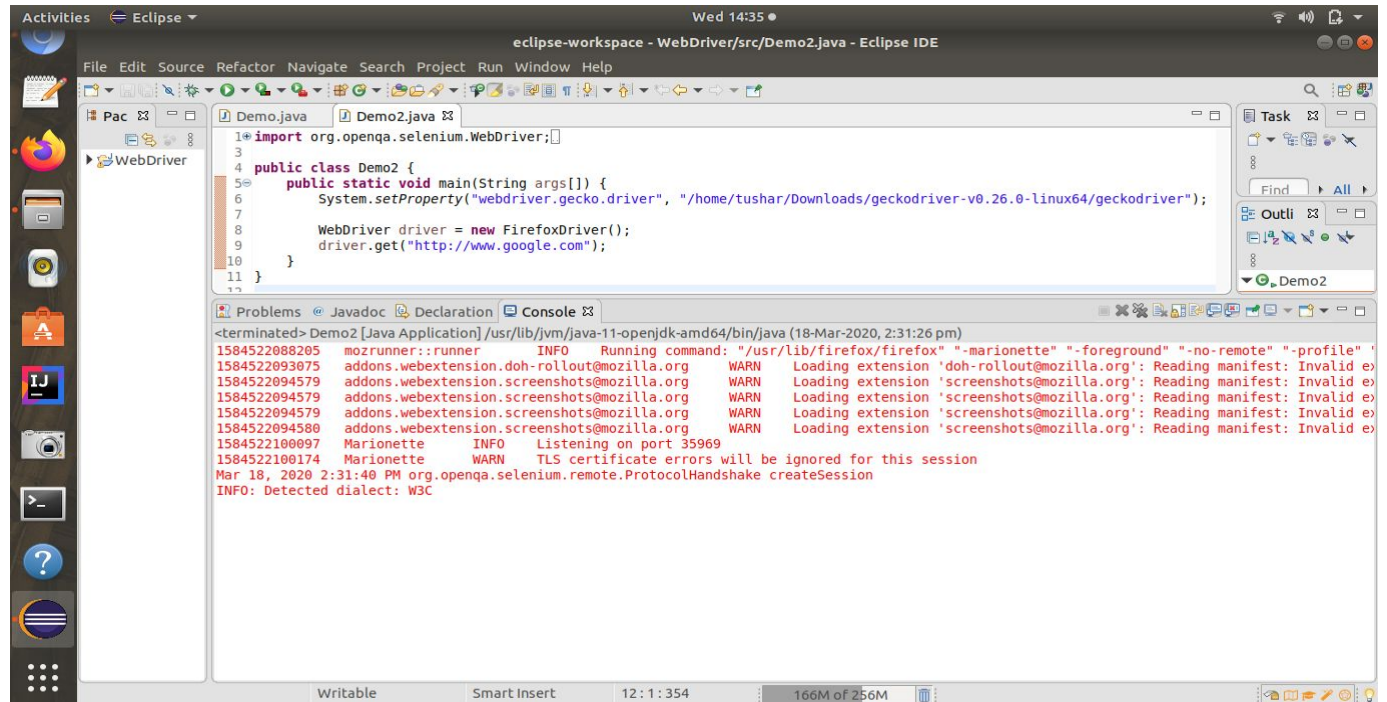


Q1. Write a script to open the Firefox browser and open <https://www.google.com/> URL.

Answer:

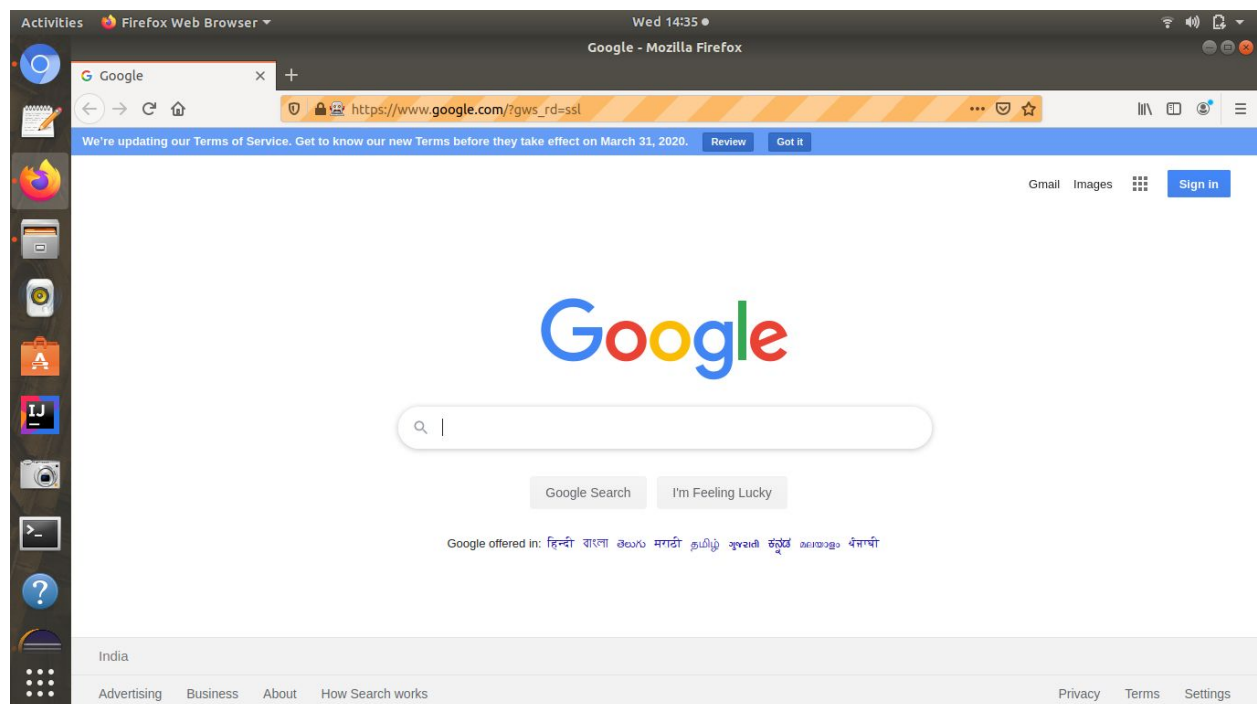


The screenshot shows the Eclipse IDE interface. The main editor displays a Java file named `Demo2.java` with the following code:

```
1 import org.openqa.selenium.WebDriver;
2
3
4 public class Demo2 {
5     public static void main(String args[]) {
6         System.setProperty("webdriver.gecko.driver", "/home/tushar/Downloads/geckodriver-v0.26.0-linux64/geckodriver");
7
8         WebDriver driver = new FirefoxDriver();
9         driver.get("http://www.google.com");
10    }
11 }
```

The `Problems` and `Console` views at the bottom show the execution output. The console output includes the command to run the application and various warnings and information messages, such as:

```
<terminated> Demo2 [Java Application] /usr/lib/jvm/java-11-openjdk-amd64/bin/java (18-Mar-2020, 2:31:26 pm)
1584522088205 mozrunner::runner INFO Running command: "/usr/lib/firefox/firefox" "-marionette" "-foreground" "-no-remote" "-profile"
1584522093075 addons.webextension.doh-rollout@mozilla.org WARN Loading extension 'doh-rollout@mozilla.org': Reading manifest: Invalid e
1584522094579 addons.webextension.screenshots@mozilla.org WARN Loading extension 'screenshots@mozilla.org': Reading manifest: Invalid e
1584522094579 addons.webextension.screenshots@mozilla.org WARN Loading extension 'screenshots@mozilla.org': Reading manifest: Invalid e
1584522094579 addons.webextension.screenshots@mozilla.org WARN Loading extension 'screenshots@mozilla.org': Reading manifest: Invalid e
1584522094580 addons.webextension.screenshots@mozilla.org WARN Loading extension 'screenshots@mozilla.org': Reading manifest: Invalid e
1584522100097 Marionette INFO Listening on port 35969
1584522100174 Marionette WARN TLS certificate errors will be ignored for this session
Mar 18, 2020 2:31:40 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: W3C
```



SELENIUM CODE JAVA

```
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.firefox.FirefoxDriver;

public class Demo2 {
    public static void main(String args[]) {
        System.setProperty("webdriver.gecko.driver",
"/home/tushar/Downloads/geckodriver-v0.26.0-linux64/geckodriver");

        WebDriver driver = new FirefoxDriver();
        driver.get("http://www.google.com");
    }
}
```

Q2. Write a script launch the Google Chrome browser and open <https://www.google.com/> URL.

Answer:

SELENIUM CODE

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

public class Demo2 {
    public static void main(String args[]) {
```

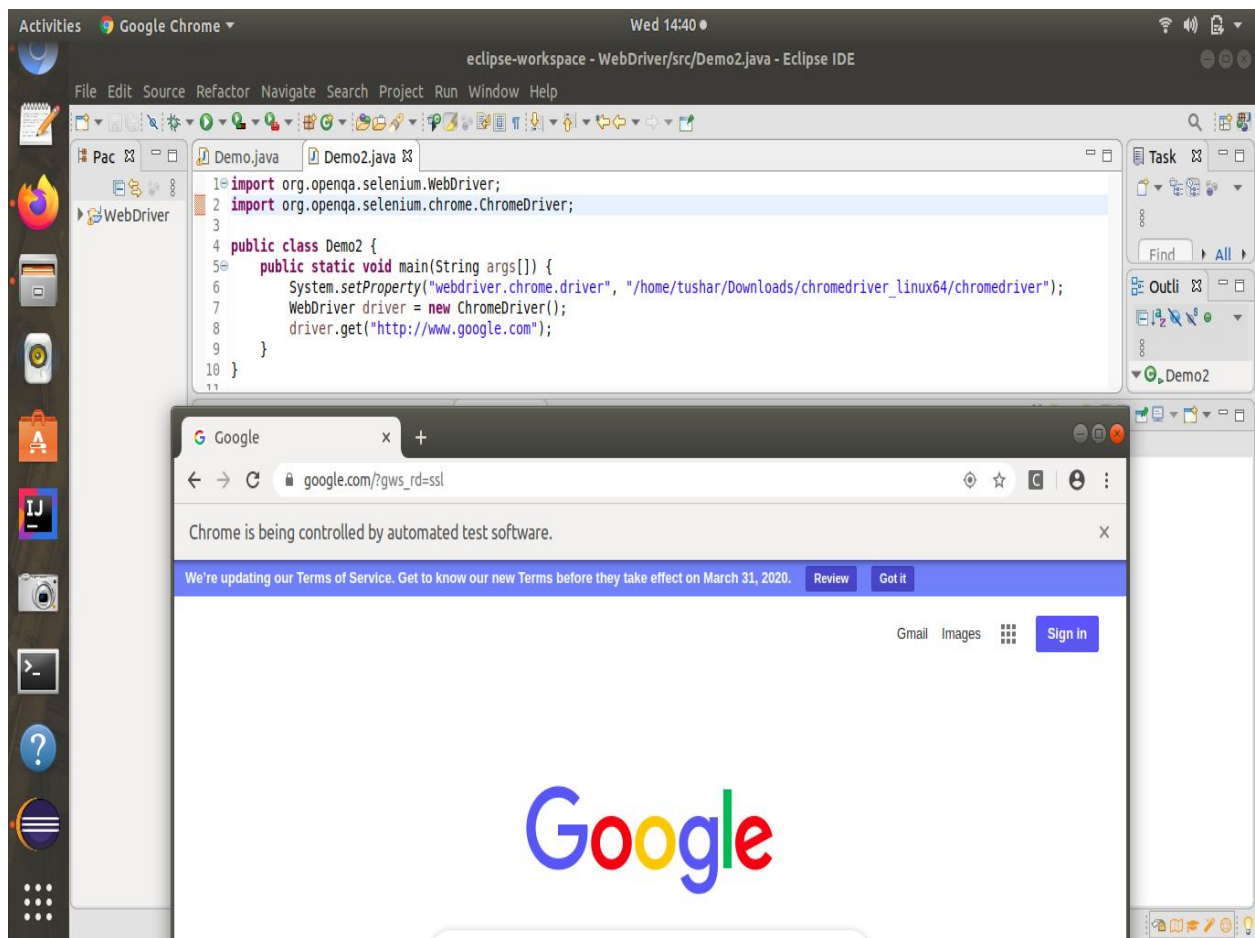
```
        System.setProperty("webdriver.chrome.driver",
"/home/tushar/Downloads/chromedriver_linux64/chromedriver");

        WebDriver driver = new ChromeDriver();

        driver.get("http://www.google.com");

    }

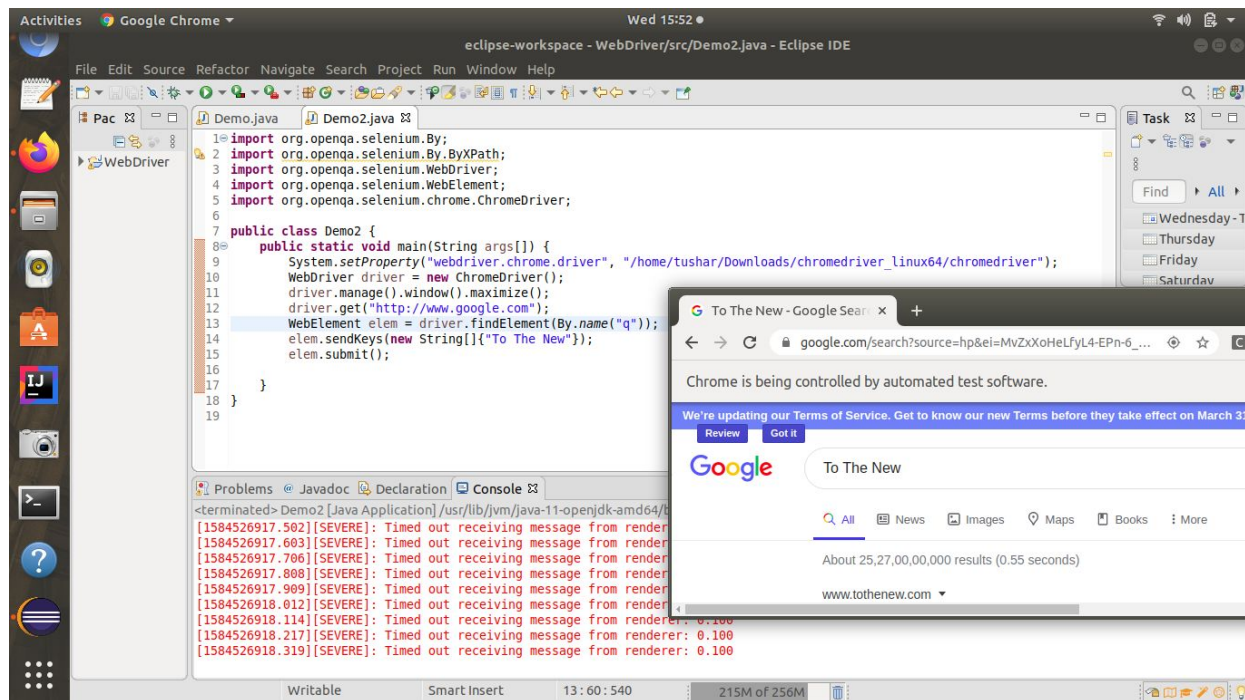
}
```



Write the following scripts in any of your desired browsers-

Q3: Write a script to search the “To The New” string in google.

Answer:



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

