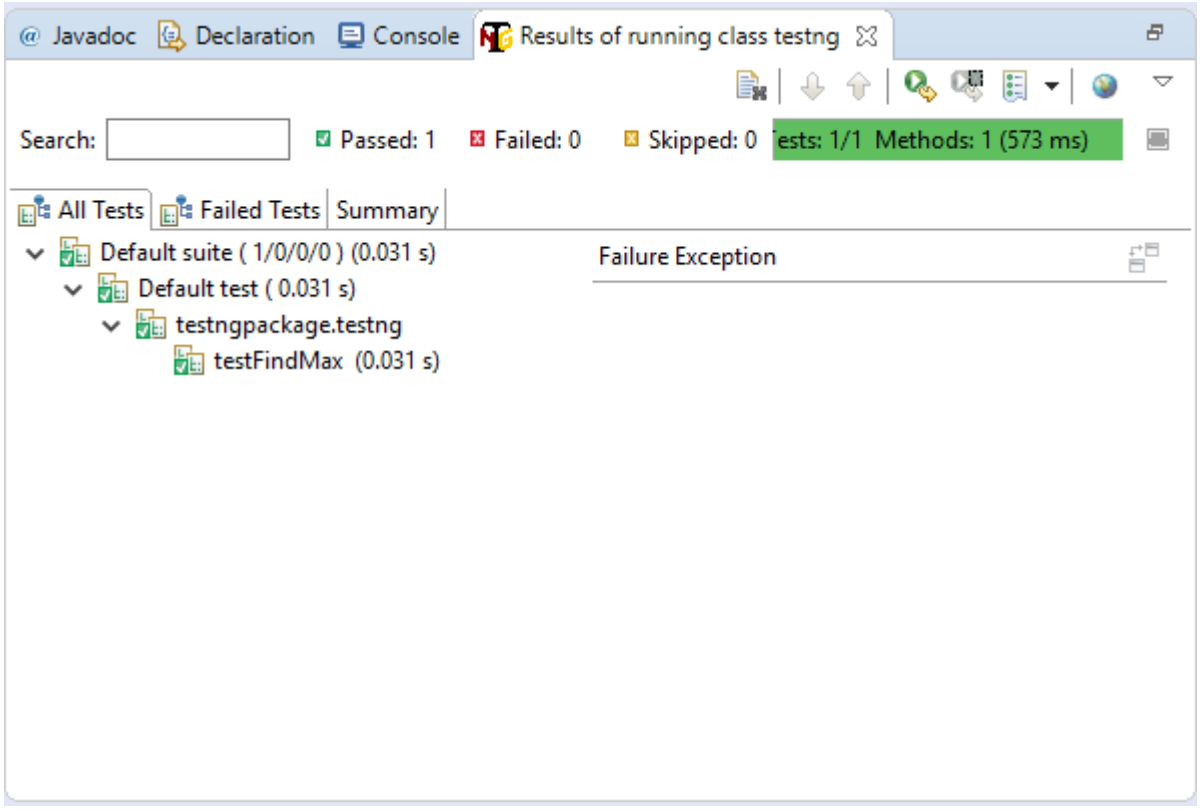
Java Program Using do while

```
package Application;
public class classwhile {

	public static int findmax(int arr[])
	{
		int i=0;
		int max=arr[0];
		do
		{
			max=arr[i];
		}while(arr[i]>max);
		return max;
	}

}
```

Testing Program using TestNG

```
package testngpackage;

import org.testng.Assert;

import org.testng.annotations.*;

import application.classwhile;

public class testng {

	@Test

	public void testFindMax()

	{

		Assert.assertEquals(15,classwhile.findmax(new int[]{15,13,1,8}));

	}

}
```

OUTPUT:




```
Javadoc  Declaration  Console  Results of running class testng
<terminated> testng [TestNG] C:\Program Files (x86)\Java\jre1.8.0_151\bin\javaw.exe (21-Mar-2018, 3:17:04 PM)
[TestNG] Running:
  C:\Users\ASHOK_PC\AppData\Local\Temp\testng-eclipse--1026682003\testng-customsuite.xml

PASSED: testFindMax

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


===============================================
Default suite
Total tests run: 1, Failures: 0, Skips: 0
===============================================

[TestNG] Time taken by org.testng.reporters.jq.Main@1c79255: 78 ms
[TestNG] Time taken by org.testng.reporters.SuiteHTMLReporter@1d4520b: 63 ms
[TestNG] Time taken by [FailedReporter passed=0 failed=0 skipped=0]: 0 ms
[TestNG] Time taken by org.testng.reporters.XMLReporter@101eaf6: 0 ms
[TestNG] Time taken by org.testng.reporters.EmailableReporter2@b494a6: 16 ms
[TestNG] Time taken by org.testng.reporters.JUnitReportReporter@199d22e: 0 ms
```

file:///C:/ecilpis/Pannu1/test-output/emailable-report.html

Test	# Passed	# Skipped	# Failed	Time (ms)	Included Groups	Excluded Groups
Default suite						
Default test	1	0	0	64		

Class	Method	Start	Time (ms)
Default suite			
Default test — passed			
testng.testngtest	testFindMax	1521626654789	24

Default test

testng.testngtest#testFindMax

back to summary

file:///C:/ecilpis/Pannu1/test-output/index.html

Test results

1 suite

All suites

Default suite

Info

- C:\Users\ASHOK_PC\AppData\Local\Temp\testng-eclipse--213826844O\testng-customsuite.xml
- 1 test
- 0 groups
- Times
- Reporter output
- Ignored methods
- Chronological view

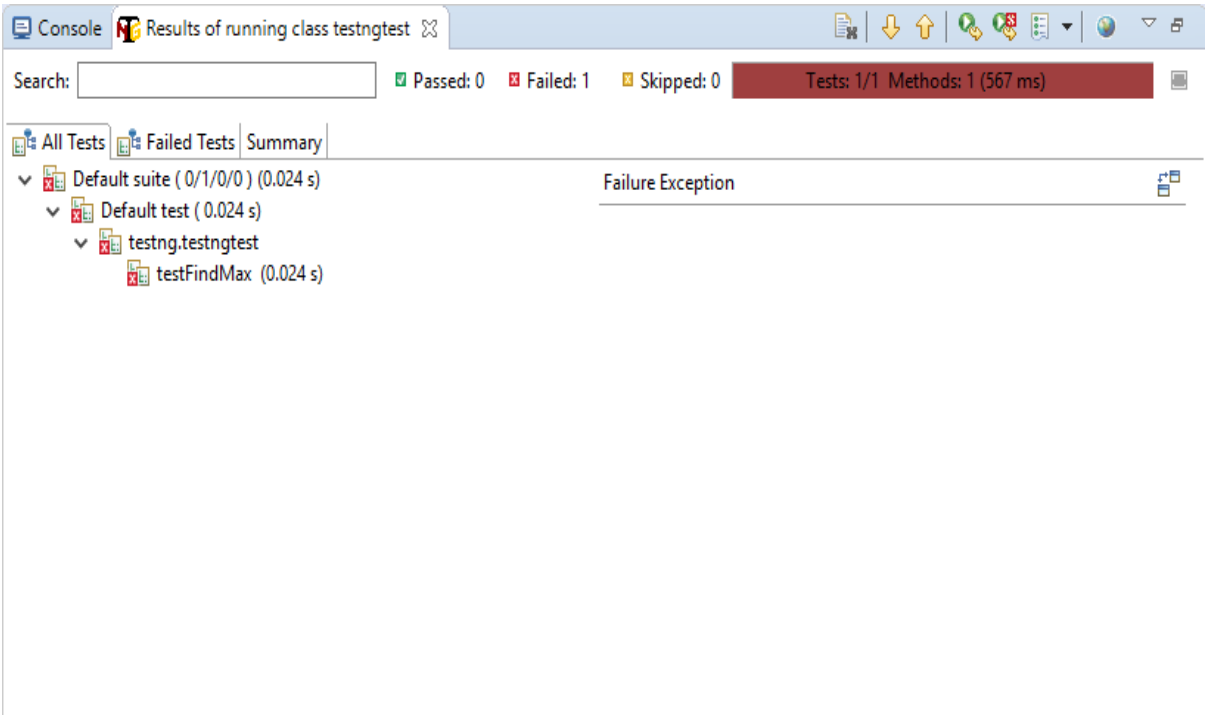
Results

- 1 method, 1 passed
- Passed methods (show)

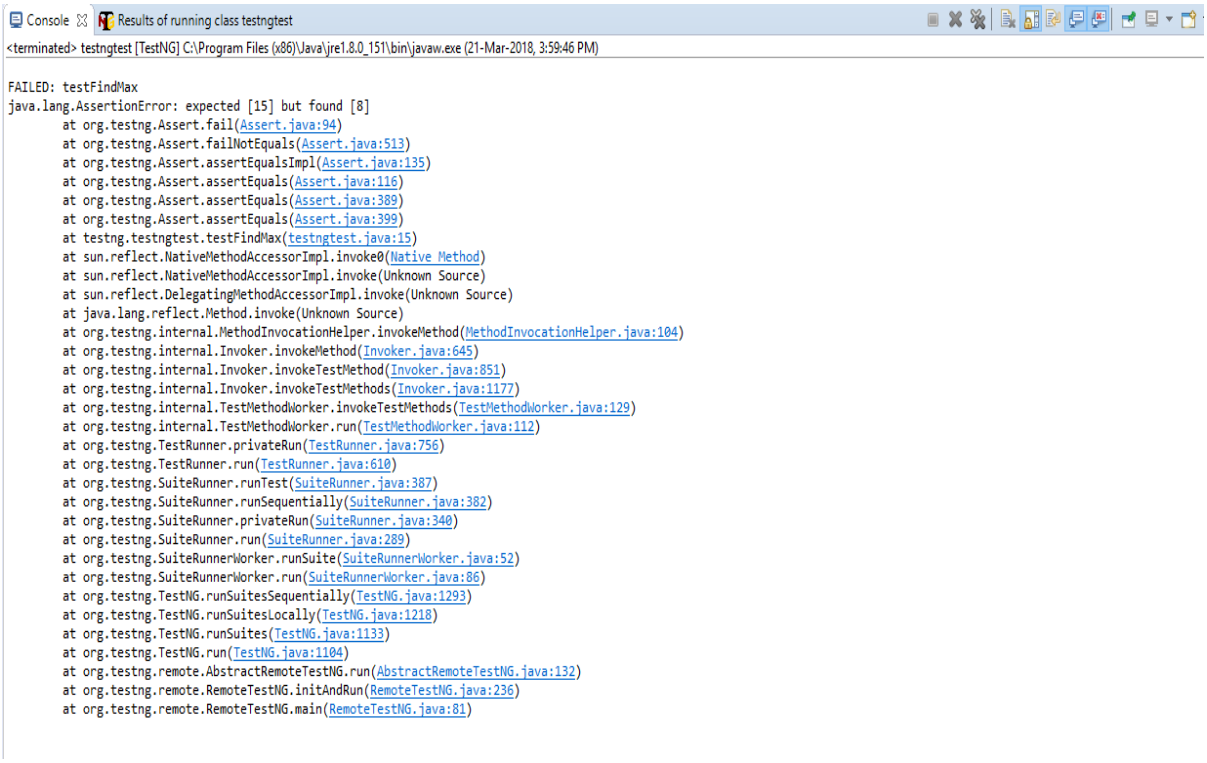
Testing Program using TestNG

```
package testng;

import org.testng.Assert;
import org.testng.annotations.*;

import Application.classwhile;

public class testngtest {

	@Test
	public void testFindMax()
	{
		Assert.assertEquals(8,classwhile.findmax(new int[]{15,13,1,8}));
	}

}
```

