

# DAY 9

## CE 1:

### Task 01:

Design and execute a calculator logic which checks all the mathematical operations.

1. Create a Calculator class containing mathematical methods like add, subtract, multiply, and divide methods.
2. Write the TestNg method to test the Calculator Class.
3. Use appropriate Assertion to validate the results.
4. Use the data Provider annotation to give different Test data with the Expected Results.
5. Execute the TestNG File.

## CODING :

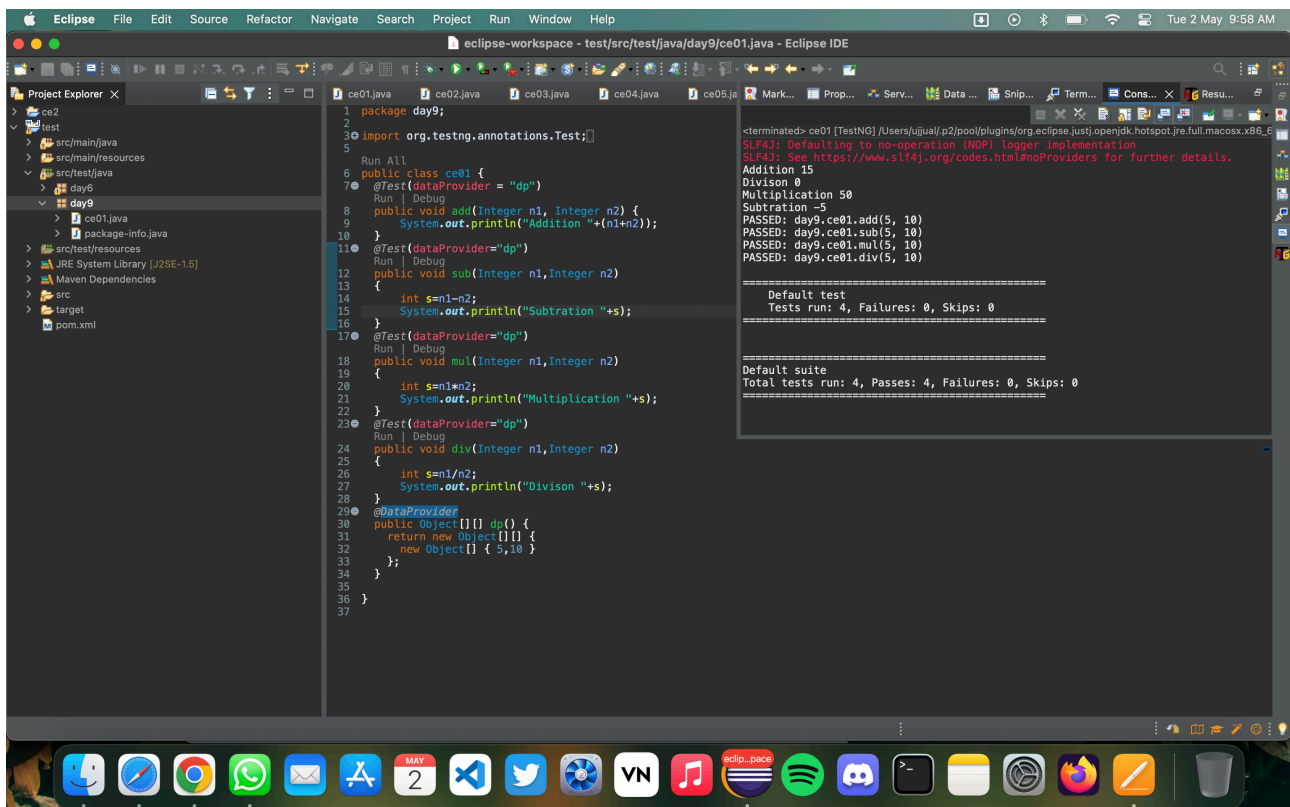
```
package day9;

import org.testng.annotations.Test;
import org.testng.annotations.DataProvider;

public class ce01 {
    @Test(dataProvider = "dp")
    public void add(Integer n1, Integer n2) {
        System.out.println("Addition "+(n1+n2));
    }
    @Test(dataProvider="dp")
    public void sub(Integer n1,Integer n2)
    {
        int s=n1-n2;
        System.out.println("Subtration "+s);
    }
    @Test(dataProvider="dp")
    public void mul(Integer n1,Integer n2)
    {
        int s=n1*n2;
        System.out.println("Multiplication "+s);
    }
    @Test(dataProvider="dp")
    public void div(Integer n1,Integer n2)
    {
```

```
        int s=n1/n2;  
        System.out.println("Divison "+s);  
    }  
    @DataProvider  
    public Object[][] dp() {  
        return new Object[][] {  
            new Object[] { 5,10 }  
        };  
    }  
}
```