```
public class Demo2 {
    public static void main(String args[]) {
        System.setProperty("webdriver.chrome.driver",
"/home/tushar/Downloads/chromedriver_linux64/chromedriver");
        WebDriver driver = new ChromeDriver();
        driver.manage().window().maximize();
        driver.get("http://www.google.com");
        WebElement elem = driver.findElement(By.name("q"));
        elem.sendKeys(new String[]{"To The New"});
        elem.submit();
    }
}
```

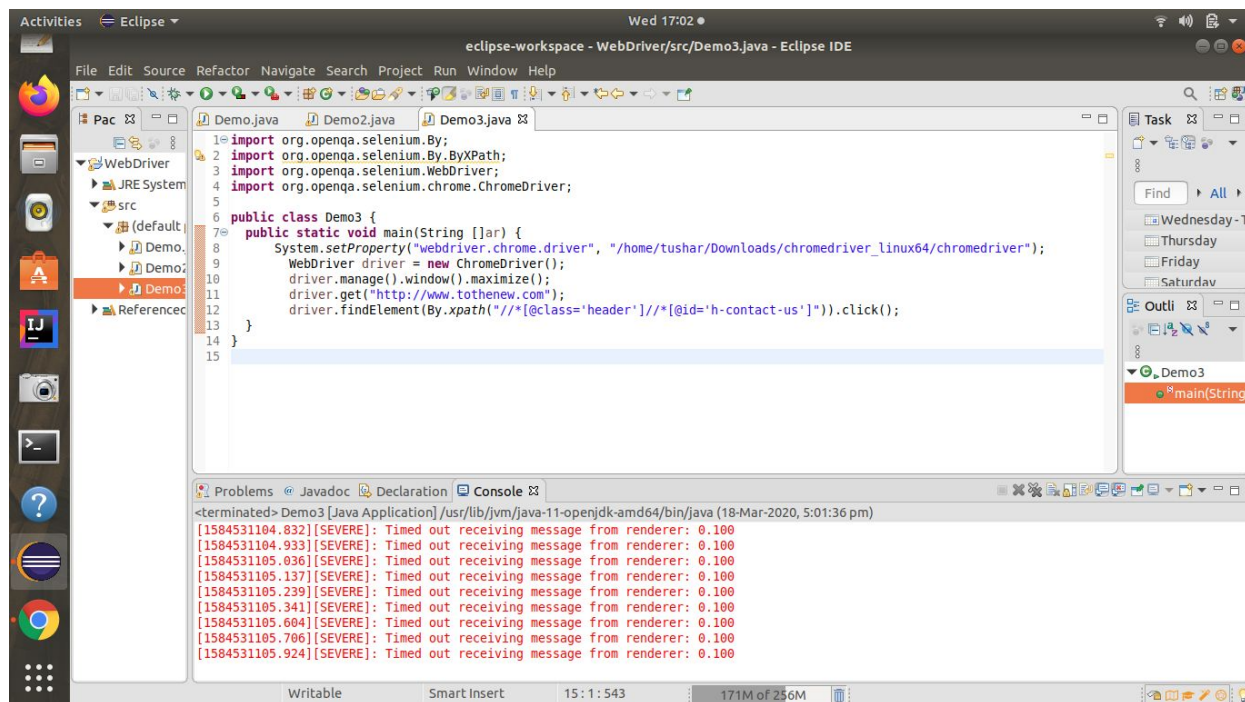
Q4: Write a script to open <http://www.tothenew.com/> and then navigate to the contact us page using 1) XPath 2) ID

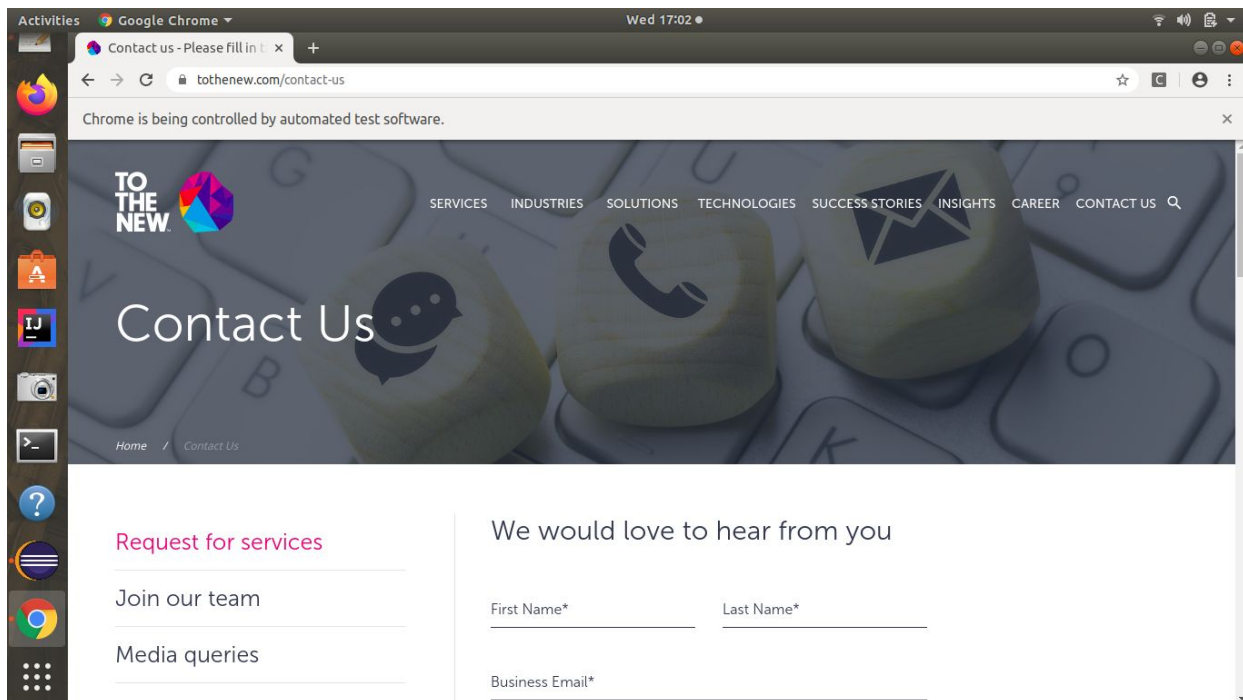
Answer:

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

public class Demo3 {
    public static void main(String []ar) {
        System.setProperty("webdriver.chrome.driver",
            "/home/tushar/Downloads/chromedriver_linux64/chromedriver");
        WebDriver driver = new ChromeDriver();
        driver.manage().window().maximize();
        driver.get("http://www.tothenew.com");

        driver.findElement(By.xpath("//*[@class='header']/*[id='h-contact-us']")).click();
    }
}
```