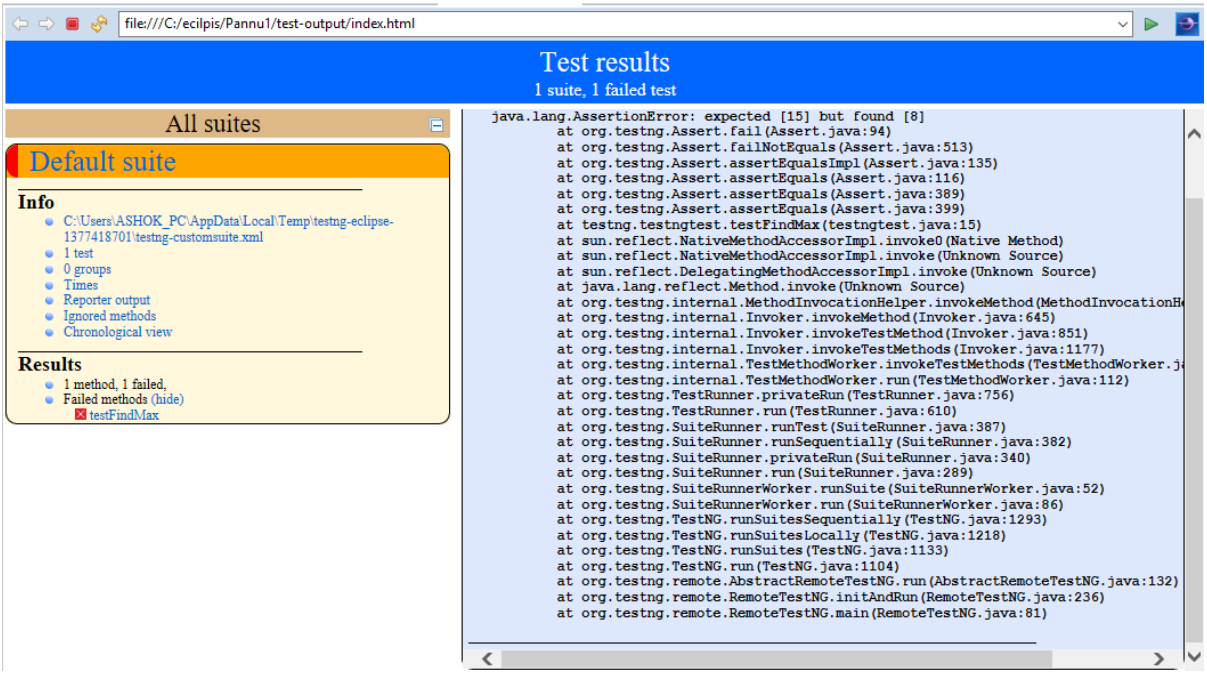
OUTPUT:



OUTPUT:



```
Console  Results of running class testngtest
<terminated> testngtest [TestNG] C:\Program Files (x86)\Java\jre1.8.0_151\bin\javaw.exe (21-Mar-2018, 3:59:46 PM)

FAILED: testFindMax
java.lang.AssertionError: expected [15] but found [8]
        at org.testng.Assert.fail(Assert.java:94)
        at org.testng.Assert.failNotEquals(Assert.java:513)
        at org.testng.Assert.assertEqualsImpl(Assert.java:135)
        at org.testng.Assert.assertEquals(Assert.java:116)
        at org.testng.Assert.assertEquals(Assert.java:389)
        at org.testng.Assert.assertEquals(Assert.java:399)
        at testng.testngtest.testFindMax(testngtest.java:15)
        at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
        at sun.reflect.NativeMethodAccessorImpl.invoke(Unknown Source)
        at sun.reflect.DelegatingMethodAccessorImpl.invoke(Unknown Source)
        at java.lang.reflect.Method.invoke(Unknown Source)
        at org.testng.internal.MethodInvocationHelper.invokeMethod(MethodInvocationHelper.java:104)
        at org.testng.internal.Invoker.invokeMethod(Invoker.java:645)
        at org.testng.internal.Invoker.invokeTestMethod(Invoker.java:851)
        at org.testng.internal.Invoker.invokeTestMethods(Invoker.java:1177)
        at org.testng.internal.TestMethodWorker.invokeTestMethods(TestMethodWorker.java:129)
        at org.testng.internal.TestMethodWorker.run(TestMethodWorker.java:112)
        at org.testng.TestRunner.privateRun(TestRunner.java:756)
        at org.testng.TestRunner.run(TestRunner.java:610)
        at org.testng.SuiteRunner.runTest(SuiteRunner.java:387)
        at org.testng.SuiteRunner.runSequentially(SuiteRunner.java:382)
        at org.testng.SuiteRunner.privateRun(SuiteRunner.java:340)
        at org.testng.SuiteRunner.run(SuiteRunner.java:289)
        at org.testng.SuiteRunnerWorker.runSuite(SuiteRunnerWorker.java:52)
        at org.testng.SuiteRunnerWorker.run(SuiteRunnerWorker.java:86)
        at org.testng.TestNG.runSuitesSequentially(TestNG.java:1293)
        at org.testng.TestNG.runSuitesLocally(TestNG.java:1218)
        at org.testng.TestNG.runSuites(TestNG.java:1133)
        at org.testng.TestNG.run(TestNG.java:1104)
        at org.testng.remote.AbstractRemoteTestNG.run(AbstractRemoteTestNG.java:132)
        at org.testng.remote.RemoteTestNG.initAndRun(RemoteTestNG.java:236)
        at org.testng.remote.RemoteTestNG.main(RemoteTestNG.java:81)
```



file:///C:/ecilpis/Pannu1/test-output/index.html

Test results

1 suite, 1 failed test

All suites

Default suite

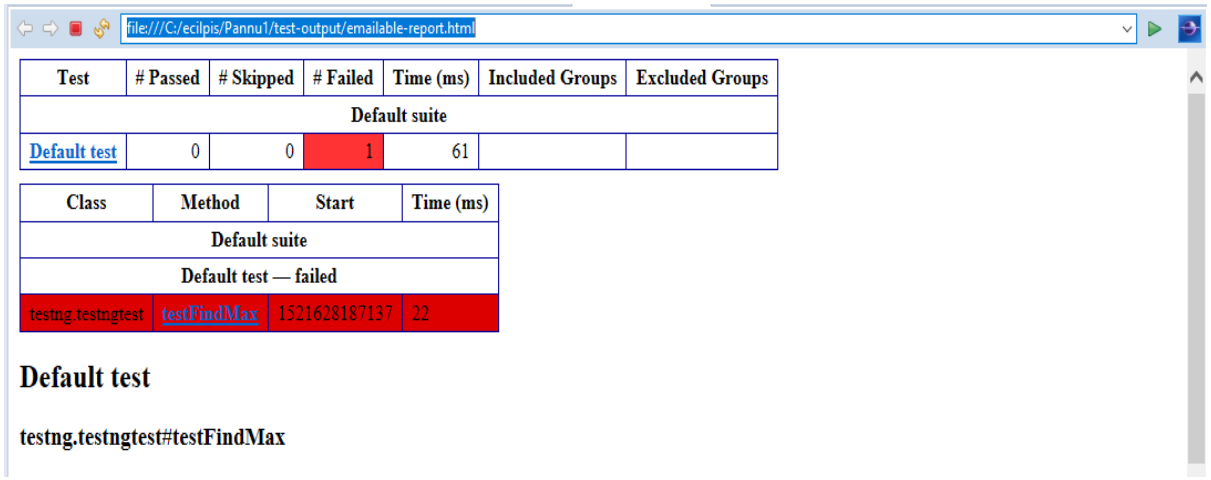
Info

- C:\Users\ASHOK_PC\AppData\Local\Temp\testng-eclipse-1377418701\testng-customsuite.xml
- 1 test
- 0 groups
- Times
- Reporter output
- Ignored methods
- Chronological view

