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*CS6474: Software Testing Laboratory*  
*(Spring 2022)*

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January 20, 2023

# **CS6474: Software Testing Laboratory 2022**

## **SELENIUM RC**

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# 1 Selenium RC

Selenium RC is a key part in Selenium. It is a framework for testing that allows testers and developers to design test scripts in multiple languages to automate frontend UI test cases. It has a client library and a server that starts and quits the browser sessions by default

Server injects Selenium core (a program in JavaScript) to the browser. The Selenium Core gets the commands from the RC server. Selenium Core executes the commands in JavaScript. Then the JavaScript commands provide instructions to the browser. Finally, the browser runs the instructions given by the Selenium Core and sends a complete status of the execution to the server. This final result is the output received by the user.

## **Selenium RC is deprecated because of the reasons listed below**

Command related usage is present in Selenium RC.

- Selenium RC comprises an additional layer of JavaScript known as the core which makes it slower.
- Selenium RC has complicated and redundant APIs.
- Selenium RC is not compatible with the HTMLUnit browser (required for headless execution).
- Selenium RC has inbuilt HTML report generation features for test results.
- Selenium RC has `selenium.typeKeys` and `selenium.type` APIs which have similar tasks. While Selenium webdriver has only one method `sendKeys` which takes care of all inputting tasks.
- Selenium RC cannot be used for testing mobile applications like android phones, iphone, iPad, and so on.
- Maintaining a large regression suite is difficult in Selenium RC.
- Additional software and third-party APIs are not supported in Selenium RC.
- Not capable of executing Selenium webdriver scripts from Selenium RC.
- Has in-built report generation features but it is not upto to the mark.
- Installation of Remote Control Server is required prior to running of scripts in Selenium RC.

## 1.1 Calculator.net

Selenium RC Screenshot of Calculator.net website.

### 1.1.1 Selenium RC calculator

```
1 package seleniumrc;  
2 import com.thoughtworks.selenium.DefaultSelenium;  
3 import com.thoughtworks.selenium.Selenium;  
4 public class Rctestcalculator {  
5  
6     public static void main(String[] args) {
```

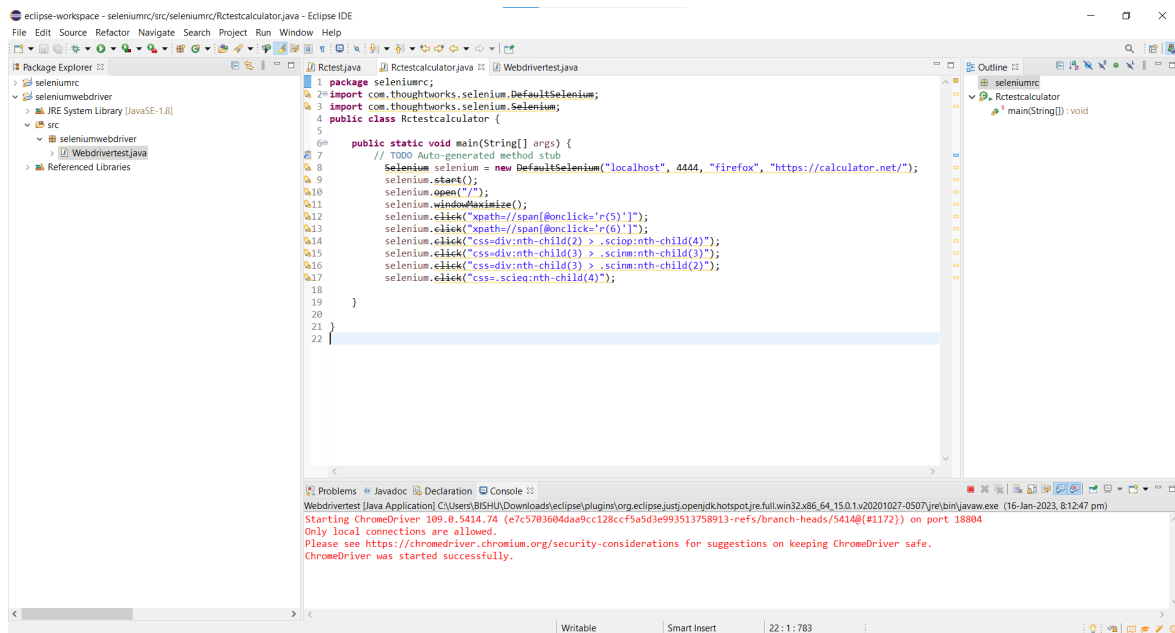


Figure 1: Selenium RC for Calculator.net Website

```

7 // TODO Auto-generated method stub
8 Selenium selenium = new DefaultSelenium("localhost", 4444, "
9     firefox", "https://calculator.net/");
10 selenium.start();
11 selenium.open("/");
12 selenium.windowMaximize();
13 selenium.click("xpath=//span[@onclick='r(5)']");
14 selenium.click("xpath=//span[@onclick='r(6)']");
15 selenium.click("css=div:nth-child(2) > .scio:nth-child(4)");
16 selenium.click("css=div:nth-child(3) > .scinm:nth-child(3)");
17 selenium.click("css=div:nth-child(3) > .scinm:nth-child(2)");
18 selenium.click("css=.scieq:nth-child(4)");
19 }
20 }

```

## 1.2 Coursera

Selenium RC Screenshot of Coursera website.