## OUTPUT :



## CE 2 & 3:

- **Test Case 02-** Open Godaddy.com and click on 'Domain Name Search'
- Steps to Automate:
  1. Launch browser of your choice like, firefox, chrome etc., using selenium webdriver.
  2. Open website url - <https://godaddy.com/>
  3. Maximize browser window.
  4. Set timeout using implicit wait command of Selenium Webdriver.
  5. Click on the first menu link, which is 'Domains'. It will open up a sub-menu, click on the 'Domain Name Search' link from the sub-menu.

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Steps to Automate:

1. Launch browser of your choice like, firefox, chrome etc., using selenium webdriver.
  2. Open website url - <https://godaddy.com/>
  3. Maximize browser window.
  4. Set timeout using implicit wait command of Selenium Webdriver.
  5. Click on the first menu link, which is 'Domains'. It will open up a sub-menu, click on the 'Domain Name Search' link from the sub-menu.
- **Test Case 03-** Open Godaddy.com and click on 'Domain Name Search'
  - Steps to Automate:

- 
7. We'll match value fetched in step 7 with expected value, if it's matched then proceed to next step either failed the test case.
  8. Verify that search box is present on the page and it's enabled by using selenium commands.
  9. Verify that "Buy It" button is available along with search box.
  10. Enter some test value in the search box, like "mydomain" and click on "Buy It" button.
  11. If domain is available then verify that "Add to Cart" button is present alongside domain name.
  12. Verify that price of the domain is also displaying alongside domain name.

Requirements to met:

1. Create the three tests
2. Group the Testcase01 as SmokeTest
3. Group TestCase02 and Testcase 03 as the Regression TestCase
4. Execute as the TestNG.xml File

## CODING :

```
package Day9;

import org.testng.annotations.Test;

import io.github.bonigarcia.wdm.WebDriverManager;

import org.testng.annotations.BeforeMethod;

import java.util.concurrent.TimeUnit;

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.testng.Assert;
import org.testng.annotations.AfterMethod;

public class CE2 {
    WebDriver driver;

    @Test
    public void case1() {
        String text = driver.getTitle();
        String expected="Domain Names, Websites, Hosting & Online Marketing Tools - GoDaddy IN";
        Assert.assertEquals(text,expected);
        System.out.print("Both the title are Matched");
    }

    @SuppressWarnings("deprecation")
    @Test
    public void case2() throws InterruptedException
    {
        driver.manage().timeouts().implicitlyWait(3000, TimeUnit.MILLISECONDS);
        driver.findElement(By.xpath("/html/body/header/div/section/div/div[1]/nav/div[2]/div[1]/ul/li[1]/div/button")).click();
        Thread.sleep(2000);
        driver.findElement(By.xpath("/html/body/header/div/section/div/div[1]/nav/div[2]/div[1]/ul/li[1]/div/div[2]/div[1]/ul/li[2]/a")).click();
        Thread.sleep(3000);
        System.out.println("Test case 2 Success");
    }

    @Test
    public void case3() throws InterruptedException {
        driver.findElement(By.xpath("/html/body/header/div/section/div/div[1]/nav/div[2]/div[1]/ul/li[1]/div/button")).click();
        Thread.sleep(3000);
        driver.findElement(By.xpath("/html/body/header/div/section/div/div[1]/nav/div[2]/div[1]/ul/li[1]/div/div[2]/div[1]/ul/li[2]/a")).click();
        Thread.sleep(3000);
        String tit = "Domain Names, Websites, Hosting & Online Marketing Tools - GoDaddy IN";
        String exp = driver.getTitle();
    }
}
```

```

        Assert.assertEquals(tit, exp);
        System.out.println(exp);
        Thread.sleep(3000);
        WebElement search = driver.findElement(By.xpath("//*[@id=\"8469f0c3-e08f-4343-9756-
ce0390b0d581\"]"));
        search.isDisplayed();
        System.out.println("Search Bar Checked");
        WebElement buy = driver.findElement(By.xpath("/html/body/main/section[1]/section/section/div/div/
section/div/div[1]/div/div/div[2]/button"));
        buy.isDisplayed();
        System.out.println("Buy Checked");
        Thread.sleep(3000);
        driver.findElement(By.xpath("//*[@id=\"8469f0c3-e08f-4343-9756-
ce0390b0d581\"]")).sendKeys("site");
        Thread.sleep(10000);
        driver.findElement(By.xpath("/html/body/main/section[1]/section/section/div/div/section/div/div[1]/div/
div/div[2]/button")).click();
        Thread.sleep(25000);
        WebElement cart = driver.findElement(By.xpath("//*[@id=\"hcCartIcon\"]"));
        cart.isDisplayed();
        System.out.println("Cart checked");
        Thread.sleep(3000);
        WebElement price = driver.findElement(By.xpath("/html/body/main/div/div/div/div/div[2]/div[1]/div[1]/
div[1]/div/div[1]/div[2]/div[1]/div/span/span"));
        System.out.println(price.getText());
    }
    @BeforeMethod
    public void beforeClass() throws InterruptedException {
        ChromeOptions co=new ChromeOptions();
        co.addArguments("--remote-allow-origins=*");
        WebDriverManager.chromedriver().setup();
        driver=new ChromeDriver();
        driver.get("https://www.godaddy.com/");
        driver.manage().window().maximize();
        Thread.sleep(6000);
    }

    @AfterMethod
    public void afterClass() throws InterruptedException {
        Thread.sleep(6000);

        driver.close();

    }
}