Q5. Write a script to get the title of the “Contact Us” page.

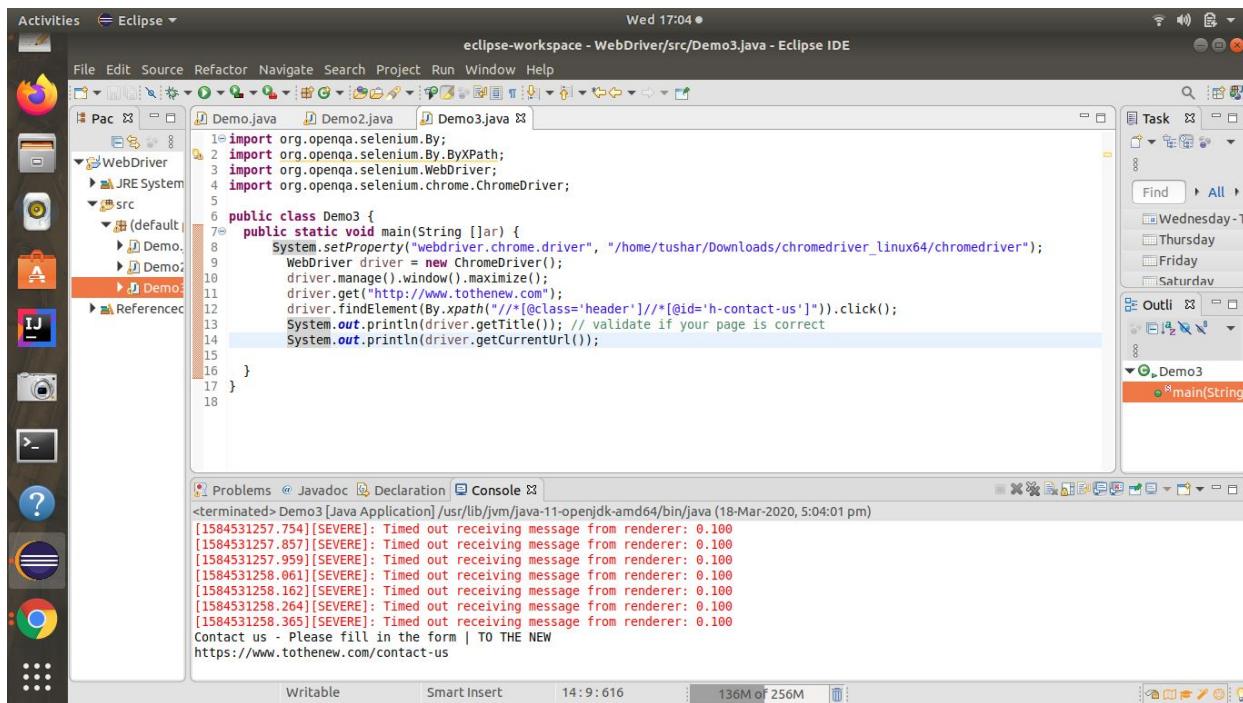
Answer:

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

public class Demo3 {
    public static void main(String []ar) {
        System.setProperty("webdriver.chrome.driver",
            "/home/tushar/Downloads/chromedriver_linux64/chromedriver");
        WebDriver driver = new ChromeDriver();
        driver.manage().window().maximize();
        driver.get("http://www.tothenew.com");

        driver.findElement(By.xpath("//*[@class='header']//*[@id='h-contact-us']")).click();
        System.out.println(driver.getTitle());

    }
}
```



Q6. Write a script to get the url of the "Contact Us" page.

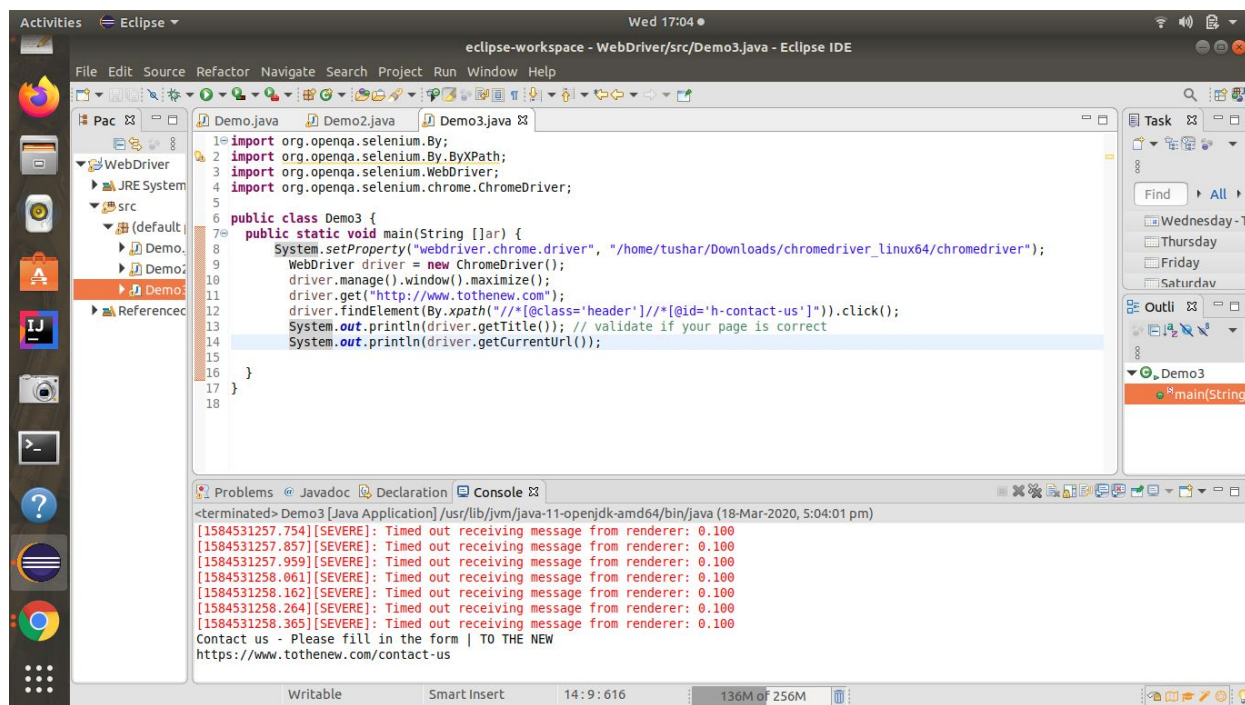
Answer:

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

public class Demo3 {
    public static void main(String []ar) {
        System.setProperty("webdriver.chrome.driver",
"/home/tushar/Downloads/chromedriver_linux64/chromedriver");
        WebDriver driver = new ChromeDriver();
        driver.manage().window().maximize();
        driver.get("http://www.tothenew.com");

        driver.findElement(By.xpath("//*[@class='header']/*[id='h-contact-us']")).click();
        System.out.println(driver.getCurrentUrl());

    }
}
```



Q7: Write the disadvantages of selenium.

Answer:

1. It supports Web-based applications only.
2. Difficult to use takes more time to create Test cases.
3. No reliable Technical Support from anybody.
4. Difficult to Setup Test Environment when it compares to Vendor Tools like UFT, RFT, SilkTest.
5. Limited support for Image Testing.
6. New features may not work properly.
7. No Test Tool integration for Test Management.
8. No Built-in Reporting facility.