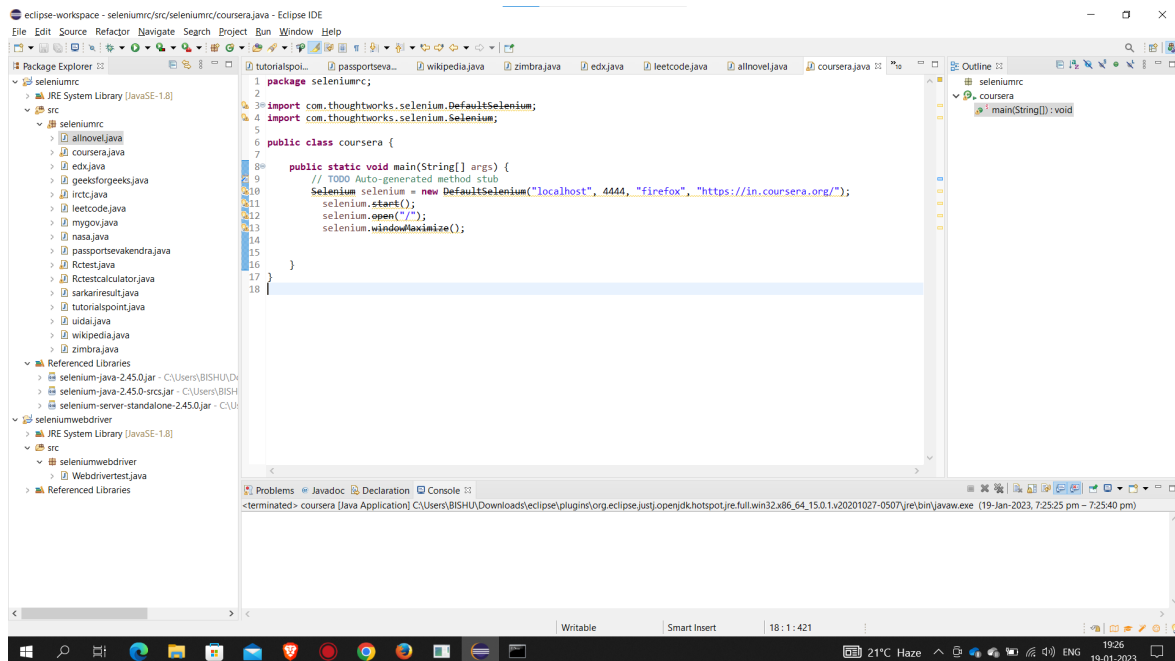


Figure 2: Selenium RC for Coursera Website

### 1.2.1 Selenium RC Coursera

```
1 package seleniumrc;
2
3 import com.thoughtworks.selenium.DefaultSelenium;
4 import com.thoughtworks.selenium.Selenium;
5
6 public class coursera {
7
8     public static void main(String[] args) {
9         // TODO Auto-generated method stub
10        Selenium selenium = new DefaultSelenium("localhost", 4444, "
11            firefox", "https://in.coursera.org/");
12        selenium.start();
13        selenium.open("/");
14        selenium.windowMaximize();
15    }
16 }
17 }
```

## 1.3 IRCTC

Selenium RC Screenshot of IRCTC website.

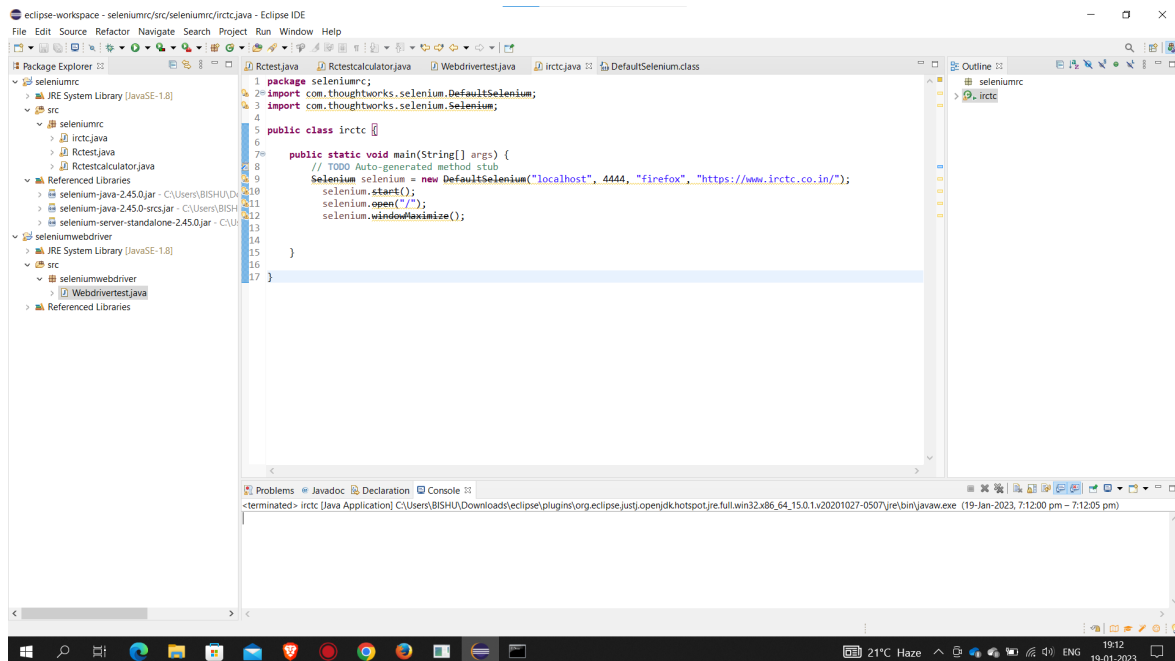


Figure 3: Selenium RC for IRCTC Website

### 1.3.1 Selenium RC IRCTC

```
1 package seleniumrc;
2 import com.thoughtworks.selenium.DefaultSelenium;
3 import com.thoughtworks.selenium.Selenium;
4
5 public class irctc {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Selenium selenium = new DefaultSelenium("localhost", 4444, "
10             firefox", "https://www.irctc.co.in/");
11         selenium.start();
12         selenium.open("/");
13         selenium.windowMaximize();
14
15     }
16
17 }
```

## 1.4 Allnovel

Selenium RC Screenshot of Allnovel website.