Results

- 1 method, 1 failed,
- Failed methods (hide)
  - testFindMax

```
java.lang.AssertionError: expected [15] but found [8]
        at org.testng.Assert.fail(Assert.java:94)
        at org.testng.Assert.failNotEquals(Assert.java:513)
        at org.testng.Assert.assertEqualsImpl(Assert.java:135)
        at org.testng.Assert.assertEquals(Assert.java:116)
        at org.testng.Assert.assertEquals(Assert.java:389)
        at org.testng.Assert.assertEquals(Assert.java:399)
        at testng.testngtest.testFindMax(testngtest.java:15)
        at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
        at sun.reflect.NativeMethodAccessorImpl.invoke(Unknown Source)
        at sun.reflect.DelegatingMethodAccessorImpl.invoke(Unknown Source)
        at java.lang.reflect.Method.invoke(Unknown Source)
        at org.testng.internal.MethodInvocationHelper.invokeMethod(MethodInvocationH
        at org.testng.internal.Invoker.invokeMethod(Invoker.java:645)
        at org.testng.internal.Invoker.invokeTestMethod(Invoker.java:851)
        at org.testng.internal.Invoker.invokeTestMethods(Invoker.java:1177)
        at org.testng.internal.TestMethodWorker.invokeTestMethods(TestMethodWorker.j
        at org.testng.internal.TestMethodWorker.run(TestMethodWorker.java:112)
        at org.testng.TestRunner.privateRun(TestRunner.java:756)
        at org.testng.TestRunner.run(TestRunner.java:610)
        at org.testng.SuiteRunner.runTest(SuiteRunner.java:387)
        at org.testng.SuiteRunner.runSequentially(SuiteRunner.java:382)
        at org.testng.SuiteRunner.privateRun(SuiteRunner.java:340)
        at org.testng.SuiteRunner.run(SuiteRunner.java:289)
        at org.testng.SuiteRunnerWorker.runSuite(SuiteRunnerWorker.java:52)
        at org.testng.SuiteRunnerWorker.run(SuiteRunnerWorker.java:86)
        at org.testng.TestNG.runSuitesSequentially(TestNG.java:1293)
        at org.testng.TestNG.runSuitesLocally(TestNG.java:1218)
        at org.testng.TestNG.runSuites(TestNG.java:1133)
        at org.testng.TestNG.run(TestNG.java:1104)
        at org.testng.remote.AbstractRemoteTestNG.run(AbstractRemoteTestNG.java:132)
        at org.testng.remote.RemoteTestNG.initAndRun(RemoteTestNG.java:236)
        at org.testng.remote.RemoteTestNG.main(RemoteTestNG.java:81)
```



file:///C:/ecilpis/Pannu1/test-output/emailable-report.html

Test	# Passed	# Skipped	# Failed	Time (ms)	Included Groups	Excluded Groups
Default suite						
Default test	0	0	1	61		

Class	Method	Start	Time (ms)
Default suite			
Default test — failed			
testng.testngtest	testFindMax	1521628187137	22

Default test

testng.testngtest#testFindMax

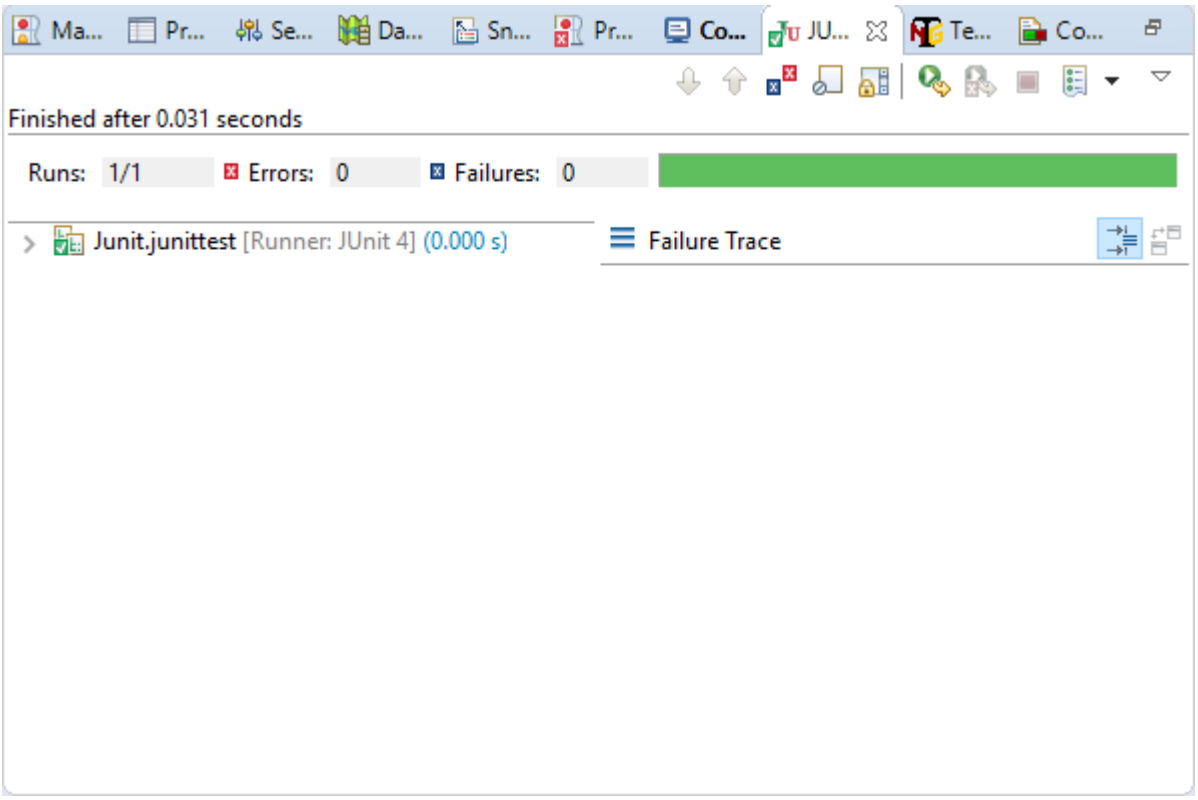
Java Program Using if else

```
package application;

public class classif {

	public static int findmax(int a,int b)
	{
		int large;
		 if(a>b)
		 large=a;
		 else
			large=b;
		 return large;

	}

}
```

Testing Program using JUnit

```
package Junit;

import static org.junit.Assert.*;

import org.junit.Test;

import application.classif;

public class junittest {

 @Test

 public void testfindmax()

 {

assertEquals("testing for max value",8,classif.findmax(5, 8));

 }
```

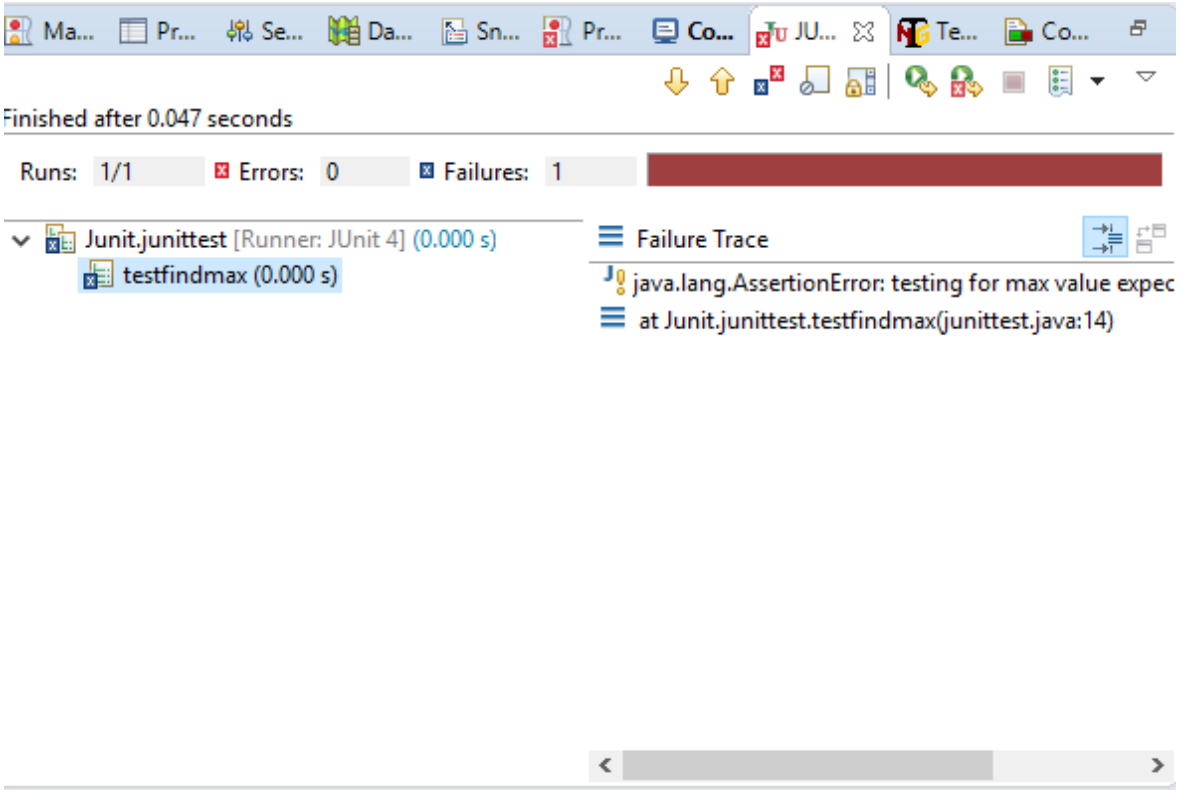
OUTPUT:



Testing Program using JUnit

```
package Junit;
import static org.junit.Assert.*;

import org.junit.Test;

import application.classif;

public class junittest {

 @Test
 public void testfindmax()
 {
          assertEquals("testing for max value",5,classif.findmax(5, 8));

 }        }
```

OUTPUT:


Ma...
Pr...
Se...
Da...
Sn...
Pr...
Co...
JU...
Te...
Co...
Finished after 0.047 seconds
Runs: 1/1
Errors: 0
Failures: 1
Junit.junittest [Runner: JUnit 4] (0.000 s)
testfindmax (0.000 s)
Failure Trace
java.lang.AssertionError: testing for max value expec
at Junit.junittest.testfindmax(junittest.java:14)