```

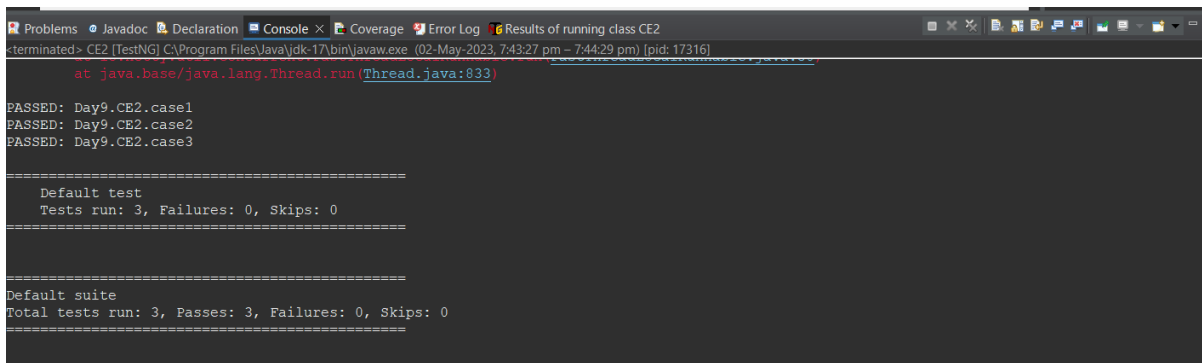
XML File:

```

<?xml version="1.0" encoding="UTF-8"?>
<suite parallel="methods" name="Suite">
  <test name="Test">
    <classes>
      <class name="Day9.CE2" />
    </classes>
  </test> <!-- Test -->
</suite> <!-- Suite -->

```

## OUTPUT :



```
terminated> CE2 [TestNG] C:\Program Files\Java\jdk-17\bin\javaw.exe (02-May-2023, 7:43:27 pm - 7:44:29 pm) [pid: 17316]
at java.base/java.lang.Thread.run(Thread.java:833)

PASSED: Day9.CE2.case1
PASSED: Day9.CE2.case2
PASSED: Day9.CE2.case3

=====
Default test
Tests run: 3, Failures: 0, Skips: 0
=====

Default suite
Total tests run: 3, Passes: 3, Failures: 0, Skips: 0
=====
```

## CE 4:

### Task 04:

- Create the TestNg File.
- Run the below Test Case on the different browsers like Chrome,edge.  
Pass the selection of Browser through the XML File
- Keep the below commands under the BeforeMethod
  - Open the Page: <https://opensource-demo.orangehrmlive.com/web/index.php/auth/login>
  - Maximize the Screen.
- Keep the below commands under the Test.
  - Enter the Username as Admin and Password as admin123.
  - Click Login.
  - Validate the User is successfully logged in.
- Keep the below commands in AfterMethod
  - Close the browser.