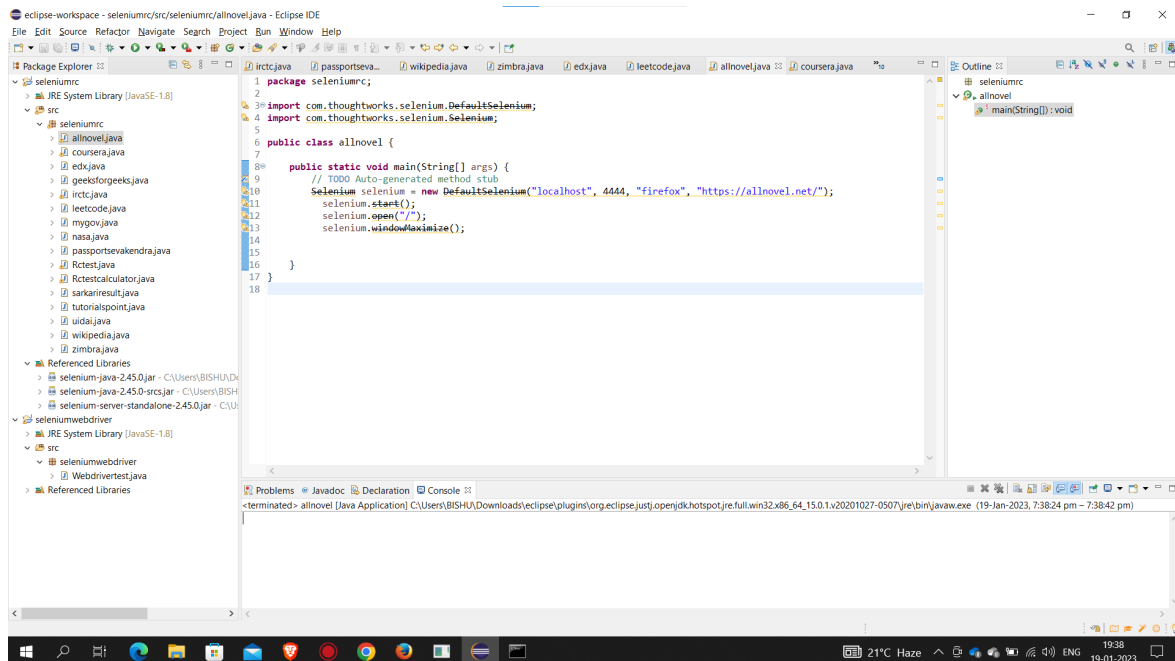


Figure 4: Selenium RC for Allnovel Website

### 1.4.1 Selenium RC Allnovel

```
1 package seleniumrc;
2
3 import com.thoughtworks.selenium.DefaultSelenium;
4 import com.thoughtworks.selenium.Selenium;
5
6 public class allnovel {
7
8     public static void main(String[] args) {
9         // TODO Auto-generated method stub
10         Selenium selenium = new DefaultSelenium("localhost", 4444, "
            firefox", "https://allnovel.net/");
11         selenium.start();
12         selenium.open("/");
13         selenium.windowMaximize();
14
15     }
16 }
17 }
```



## 1.5 EDX

Selenium RC Screenshot of EDX website.

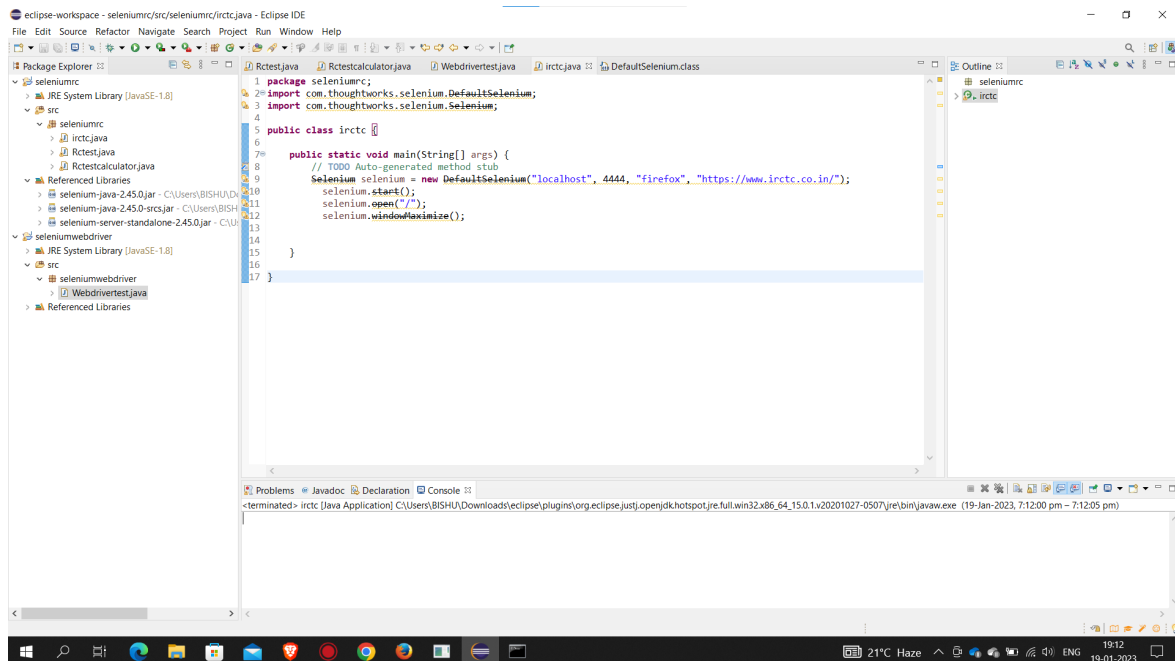


Figure 5: Selenium RC for EDX Website

### 1.5.1 Selenium RC EDX

```
1 package seleniumrc;
2
3 import com.thoughtworks.selenium.DefaultSelenium;
4 import com.thoughtworks.selenium.Selenium;
5
6 public class edx {
7
8     public static void main(String[] args) {
9         // TODO Auto-generated method stub
10        Selenium selenium = new DefaultSelenium("localhost", 4444, "
11            firefox", "https://www.edx.org/");
12        selenium.start();
13        selenium.open("/");
14        selenium.windowMaximize();
15    }
16 }
17 }
```

## 1.6 Geeksforgeeks

Selenium RC Screenshot of Geeksforgeeks website.