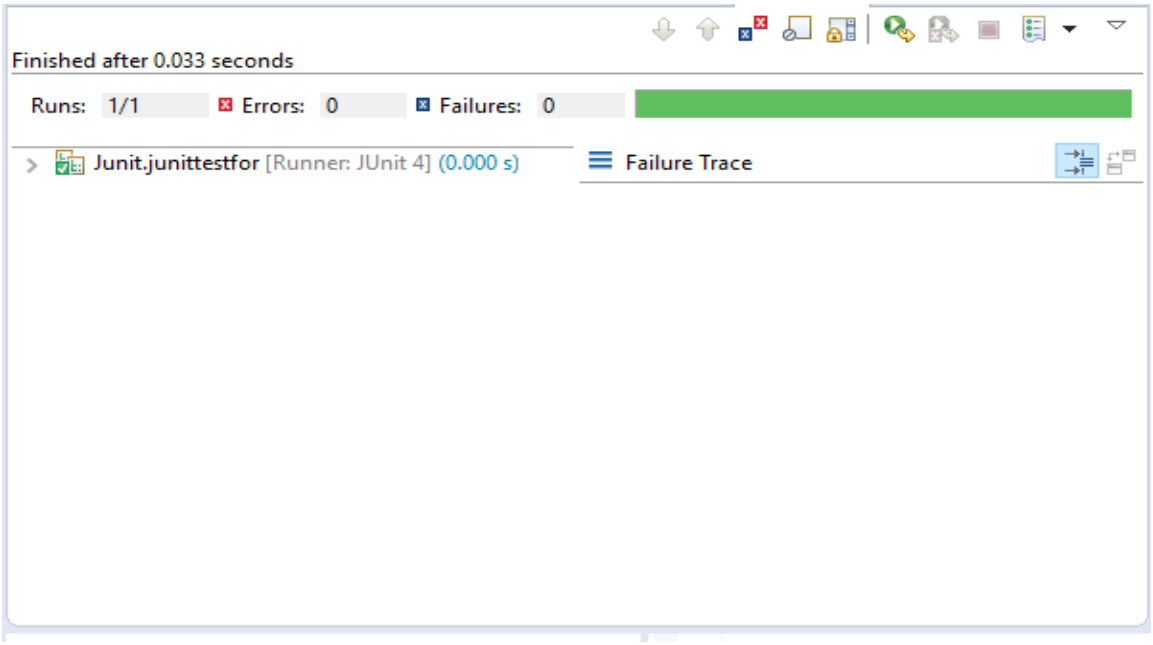
Java Program Using For Loop

```
package application;
public class classfor {

	public static int findmax(int arr[])
	{
		int max=arr[0];
		for(int i=1;i<arr.length;i++)
		{
			if(max<arr[i])
			max=arr[i];
		}
		return max;
	}

}
```

Testing program using JUnit

```
package Junit;

import static org.junit.Assert.*;

import org.junit.Test;

import application.classfor;


public class junittestfor {

	@Test

	public void testFindMax()

	{

		assertEquals("Testing for max value",10,classfor.findmax(new
int[]{10,2,3,4}));

	}

}
```

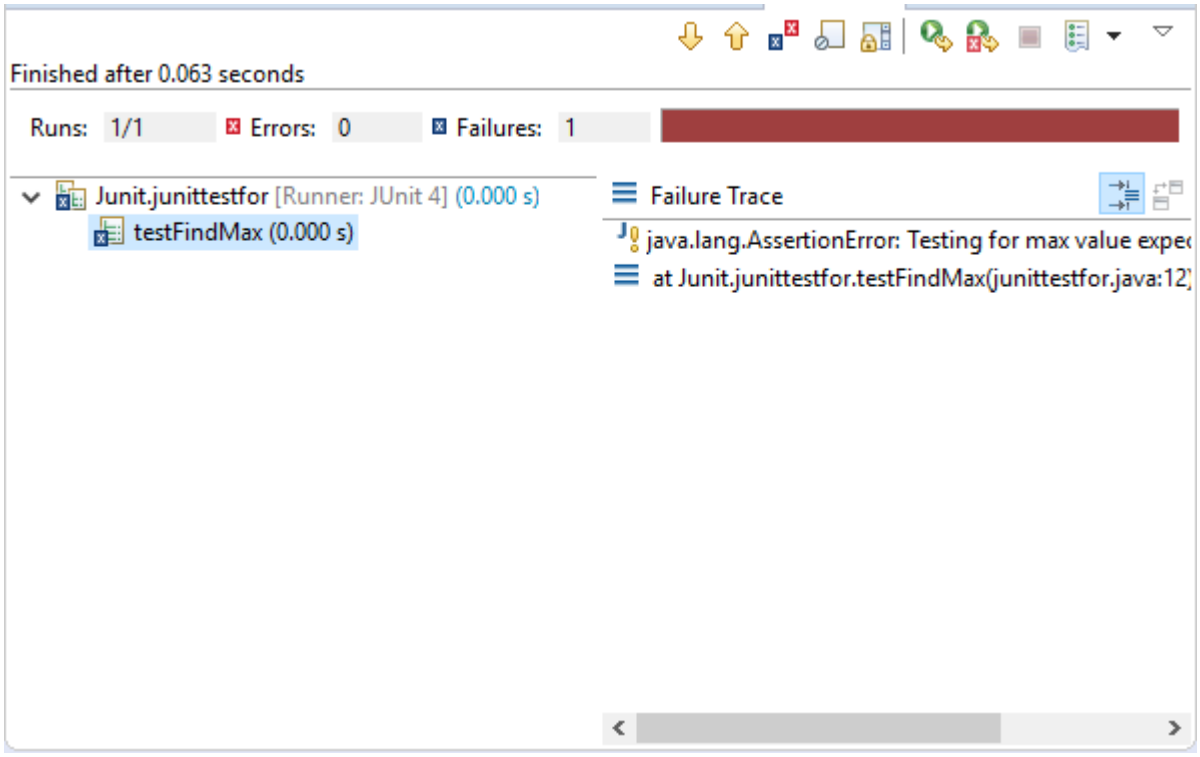
OUTPUT:



Testing program using JUnit

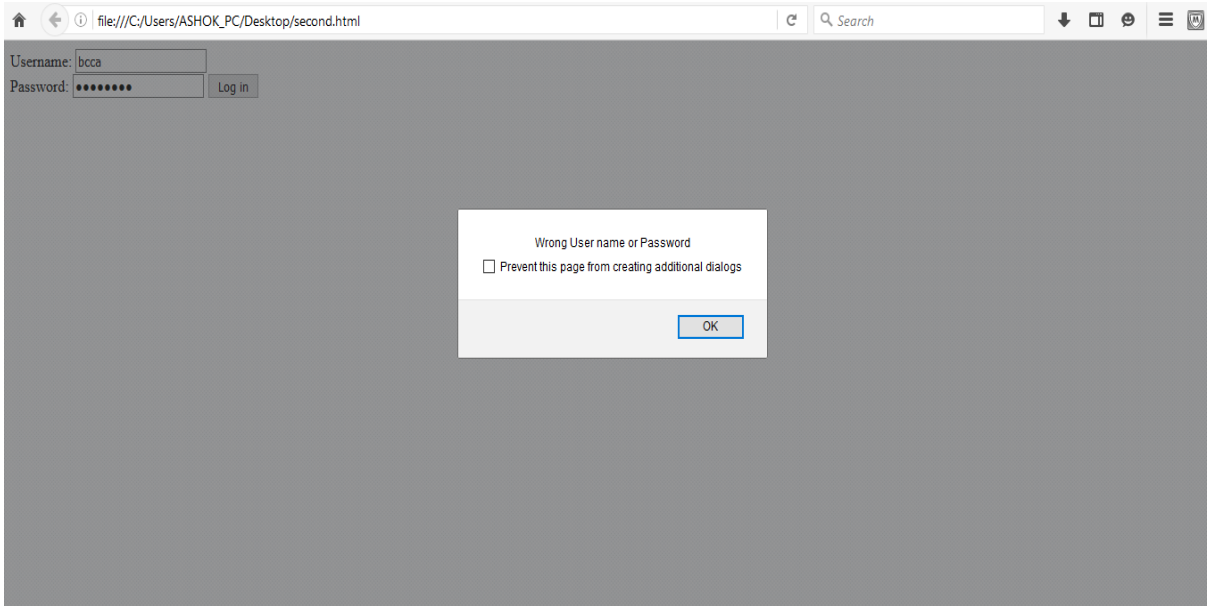
```
package Junit;

import static org.junit.Assert.*;

import org.junit.Test;

import application.classfor;

public class junittestfor {

	@Test

	public void testFindMax()

	{

		assertEquals("Testing for max value",1,classfor.findmax(new int[]{10,2,3,4}));

	}

}
```

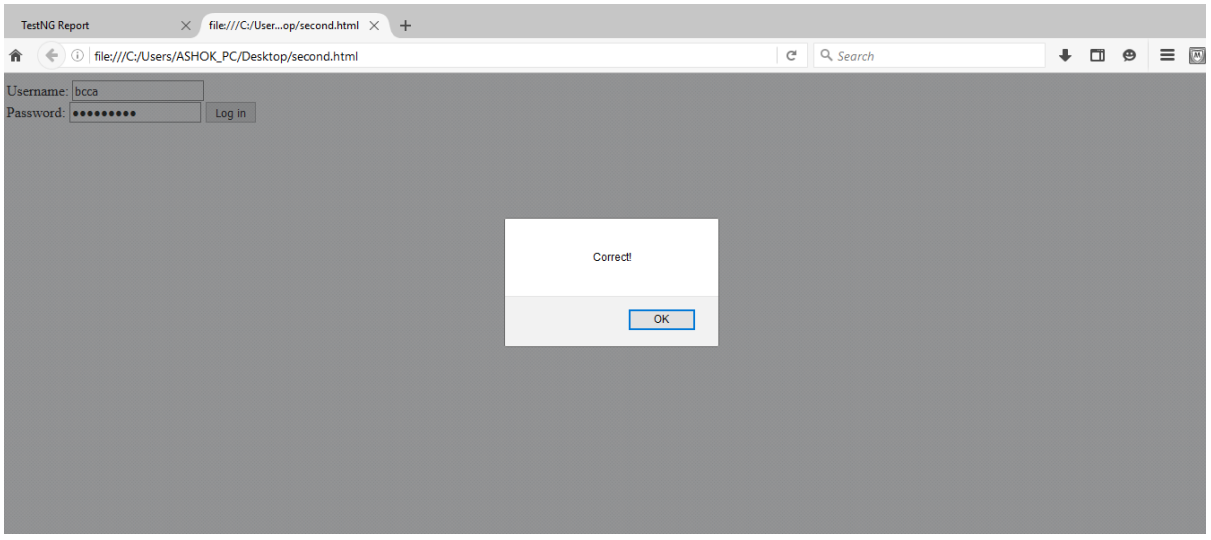
OUTPUT:

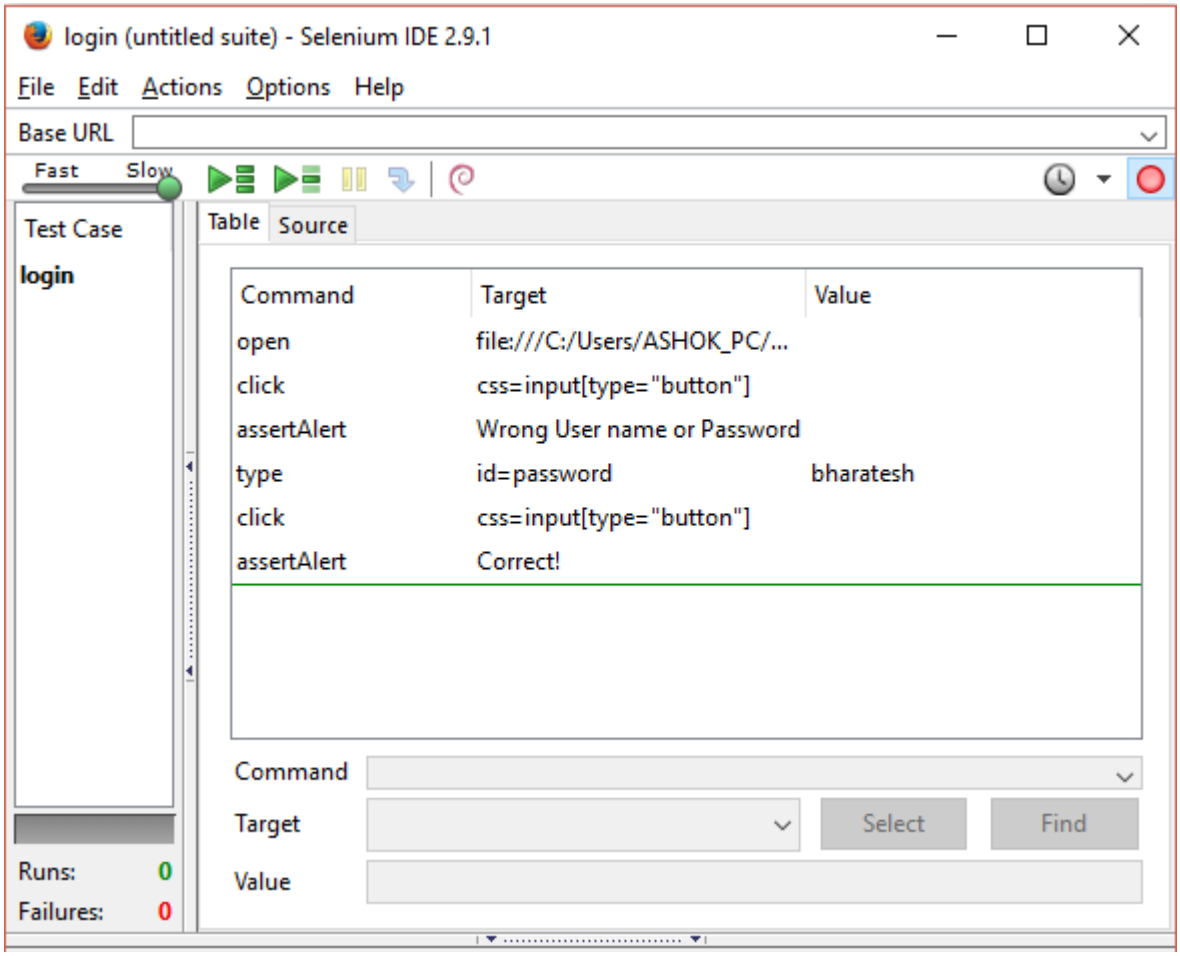

Finished after 0.063 seconds
Runs: 1/1
Errors: 0
Failures: 1
Junit.junittestfor [Runner: JUnit 4] (0.000 s)
testFindMax (0.000 s)
Failure Trace
java.lang.AssertionError: Testing for max value expe
at Junit.junittestfor.testFindMax(junittestfor.java:12

```
<html>
<head>
<script type="text/javascript">
function isValid(){
var username= document.getElementById('uname').value;
var password = document.getElementById('password').value;
if (username=="bcca" && password == "bharatesh")
{
alert('Correct!')}
else
{
alert('Wrong User name or Password')}
}
</script>
</head>
<body>
<form name="Username_Password" action="">
Username:
<input type="text" id="uname" name="uname"><br>
Password:
<input type="password" id="password" name="password">
<input type="button" value="Log in" onclick="isValid();">
</form>
</body>
</html>
```

OUTPUT:


file:///C:/Users/ASHOK_PC/Desktop/second.html
Search
Username: bcca
Password:
Log in
Wrong User name or Password
Prevent this page from creating additional dialogs
OK


TestNG Report
file:///C:/User...op/second.html
file:///C:/Users/ASHOK_PC/Desktop/second.html
Search
Username: bcca
Password:
Log in
Correct!
OK


login (untitled suite) - Selenium IDE 2.9.1
File Edit Actions Options Help
Base URL
Fast Slow
Test Case
login
Table Source
Command Target Value
open file:///C:/Users/ASHOK_PC/...
click css=input[type="button"]
assertAlert Wrong User name or Password
type id=password bharatesh
click css=input[type="button"]
assertAlert Correct!
Command
Target
Select
Find
Value
Runs: 0
Failures: 0

index.php

```
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title></title>
  </head>
  <body>
    <form name="f1" action="" method="post">
    Enter your rollno:<input type="text" name="rollno" placeholder="enter Rollno" required/><br/> <br/>
    Enter first name:<input type="text" name="fname" placeholder="enter first name" required/><br/> <br/>
    Enter last name: <input type="text" name="lname" placeholder="enter last name" required/><br/> <br/>
    Enter mobile no: <input type="text" name="mobileno" placeholder="enter mobile" required/><br/> <br/>
    Enter address:   <textarea name="address"> </textarea><br/> <br/>
    <input type="submit" name="submit1" value="Insert"/>
    <a href="select.php">View</a>
    </form>
    <?php
    if(isset($_REQUEST['submit1']))
    {
       $con=mysql_connect("127.0.0.1","root","");
          mysql_select_db("bcca1",$con);
         $rollno=$_POST['rollno'];
    $fname=$_POST['fname'];
```

```
        $lname=$_POST['lname'];
        $mobileno=$_POST['mobileno'];
        $address=$_POST['address'];

$sql="insert into tblreg values('$rollno','$fname','$lname','$mobileno','$address')";
$res=mysql_query($sql);
if($res)
{
    echo "inserted successfully";
}
else
{
   echo "Error in insertion";
}
}
 ?>
 </body>
</html>
```

update.php

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 3.2 Final//EN">
<html>
   <head>
      <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
      <title></title>
   </head>
   <body>
```

```
<?php
$con=mysql_connect("127.0.0.1","root","");
mysql_select_db("bcca1",$con);

$a=$_GET['a'];
$q="select  * from tblreg where rollno=$a";
$result=mysql_query($q);
$row=mysql_fetch_assoc($result);
?>
<form name="f1" action="" method="post">
Enter your rollno:<input type="text" name="rollno" value="<?php echo $a ?>" readonly /><br/> <br/>
Enter first name:<input type="text" name="fname" value="<?php echo $row['fname'] ?>" /><br/> <br/>
Enter last name: <input type="text" name="lname" value="<?php echo $row['lname'] ?>" /><br/> <br/>
Enter mobile no: <input type="text" name="mobileno" value="<?php echo $row['mobileno'] ?>" /><br/> <br/>
Enter address:   <input type="text" name="address" value="<?php echo $row['address'] ?>"/><br/> <br/>
<br/>
<input type="submit" name="submit" value="update" />
<?php
$a=$_GET['a'];
$con=mysql_connect("127.0.0.1","root","");
mysql_select_db("bcca1",$con);
if(isset($_REQUEST['submit'])){
$fname=$_POST['fname'];
$lname=$_POST['lname'];
```

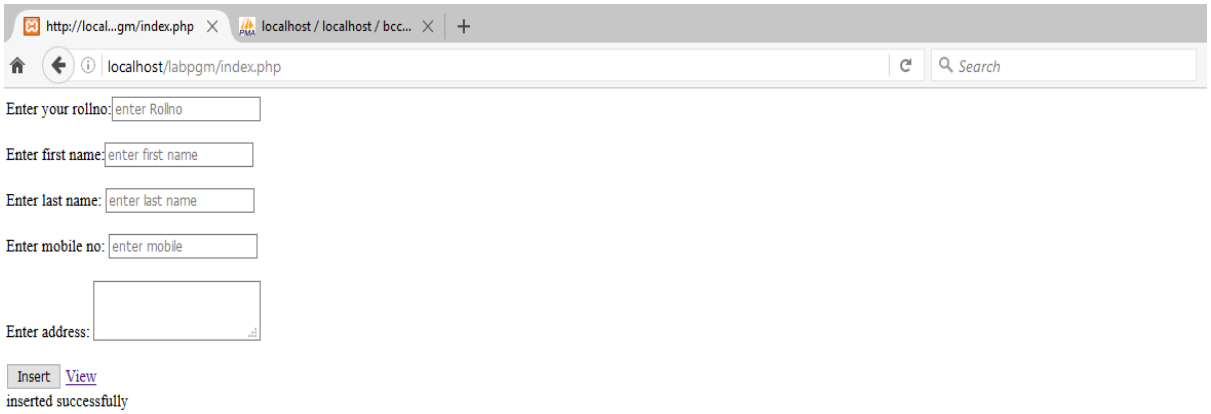
```
$mobileno=$_POST['mobileno'];

$address=$_POST['address'];


$sql="update tblreg set
fname='$fname',lname='$lname',mobileno='$mobileno',address='$address' where
rollno=$a";

$res=mysql_query($sql);

if($res>0)

{

   header('location:select.php');

  // echo "Updated successfully";

}

else

{

  echo "Error";