Q8: Difference between get() & navigate() method

Answer:

`.driver.get()` method is used to open an URL and it will wait till the whole page gets loaded. WebDriver will wait until the page has fully loaded before returning control to your test or script. For eg:

```
driver.get("http://www.google.com");
```

While `driver.navigate.to()` method navigates to an URL and It will not wait till the whole page gets loaded. It maintains the browser history and cookies, [so we can use a forward and backward button to navigate between the pages](#) during the coding of Testcase.

```
driver.navigate.to("http://www.tothenew.com/");
```

Q9. What is the difference between Selenium RC & Selenium WebDriver.

Answer:

- The architecture of Selenium RC is complicated because it uses an intermediate RC Server to communicate with the browser. While The architecture of Selenium WebDriver is simpler as compared to Selenium RC. The browser is controlled directly from OS (Operating System) level
- Selenium WebDriver performs faster than Selenium RC because it interacts directly with the browser without using any external proxy server. Selenium RC, on the other hand uses an intermediate RC Server to communicate with the browser.
- Selenium WebDriver is purely object oriented API, whereas Selenium RC is less object oriented API. While WebDriver is entirely based on object oriented programming languages like Java, C#, etc.
- Selenium WebDriver supports OS (Operating System) for mobile applications like iOS, windows mobile and android. On the other hand, Selenium RC doesn't support testing of mobile applications.
- Selenium WebDriver also supports headless HTMLUnit browser (Invisible Browser). While Selenium RC doesn't support the headless HTMLUnit browser as it needs a real browser to work with.

Q10. What are locators & types of locators in selenium

Answer:

Locator is a command which tells the selenium IDE which GUI element it has to operate on.

Types:-

- Id
- Name
- Xpath
- Css Class
- Css Selectors
- Link Text
- Text

Q11. Write an automation script for filling all fields of the registration page. (Registration.html)

a- Validate that Refresh button is disabled.

b- Validate that your respective gender is selected or not.

c- Validate that header of the registration page is Automation Demo Site.

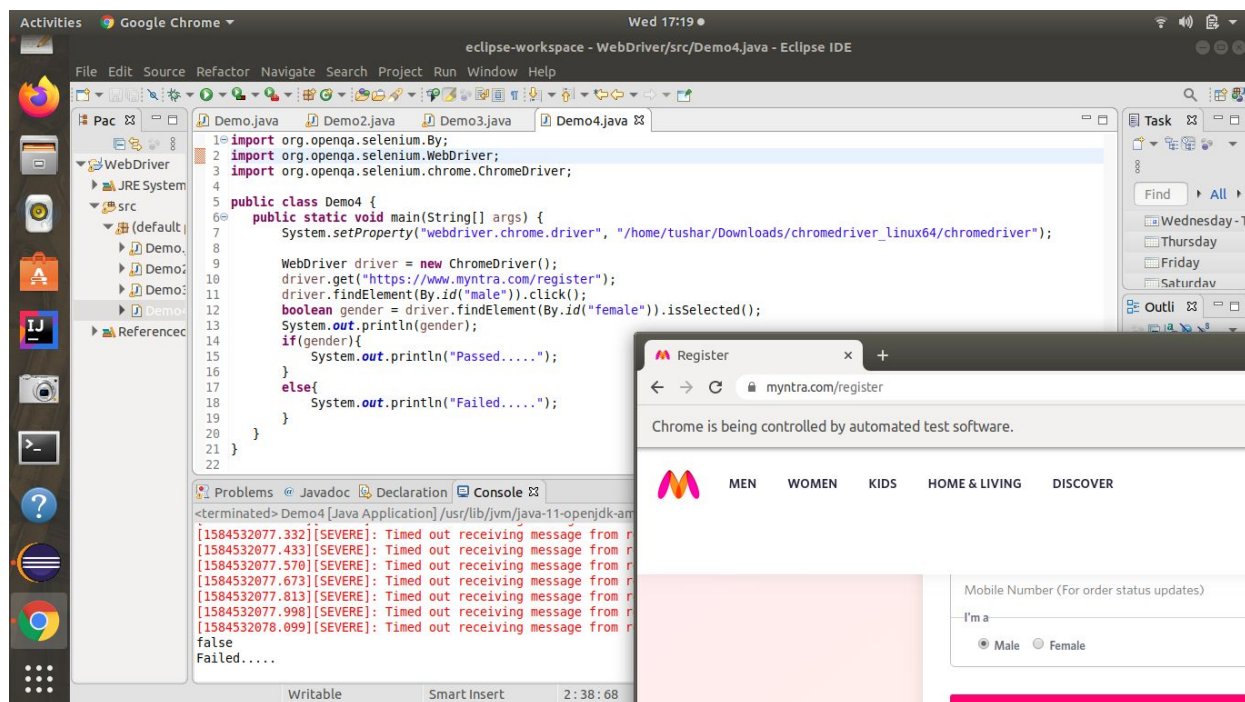
d- Validate that title of the page is Register.