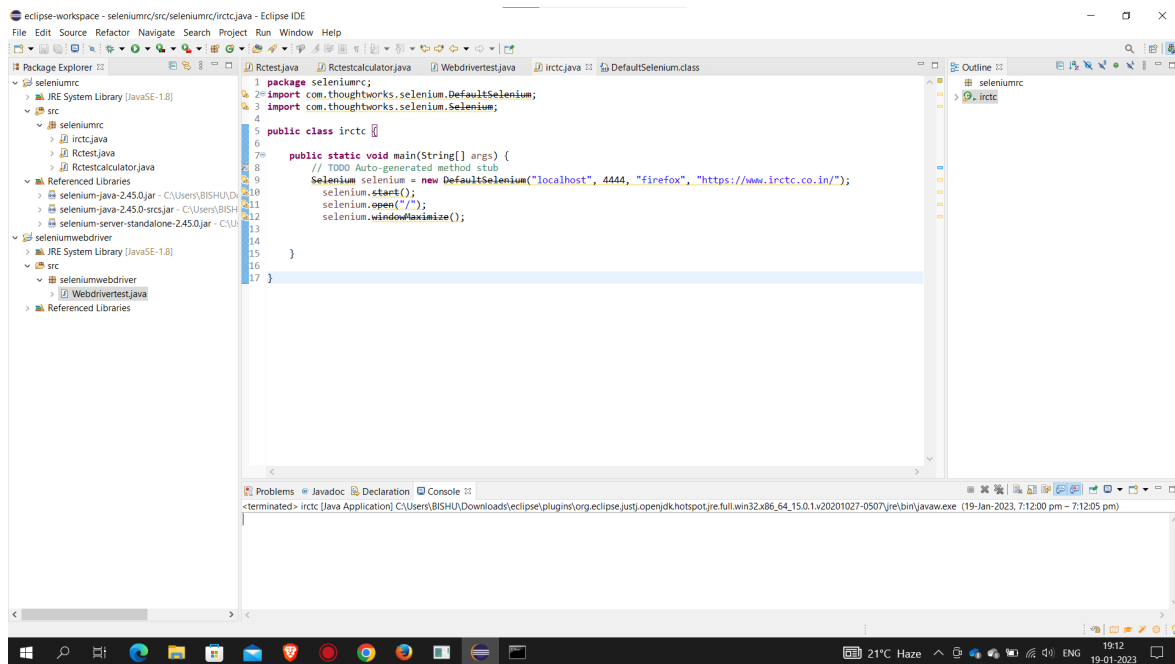


Figure 6: Selenium RC for Geeksforgeeks Website

### 1.6.1 Selenium RC Geeksforgeeks

```
1 package seleniumrc;
2
3 import com.thoughtworks.selenium.DefaultSelenium;
4 import com.thoughtworks.selenium.Selenium;
5
6 public class geeksforgeeks {
7
8     public static void main(String[] args) {
9         // TODO Auto-generated method stub
10        Selenium selenium = new DefaultSelenium("localhost", 4444, "
11            firefox", "https://www.geeksforgeeks.org/");
12        selenium.start();
13        selenium.open("/");
14        selenium.windowMaximize();
15    }
16 }
17
18 }
```

## 1.7 Leetcode

Selenium RC Screenshot of Leetcode website.

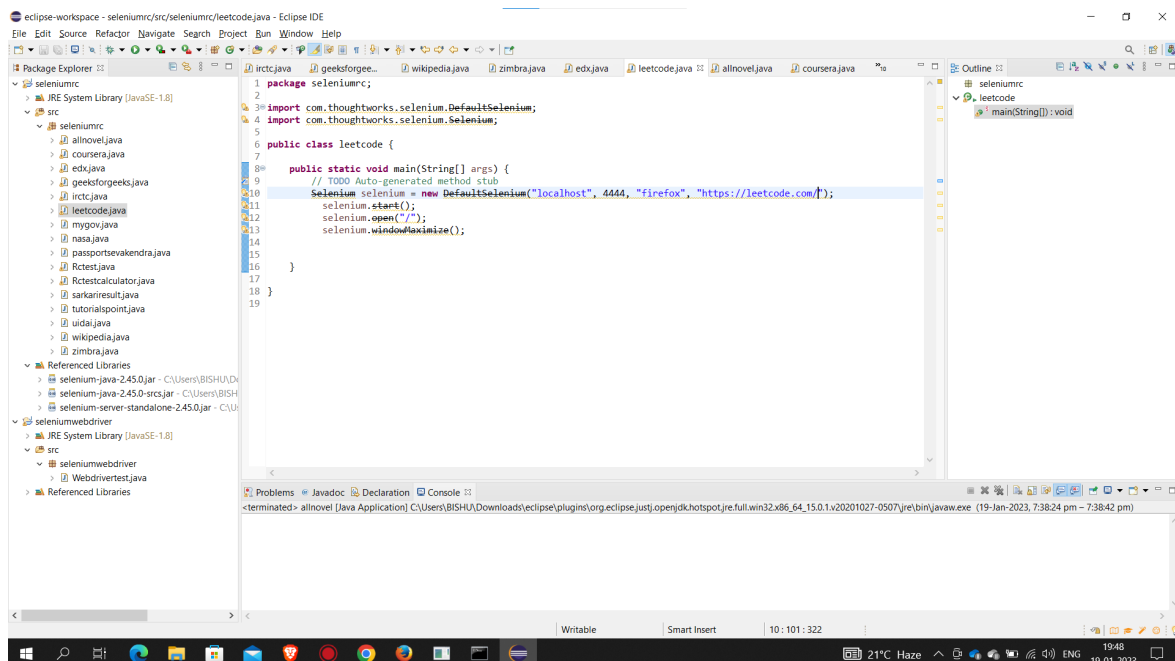


Figure 7: Selenium RC for Leetcode Website

### 1.7.1 Selenium RC Leetcode

```
1 package seleniumrc;
2
3 import com.thoughtworks.selenium.DefaultSelenium;
4 import com.thoughtworks.selenium.Selenium;
5
6 public class leetcode {
7
8     public static void main(String[] args) {
9         // TODO Auto-generated method stub
10        Selenium selenium = new DefaultSelenium("localhost", 4444, "
11            firefox", "https://leetcode.com/");
12        selenium.start();
13        selenium.open("/");
14        selenium.windowMaximize();
15
16    }
17
18 }
```

## 1.8 NASA

Selenium RC Screenshot of NASA website.