## CODING :

```
package Day9;

import org.testng.annotations.Test;

import io.github.bonigarcia.wdm.WebDriverManager;

import org.testng.annotations.BeforeMethod;
import org.testng.annotations.Parameters;
import org.openqa.selenium.By;
```

```

import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.chrome.ChromeOptions;
import org.openqa.selenium.edge.EdgeDriver;
import org.openqa.selenium.edge.EdgeOptions;
import org.testng.Assert;
import org.testng.annotations.AfterMethod;

public class CE4 {
    WebDriver driver;

    @Test
    public void url() throws InterruptedException {
        driver.findElement(By.xpath("/html/body/div/div[1]/div/div[1]/div/div[2]/div[2]/form/div[1]/div/div[2]/input")).sendKeys("Admin");
        Thread.sleep(4000);
        driver.findElement(By.xpath("/html/body/div/div[1]/div/div[1]/div/div[2]/div[2]/form/div[2]/div/div[2]/input")).sendKeys("admin123");
        Thread.sleep(3000);
        driver.findElement(By.xpath("/html/body/div/div[1]/div/div[1]/div/div[2]/div[2]/form/div[3]/button")).click();
        Thread.sleep(3000);
        String txt = "Dashboard";
        String login = driver.findElement(By.xpath("/html/body/div/div[1]/div[1]/header/div[1]/div[1]/span/h6")).getText();
        Assert.assertEquals(txt, login);
    }

    @Parameters({"browser"})
    @BeforeMethod
    public void beforeMethod(String browser1) throws InterruptedException {
        if(browser1.equals("chrome")) {
            ChromeOptions co=new ChromeOptions();
            co.addArguments("--remote-allow-origins=*");
            WebDriverManager.chromedriver().setup();
            driver=new ChromeDriver();
            driver.get("https://opensource-demo.orangehrmlive.com/web/index.php/auth/login");

            driver.manage().window().maximize();
            Thread.sleep(6000);
        }
        else if(browser1.equals("edge")) {
            EdgeOptions co=new EdgeOptions();
            co.addArguments("--remote-allow-origins=*");
            WebDriverManager.edgedriver().setup();
            driver=new EdgeDriver();
            driver.get("https://opensource-demo.orangehrmlive.com/web/index.php/auth/login");

            driver.manage().window().maximize();
            Thread.sleep(6000);
        }
    }

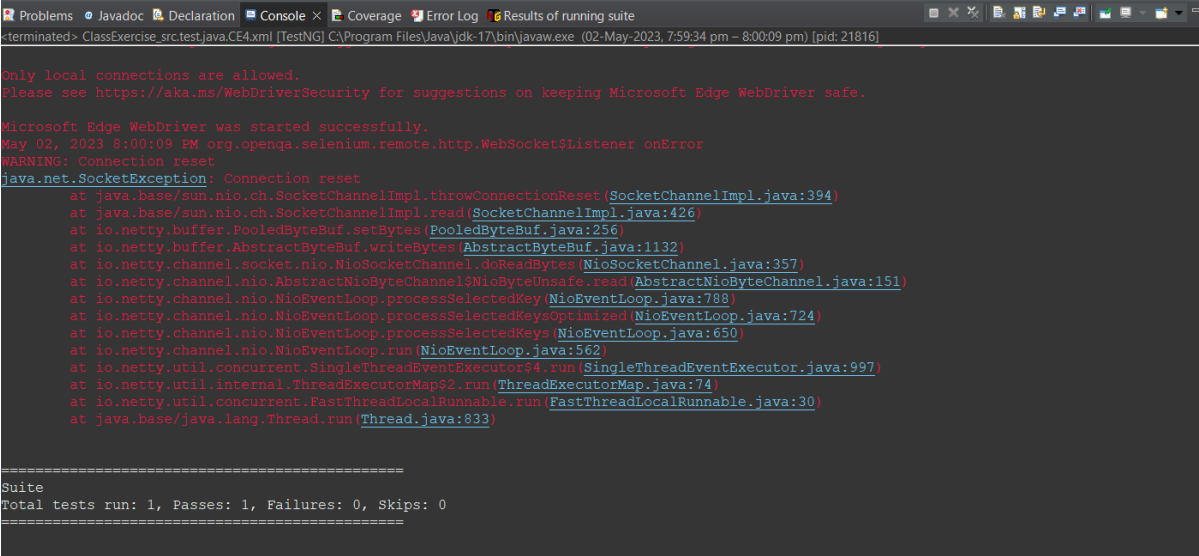
    @AfterMethod
    public void afterMethod() {
        driver.close();
    }
}