Answer:

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

public class Demo4 {
    public static void main(String[] args) {
        System.setProperty("webdriver.chrome.driver",
            "/home/tushar/Downloads/chromedriver_linux64/chromedriver");

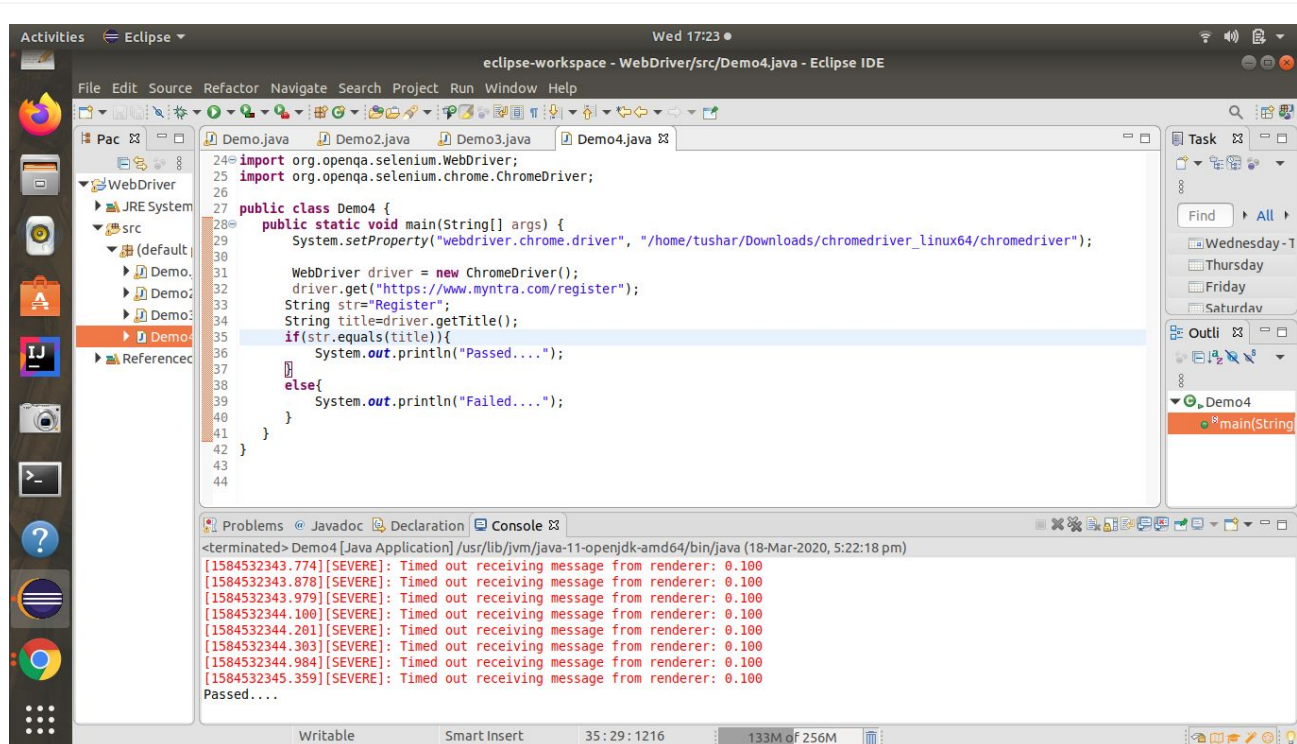
        WebDriver driver = new ChromeDriver();
        driver.get("https://www.myntra.com/register");
        driver.findElement(By.id("male")).click();
        boolean gender = driver.findElement(By.id("female")).isSelected();
        System.out.println(gender);
        if(gender){
            System.out.println("Passed.....");
        }
        else{
            System.out.println("Failed.....");
        }
    }
}
```



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

```
public class Demo4 {
    public static void main(String[] args) {
        System.setProperty("webdriver.chrome.driver",
"/home/tushar/Downloads/chromedriver_linux64/chromedriver");
```

```
        WebDriver driver = new ChromeDriver();
        driver.get("https://www.myntra.com/register");
        String str="Register";
        String title=driver.getTitle();
        if(str.equals(title)){
            System.out.println("Passed....");
        }
        else{
            System.out.println("Failed....");
        }
    }
}
```



Q12. Write an automation script for filling FirstName, LastName & Email address field with the help of name locator. (Registration.html)

Answer:

```
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
public class Demo5 {
    public static void main(String[] args) {
        System.setProperty("webdriver.chrome.driver",
"/home/tushar/Downloads/chromedriver_linux64/chromedriver");
        WebDriver driver = new ChromeDriver();
        driver.get("https://www.tothenew.com/contact-us");
        driver.findElement(By.name("fname")).sendKeys("Tushar");
        driver.findElement(By.name("lname")).sendKeys("Bansal");
        driver.findElement(By.name("email")).sendKeys("tushar.com");
    }
}
```

