException {
        WebDriverManager.edgedriver().setup();
        WebDriver wd=new EdgeDriver();
        wd.manage().window().maximize();
        Thread.sleep(5000);

        wd.get("https://www.flipkart.com/");
        wd.findElement(By.name("q")).sendKeys("iphone13");
        //wd.manage().timeouts().implicitlyWait(5000, TimeUnit.MILLISECONDS);
        Thread.sleep(3000);
        wd.findElement(By.name("q")).submit();
        JavascriptExecutor js=(JavascriptExecutor) wd;
        js.executeScript("window.scrollBy(0,document.body.scrollHeight)");
        WebElement we=wd.findElement(By.className("hDTmm5"));
        js.executeScript("arguments[0].scrollIntoView()", we);
        we.click();
    }


}
```

3.pom.xml:

```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
http://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>

  <groupId>coms</groupId>
  <artifactId>Phase5EndProject</artifactId>
  <version>0.0.1-SNAPSHOT</version>
  <packaging>jar</packaging>
```

```xml
<name>Phase5EndProject</name>
<url>http://maven.apache.org</url>

<properties>
  <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
</properties>

<dependencies>
  <dependency>
    <groupId>junit</groupId>
    <artifactId>junit</artifactId>
    <version>3.8.1</version>
    <scope>test</scope>
  </dependency>

  <!-- https://mvnrepository.com/artifact/io.github.bonigarcia/webdrivermanager -->
    <dependency>
        <groupId>io.github.bonigarcia</groupId>
        <artifactId>webdrivermanager</artifactId>
        <version>5.6.2</version>
    </dependency>

    <!-- https://mvnrepository.com/artifact/org.seleniumhq.selenium/selenium-java
-->
    <dependency>
        <groupId>org.seleniumhq.selenium</groupId>
        <artifactId>selenium-java</artifactId>
        <version>3.141.59</version>
    </dependency>


  </dependencies>
</project>
```