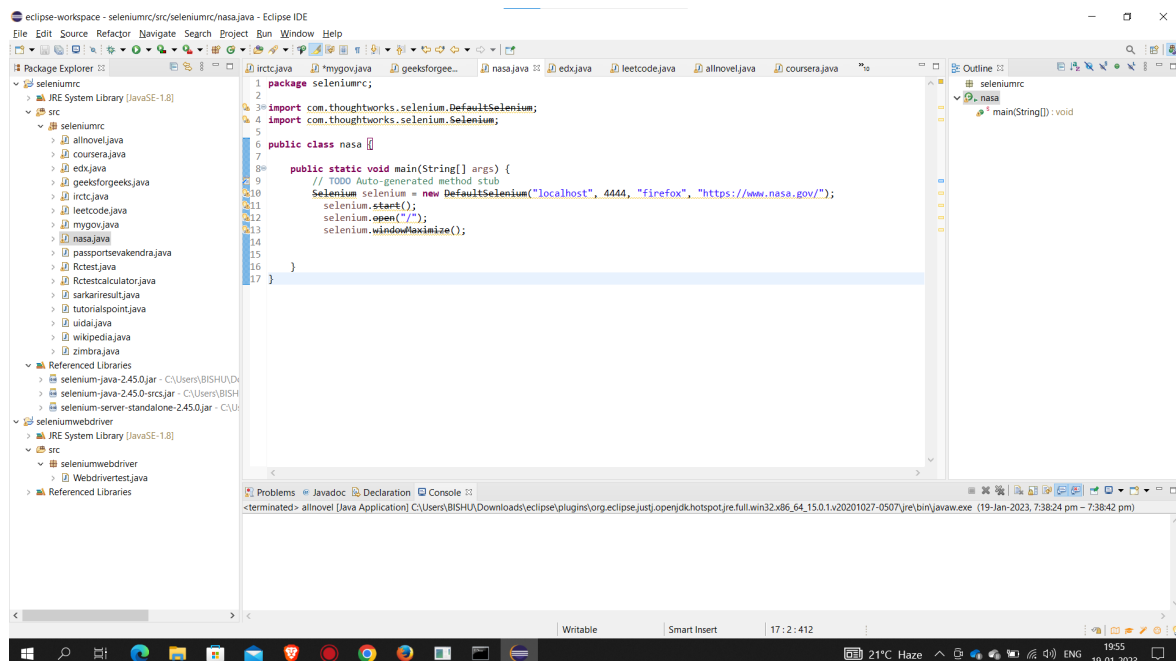


Figure 8: Selenium RC for NASA Website

### 1.8.1 Selenium RC NASA

```
1 package seleniumrc;
2
3 import com.thoughtworks.selenium.DefaultSelenium;
4 import com.thoughtworks.selenium.Selenium;
5
6 public class nasa {
7
8     public static void main(String[] args) {
9         // TODO Auto-generated method stub
10        Selenium selenium = new DefaultSelenium("localhost", 4444, "
            firefox", "https://www.nasa.gov/");
11        selenium.start();
12        selenium.open("/");
13        selenium.windowMaximize();
14
15    }
16 }
17 }
```

## 1.9 MyGov

Selenium RC Screenshot of MyGov website.

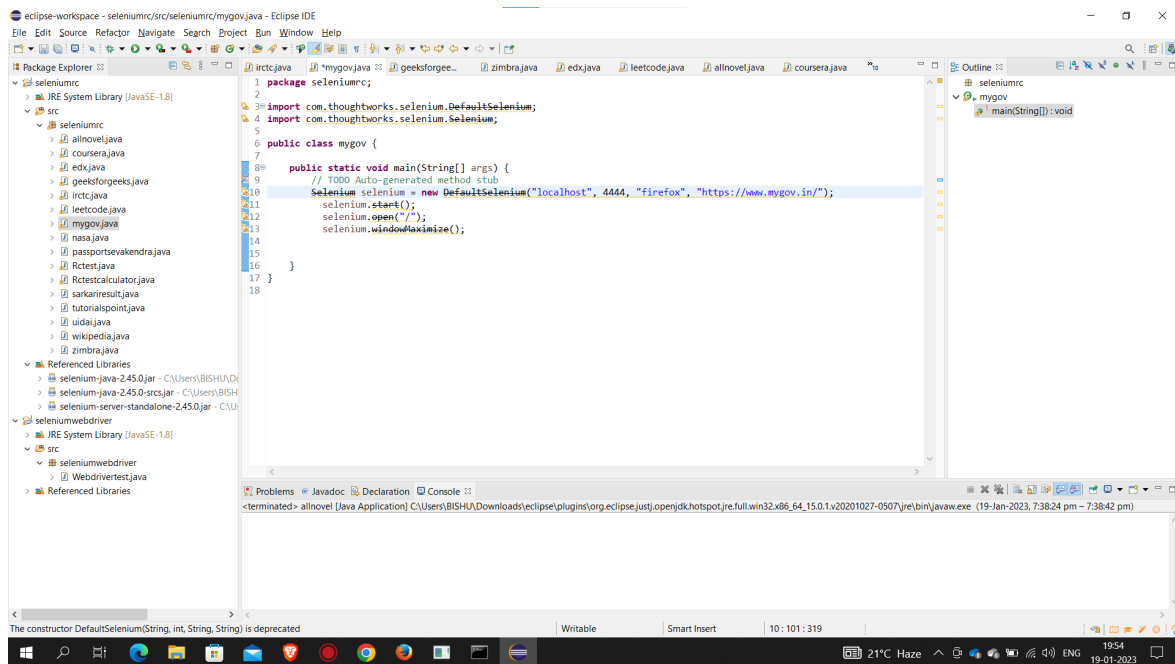


Figure 9: Selenium RC for MyGov Website

### 1.9.1 Selenium RC MyGov

```
1 package seleniumrc;
2
3 import com.thoughtworks.selenium.DefaultSelenium;
4 import com.thoughtworks.selenium.Selenium;
5
6 public class mygov {
7
8     public static void main(String[] args) {
9         // TODO Auto-generated method stub
10        Selenium selenium = new DefaultSelenium("localhost", 4444, "
            firefox", "https://www.mygov.in/");
11        selenium.start();
12        selenium.open("/");
13        selenium.windowMaximize();
14
15    }
16 }
17 }
```

## 1.10 PassportIndia

Selenium RC Screenshot of PassportIndia website.