}

}

      ?>

       </form>

   </body>

</html>
```

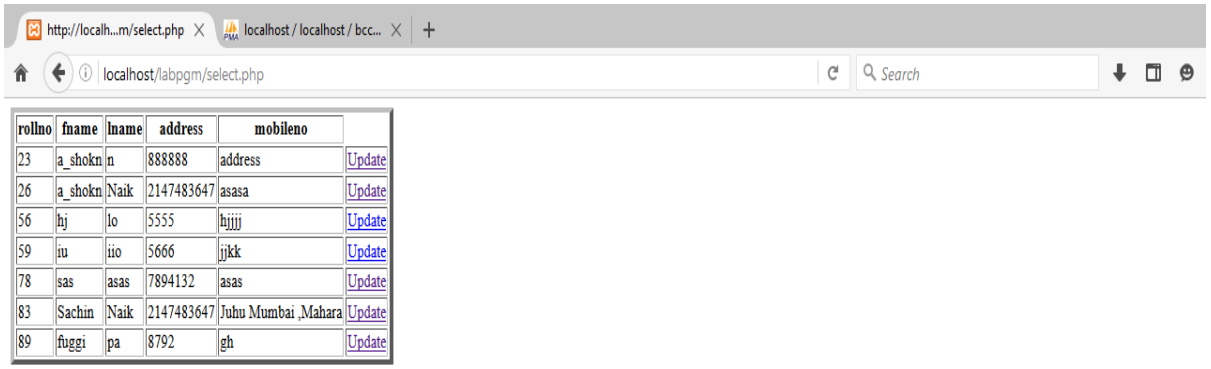
select.php

```
<html>

   <head>

      <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

      <title></title>

   </head>

   <body>
```

```
<?php
$con=mysql_connect("127.0.0.1","root","");
mysql_select_db("bcca1",$con);
echo"<table border='5'>
   <tr>
   <th>rollno</th>
   <th>fname</th>
   <th>lname</th>
   <th>address</th>
   <th>mobileno</th>
     </tr>";
$sql="select * from tblreg";
$res=mysql_query($sql);
while($r=mysql_fetch_assoc($res))
{?>
  <tr>
   <td><?php echo "{$r['rollno']}" ?></td>
   <td><?php echo "{$r['fname']}" ?></td>
   <td><?php echo "{$r['lname']}" ?></td>
   <td><?php echo "{$r['mobileno']}" ?></td>
   <td><?php echo "{$r['address']}" ?></td>
   <td><a href="update.php?a=<?php echo $r['rollno'] ?>">Update</a></td>
   </tr>
 <?php   }
echo"</table>";
?>
```

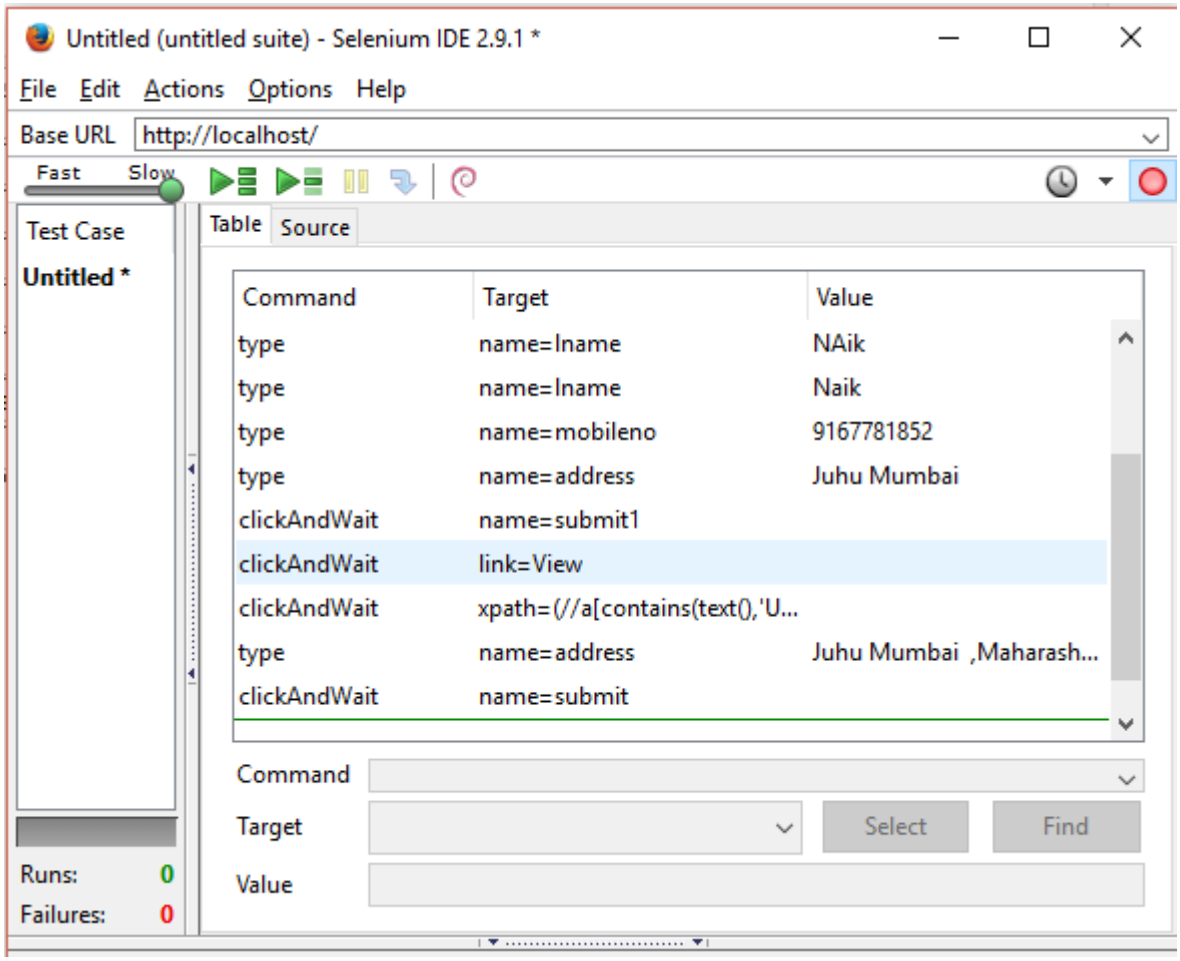
OUTPUT:





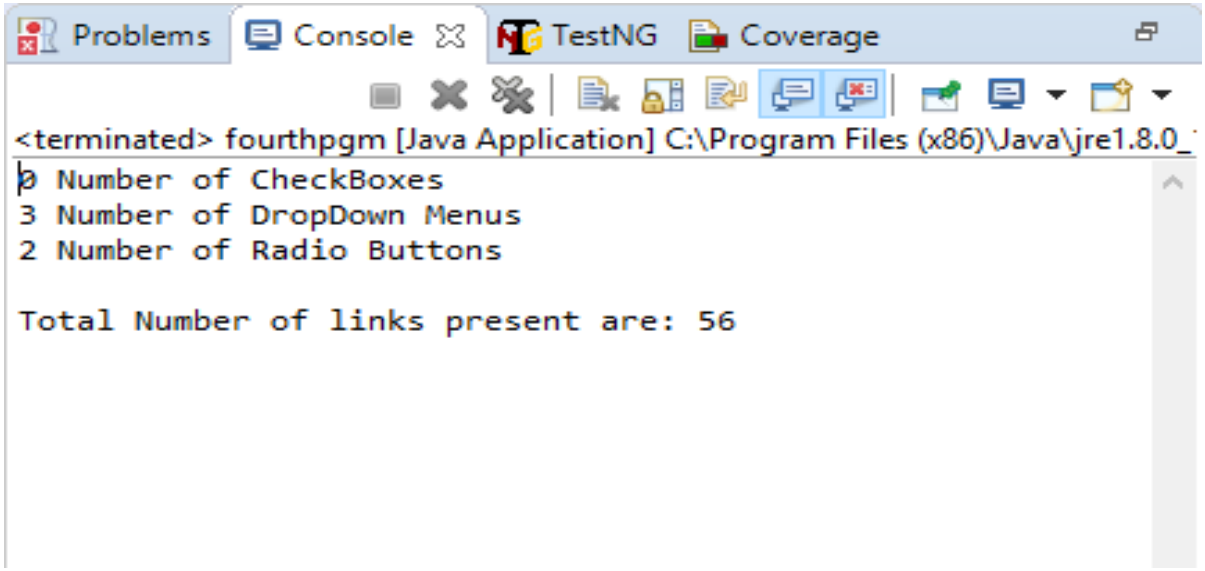
rollno	fname	lname	address	mobileno	
23	a_shokn	n	888888	address	Update
26	a_shokn	Naik	2147483647	asasa	Update
56	hj	lo	5555	hjjjj	Update
59	iu	iio	5666	jjkk	Update
78	sas	asas	7894132	asas	Update
83	Sachin	Naik	2147483647	Juhu Mumbai ,Mahara	Update
89	fuggi	pa	8792	gh	Update

OUTPUT:


Untitled (untitled suite) - Selenium IDE 2.9.1 *
File Edit Actions Options Help
Base URL http://localhost/
Fast Slow
Test Case
Untitled *
Table Source
Command Target Value
type name=lname NAik
type name=lname Naik
type name=mobileno 9167781852
type name=address Juhu Mumbai
clickAndWait name=submit1
clickAndWait link=View
clickAndWait xpath=(//a[contains(text(),'U...
type name=address Juhu Mumbai ,Maharash...
clickAndWait name=submit
Command
Target
Select
Find
Value
Runs: 0
Failures: 0