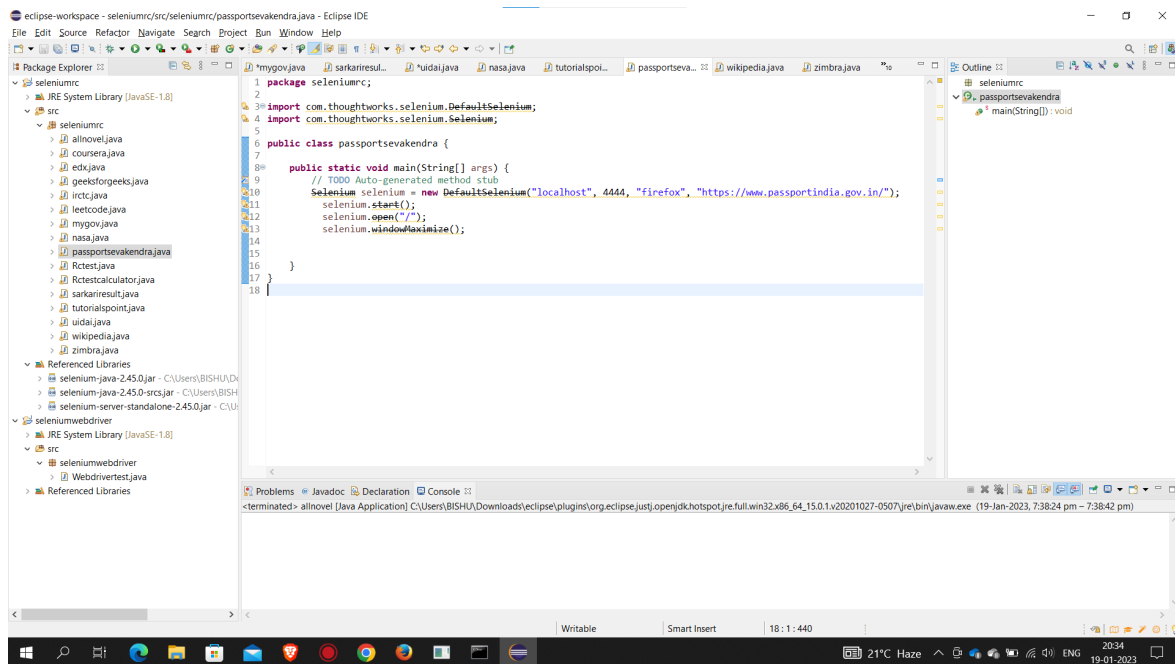


Figure 10: Selenium RC for PassportIndia Website

### 1.10.1 Selenium RC PassportIndia

```
1 package seleniumrc;
2
3 import com.thoughtworks.selenium.DefaultSelenium;
4 import com.thoughtworks.selenium.Selenium;
5
6 public class passportsevakendra {
7
8     public static void main(String[] args) {
9         // TODO Auto-generated method stub
10        Selenium selenium = new DefaultSelenium("localhost", 4444, "
            firefox", "https://www.passportindia.gov.in/");
11        selenium.start();
12        selenium.open("/");
13        selenium.windowMaximize();
14
15    }
16 }
17 }
```

## 1.11 Sarkariresult

Selenium RC Screenshot of Sarkariresult website.

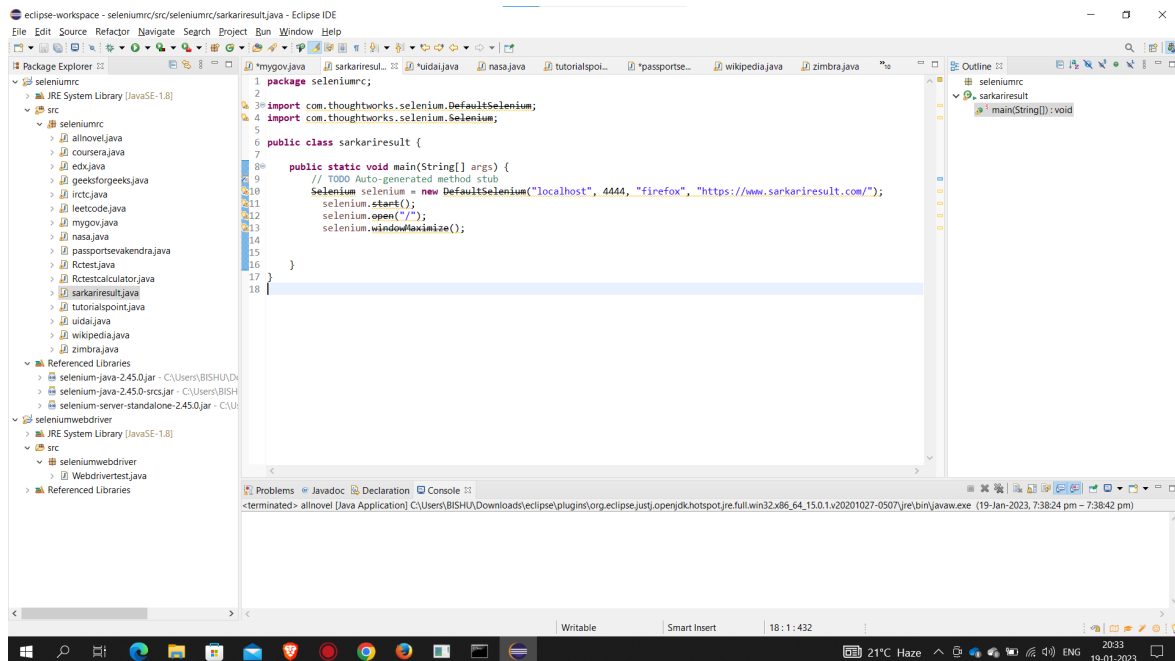


Figure 11: Selenium RC for Sarkariresult Website

### 1.11.1 Selenium RC Sarkariresult

```
1 package seleniumrc;
2
3 import com.thoughtworks.selenium.DefaultSelenium;
4 import com.thoughtworks.selenium.Selenium;
5
6 public class sarkariresult {
7
8     public static void main(String[] args) {
9         // TODO Auto-generated method stub
10         Selenium selenium = new DefaultSelenium("localhost", 4444, "
            firefox", "https://www.sarkariresult.com/");
11         selenium.start();
12         selenium.open("/");
13         selenium.windowMaximize();
14
15     }
16 }
17 }
```

## 1.12 Tutorialspoint

Selenium RC Screenshot of Tutorialspoint website.