```
package Fourth;
import java.util.List;
import java.util.concurrent.TimeUnit;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.firefox.FirefoxDriver;

public class fourthpgm {

	public static void main(String[] args) {
		WebDriver driver = new FirefoxDriver();
		driver.get("http://facebook.com");
		// Put an Implicit wait,
		driver.manage().timeouts().implicitlyWait(10, TimeUnit.SECONDS);
		driver.manage().window().maximize();
		//Get count of CheckBoxes present
		java.util.List<WebElement> checkboxes =
driver.findElements(By.xpath("//input[@type='checkbox']"));
		System.out.println (checkboxes.size () +" Number of CheckBoxes");
		// Get count  of Dropdown menus
		List<WebElement> dropdown = driver.findElements(By.tagName("select"));
System.out.println(dropdown.size()+" Number of DropDown Menus");
		// Get count no' of radio buttons
		List<WebElement> radioBtns =
		driver.findElements(By.xpath("//input[@type='radio']"));
			System.out.println(radioBtns.size()+" Number of Radio Buttons");
		//Get total number of links present
				System.out.println();
		java.util.List<WebElement> links= driver.findElements(By.tagName("a"));
		System.out.println("Total Number of links present are: "+links.size());
		    } }
```

OUTPUT:


Problems
Console
TestNG
Coverage
<terminated> fourthpgm [Java Application] C:\Program Files (x86)\Java\jre1.8.0_
0 Number of CheckBoxes
3 Number of DropDown Menus
2 Number of Radio Buttons
Total Number of links present are: 56

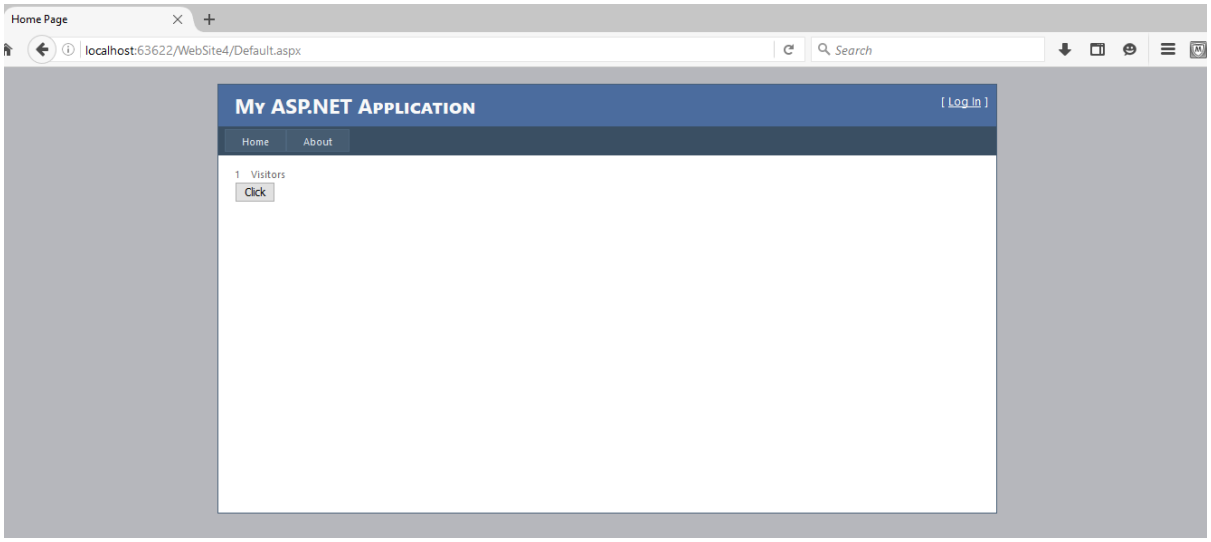
Interface:

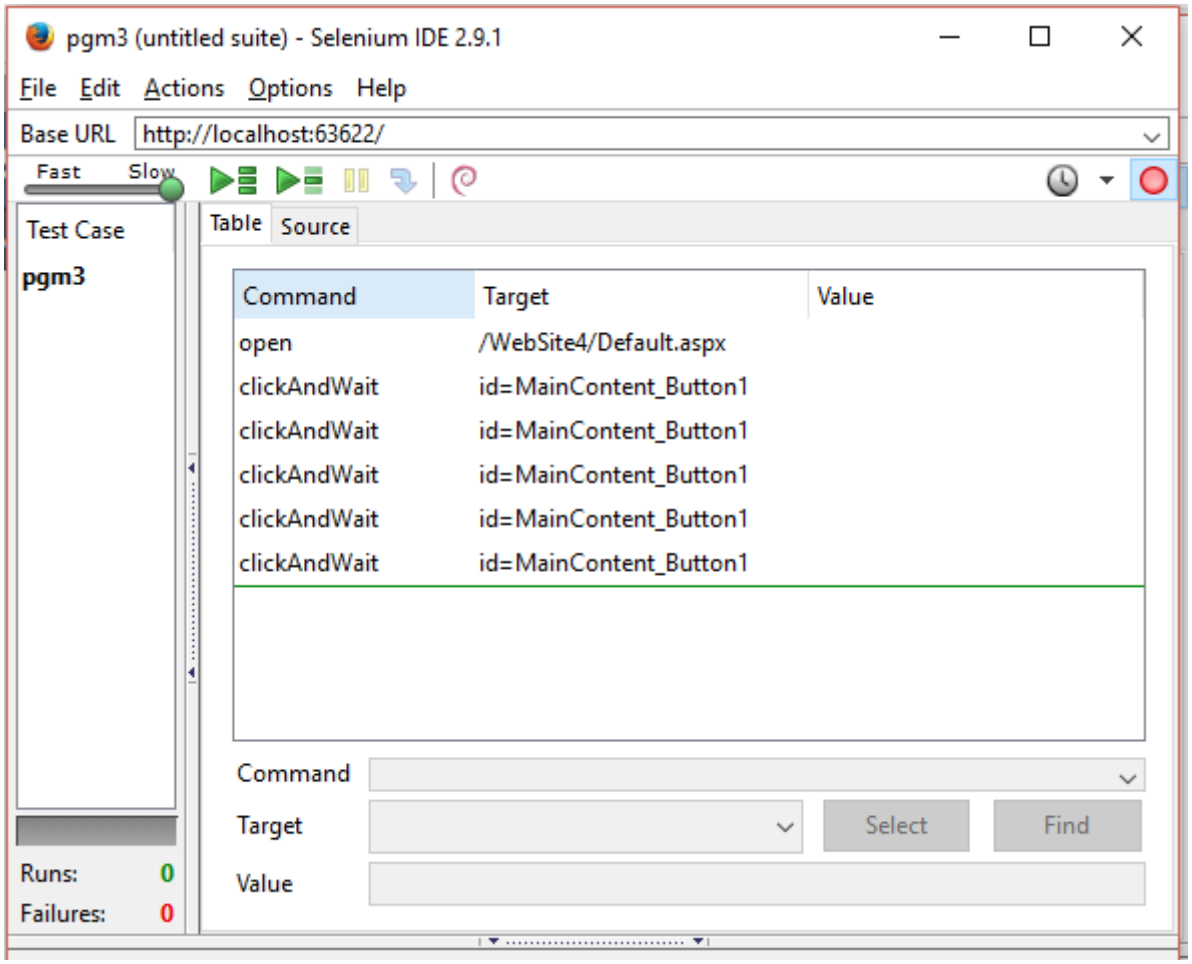
```
Imports System.Data
Partial Class _Default
   Inherits System.Web.UI.Page

   Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
Countme()
      Dim t As New DataSet
t.ReadXml(Server.MapPath("~/counter.xml"))
      Label1.Text = t.Tables(0).Rows(0)("hits").ToString
   End Sub

   Private Sub Countme()
      Dim t As New DataSet
t.ReadXml(Server.MapPath("~/counter.xml"))
      Dim hits As Integer = Int32.Parse(t.Tables(0).Rows(0)("hits").ToString)
hits += 1
t.Tables(0).Rows(0)("hits") = hits.ToString
t.WriteXml(Server.MapPath("~/counter.xml"))
   End Sub
End Class
```

XML-CODE

```
<?xml version="1.0" standalone="yes"?>
<counter>
<count>
<hits>0</hits>
</count>
</counter>
```

OUTPUT:

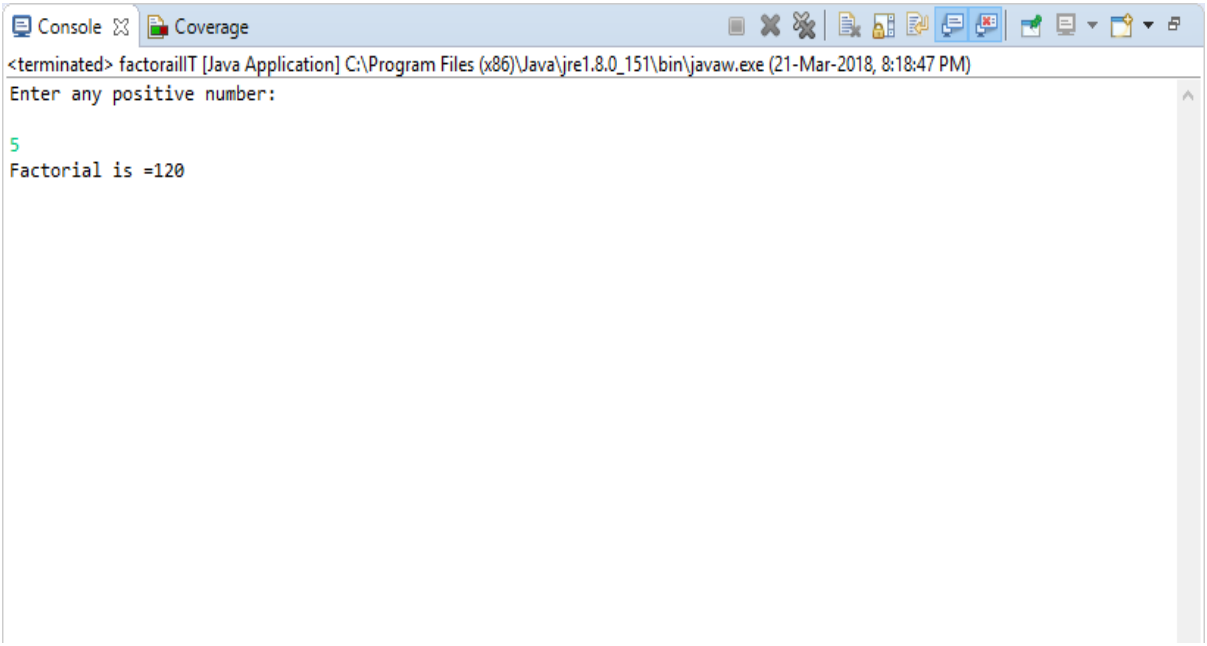

Home Page
localhost:63622/WebSite4/Default.aspx
Search
My ASP.NET Application
[Log In]
Home
About
1 Visitors
Click

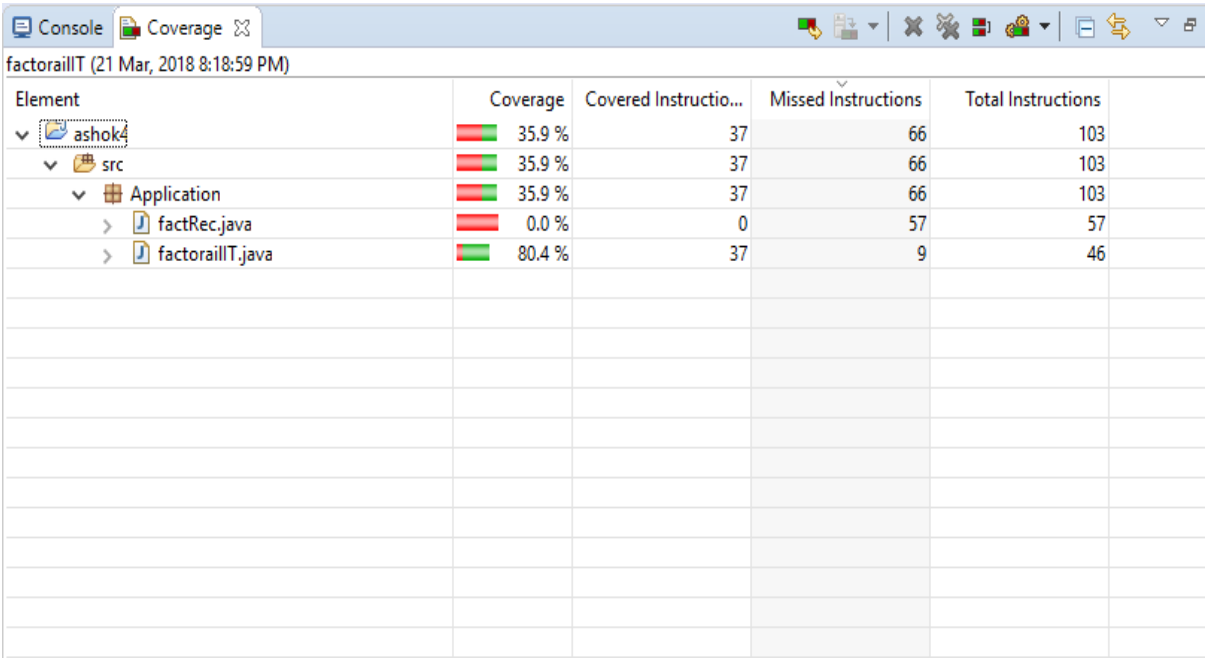

pgm3 (untitled suite) - Selenium IDE 2.9.1
File Edit Actions Options Help
Base URL http://localhost:63622/
Fast Slow
Test Case
pgm3
Table Source
Command Target Value
open /WebSite4/Default.aspx
clickAndWait id=MainContent_Button1
clickAndWait id=MainContent_Button1
clickAndWait id=MainContent_Button1
clickAndWait id=MainContent_Button1
clickAndWait id=MainContent_Button1
Command
Target
Select
Find
Value
Runs: 0
Failures: 0

Iterative Process