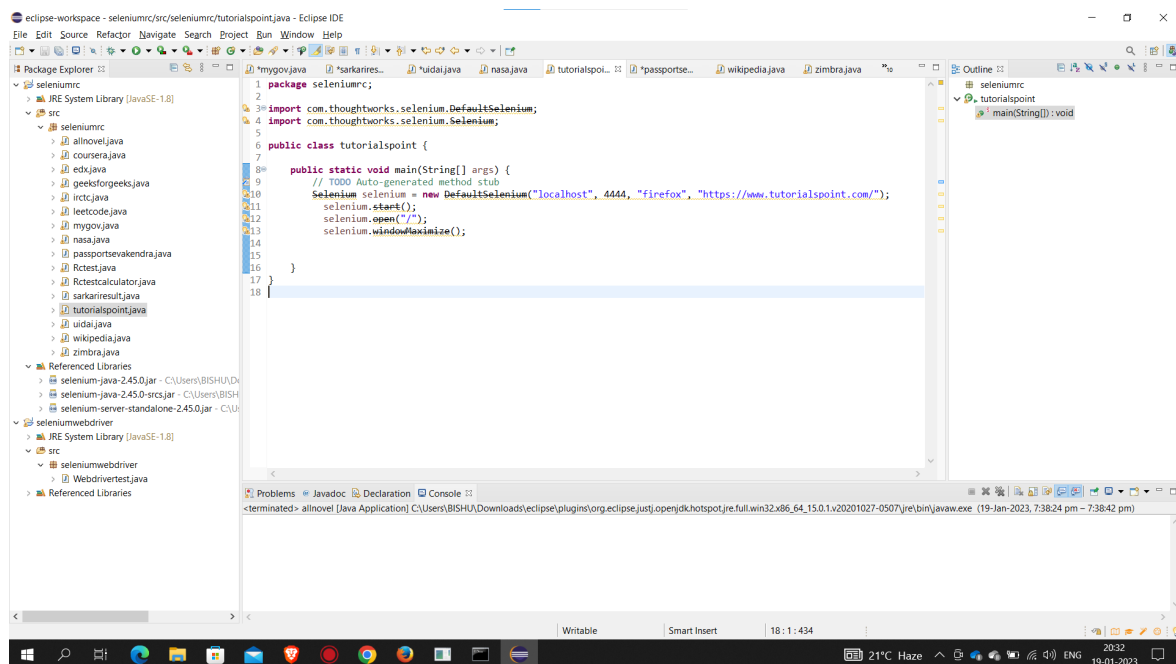


Figure 12: Selenium RC for Tutorialspoint Website

### 1.12.1 Selenium RC Tutorialspoint

```
1 package seleniumrc;
2
3 import com.thoughtworks.selenium.DefaultSelenium;
4 import com.thoughtworks.selenium.Selenium;
5
6 public class tutorialspoint {
7
8     public static void main(String[] args) {
9         // TODO Auto-generated method stub
10         Selenium selenium = new DefaultSelenium("localhost", 4444, "
            firefox", "https://www.tutorialspoint.com/");
11         selenium.start();
12         selenium.open("/");
13         selenium.windowMaximize();
14
15     }
16 }
17 }
```



## 1.13 Wikipedia

Selenium RC Screenshot of wikipedia website.

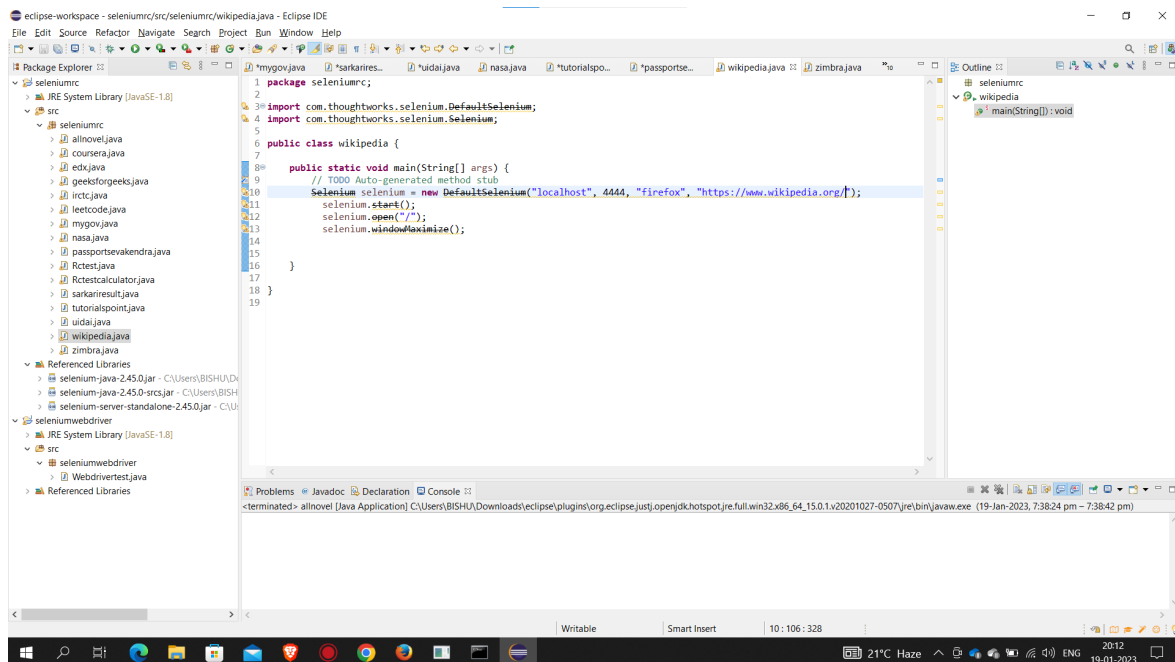


Figure 13: Selenium RC for wikipedia Website

### 1.13.1 Selenium RC wikipedia

```
1 package seleniumrc;
2
3 import com.thoughtworks.selenium.DefaultSelenium;
4 import com.thoughtworks.selenium.Selenium;
5
6 public class wikipedia {
7
8     public static void main(String[] args) {
9         // TODO Auto-generated method stub
10         Selenium selenium = new DefaultSelenium("localhost", 4444, "
            firefox", "https://www.wikipedia.org/");
11         selenium.start();
12         selenium.open("/");
13         selenium.windowMaximize();
14
15     }
16 }
17
18 }
```

## 1.14 UIDAI

Selenium RC Screenshot of UIDAI website.

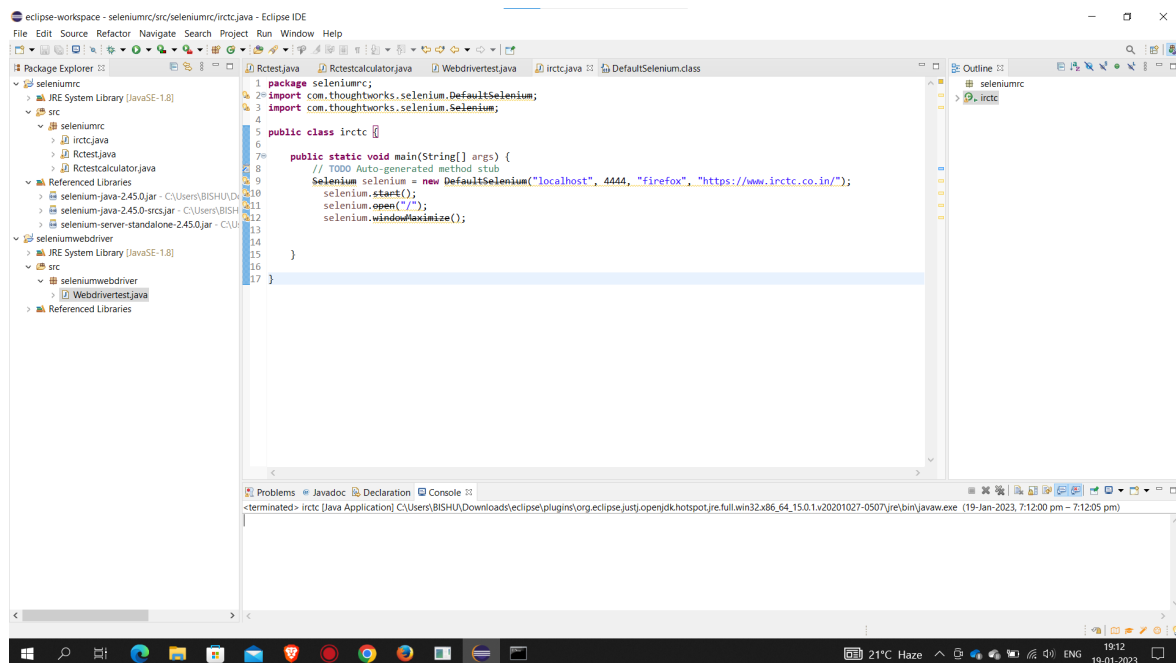


Figure 14: Selenium RC for UIDAI Website

### 1.14.1 Selenium RC UIDAI

```
1 package seleniumrc;
2 import com.thoughtworks.selenium.DefaultSelenium;
3 import com.thoughtworks.selenium.Selenium;
4
5 public class ircrc {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Selenium selenium = new DefaultSelenium("localhost", 4444, "
10             firefox", "https://www.ircrc.co.in/");
11         selenium.start();
12         selenium.open("/");
13         selenium.windowMaximize();
14     }
15 }
16
17 }
```

## 1.15 Zimbra

Selenium RC Screenshot of Zimbra website.

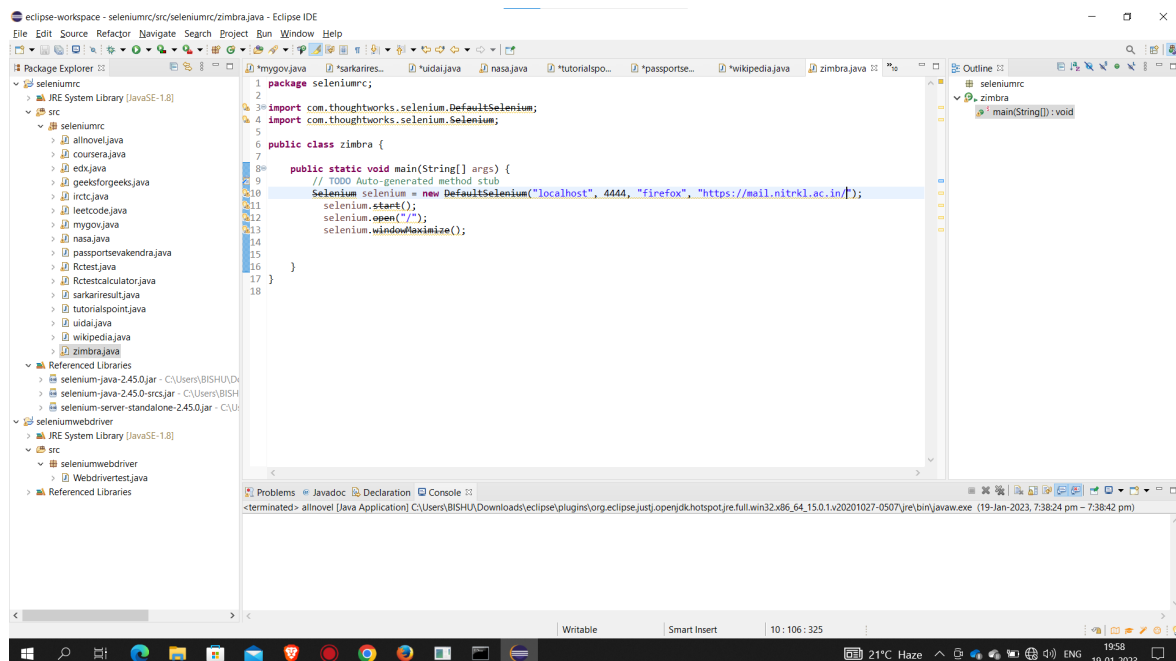


Figure 15: Selenium RC for Zimbra Website

### 1.15.1 Selenium RC Zimbra

```
1 package seleniumrc;
2
3 import com.thoughtworks.selenium.DefaultSelenium;
4 import com.thoughtworks.selenium.Selenium;
5
6 public class zimbra {
7
8     public static void main(String[] args) {
9         // TODO Auto-generated method stub
10         Selenium selenium = new DefaultSelenium("localhost", 4444, "
            firefox", "https://mail.nitrkl.ac.in/");
11         selenium.start();
12         selenium.open("/");
13         selenium.windowMaximize();
14
15     }
16 }
17 }
```