```
package Application;

import java.util.Scanner;

public class factorailIT {

	public static void main(String[] args) {

		int fact=1;

		Scanner scan=new Scanner(System.in);

		System.out.println("Enter any positive number:");

		int num=scan.nextInt();

		while(num<0)

		{

		System.out.println("Please Enter a positive integer");

		num=scan.nextInt();

		}

		for(int i=1;i<=num;i++)

		fact=fact*i;

		System.out.println("Factorial is ="+fact);

		}

}
```

OUTPUT:

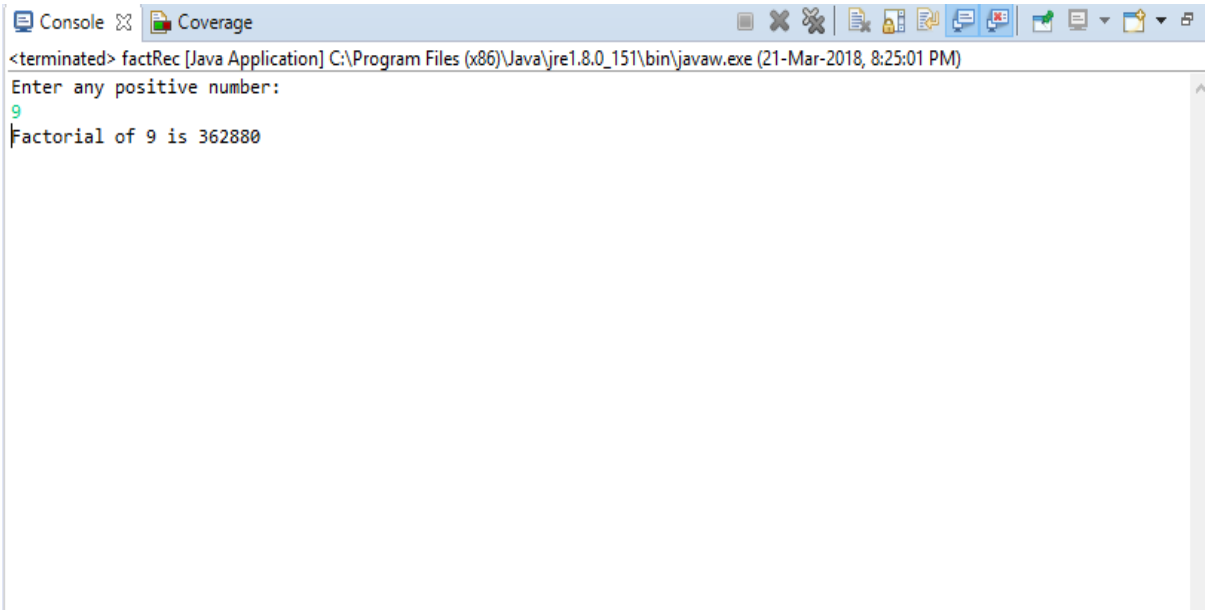

Console
Coverage
<terminated> factoraillT [Java Application] C:\Program Files (x86)\Java\jre1.8.0_151\bin\javaw.exe (21-Mar-2018, 8:18:47 PM)
Enter any positive number:
5
Factorial is =120

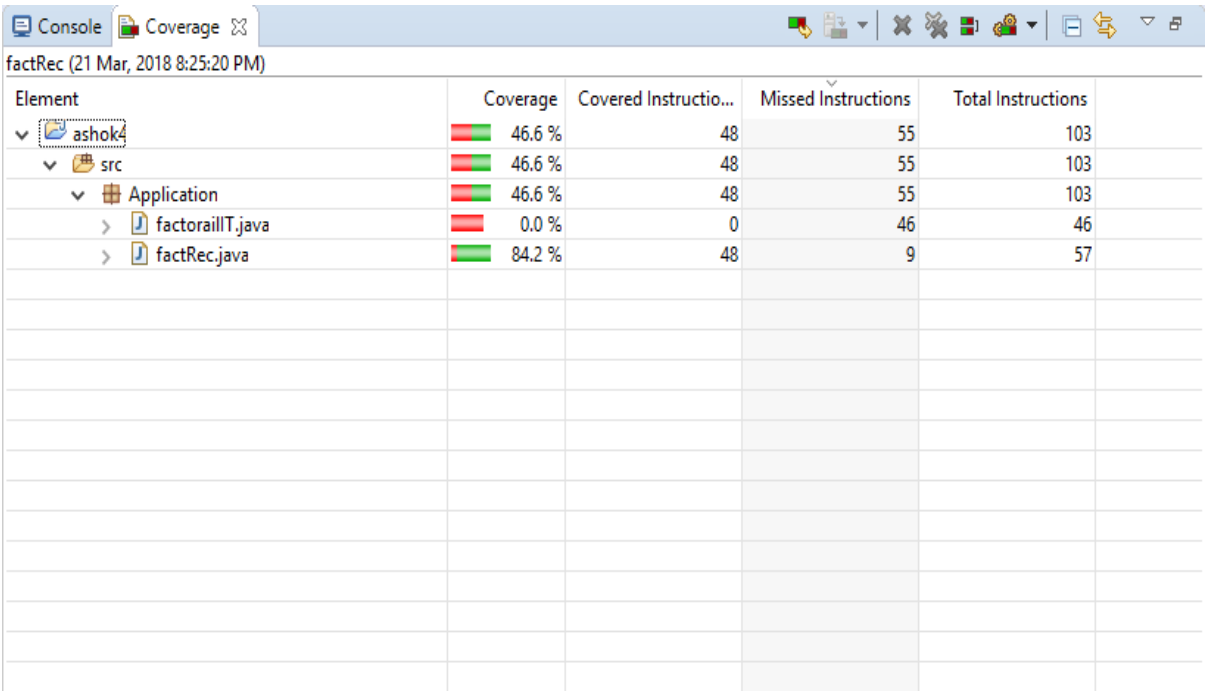

Console
Coverage
factoraillT (21 Mar, 2018 8:18:59 PM)
Element
Coverage
Covered Instructio...
Missed Instructions
Total Instructions
ashok4
35.9 %
37
66
103
src
35.9 %
37
66
103
Application
35.9 %
37
66
103
factRec.java
0.0 %
0
57
57
factoraillT.java
80.4 %
37
9
46

Recursive Process

```
package Application;

import java.util.Scanner;

public class factRec {

	public static void main(String[] args) {

		int fact=1;

		Scanner scan=new Scanner(System.in);

		System.out.println("Enter any positive number:");

		int num=scan.nextInt();

		while(num<0)

		{

		System.out.println("Please Enter a positive integer");

		num=scan.nextInt();

		}

		int result=factorial(num);

		System.out.println("Factorial of "+ num + " is " + result);

		}

		public static int factorial(int n)

		{

		int result=1;

		for(int i=1;i<=n;i++)

		{

		result=result*i;

		}

		return result;

		}

}
```

OUTPUT:


Console
Coverage
<terminated> factRec [Java Application] C:\Program Files (x86)\Java\jre1.8.0_151\bin\javaw.exe (21-Mar-2018, 8:25:01 PM)
Enter any positive number:
9
Factorial of 9 is 362880


Console
Coverage
factRec (21 Mar, 2018 8:25:20 PM)
Element
Coverage
Covered Instructio...
Missed Instructions
Total Instructions
ashok4 46.6 % 48 55 103
src 46.6 % 48 55 103
Application 46.6 % 48 55 103
factorailIT.java 0.0 % 0 46 46
factRec.java 84.2 % 48 9 57