```

## XML File :

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">
<suite parallel="false" name="Suite">
  <test name="Test">
    <classes>
      <class name="Day9.CE4"/>
      <parameter name = "browser" value="edge"></parameter>
    </classes>
  </test> <!-- Test -->
</suite> <!-- Suite -->
```

## OUTPUT :



```
Problems Javadoc Declaration Console x Coverage Error Log Results of running suite
<terminated> ClassExercise_src\test\java.CE4.xml [TestNG] C:\Program Files\Java\jdk-17\bin\javaw.exe (02-May-2023, 7:59:34 pm - 8:00:09 pm) [pid: 21816]

Only local connections are allowed.
Please see https://aka.ms/WebDriverSecurity for suggestions on keeping Microsoft Edge WebDriver safe.

Microsoft Edge WebDriver was started successfully.
May 02, 2023 8:00:09 PM org.openqa.selenium.remote.http.WebSocket$Listener onError
WARNING: Connection reset
java.net.SocketException: Connection reset
    at java.base/sun.nio.ch.SocketChannelImpl.throwConnectionReset(SocketChannelImpl.java:394)
    at java.base/sun.nio.ch.SocketChannelImpl.read(SocketChannelImpl.java:426)
    at io.netty.buffer.PooledByteBuf.setBytes(PooledByteBuf.java:256)
    at io.netty.buffer.AbstractByteBuf.writeBytes(AbstractByteBuf.java:1132)
    at io.netty.channel.socket.nio.NioSocketChannel.doReadBytes(NioSocketChannel.java:357)
    at io.netty.channel.nio.AbstractNioByteChannel$NioByteUnsafe.read(AbstractNioByteChannel.java:151)
    at io.netty.channel.nio.NioEventLoop.processSelectedKey(NioEventLoop.java:788)
    at io.netty.channel.nio.NioEventLoop.processSelectedKeysOptimized(NioEventLoop.java:724)
    at io.netty.channel.nio.NioEventLoop.processSelectedKeys(NioEventLoop.java:650)
    at io.netty.channel.nio.NioEventLoop.run(NioEventLoop.java:562)
    at io.netty.util.concurrent.SingleThreadEventExecutor$4.run(SingleThreadEventExecutor.java:997)
    at io.netty.util.internal.ThreadExecutorMap$2.run(ThreadExecutorMap.java:74)
    at io.netty.util.concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30)
    at java.base/java.lang.Thread.run(Thread.java:833)

=====
Suite
Total tests run: 1, Passes: 1, Failures: 0, Skips: 0
=====
```



## CE 5:

### Task 05:

- Create the TestNg File.
- Keep the below commands under the BeforeMethod
  - Open the Page: <https://opensource-demo.orangehrmlive.com/web/index.php/auth/login>
  - Maximize the Screen.
- Keep the below commands under the Test.
  - Enter the Username as Suvitha and Password as 12345.
  - Click Login.
  - Validate the User is successfully logged in.
- Keep the below commands in AfterMethod
  - Close the browser.

Include the Test Listener to observe the Test Execution and Print the Name of the Test Method when it got Fails.

## CODING :

```
package Day9;

import org.testng.annotations.Test;

import io.github.bonigarcia.wdm.WebDriverManager;

import org.testng.annotations.BeforeMethod;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.edge.EdgeDriver;
import org.openqa.selenium.edge.EdgeOptions;
import org.testng.Assert;
import org.testng.annotations.AfterMethod;

public class CE5 {
    WebDriver driver;

    @Test
    public void url() throws InterruptedException {
        driver.findElement(By.xpath("/html/body/div/div[1]/div/div[1]/div/div[2]/div[2]/form/div[1]/div/div[2]/input")).sendKeys("Suvitha");
    }
}
```

```

        Thread.sleep(4000);
        driver.findElement(By.xpath("/html/body/div/div[1]/div/div[1]/div/div[2]/div[2]/form/div[2]/div/div[2]/
input")).sendKeys("12345");
        Thread.sleep(3000);
        driver.findElement(By.xpath("/html/body/div/div[1]/div/div[1]/div/div[2]/div[2]/form/div[3]/
button")).click();
        Thread.sleep(3000);
        String txt = "Dashboard";
        String login = driver.findElement(By.xpath("/html/body/div/div[1]/div[1]/header/div[1]/div[1]/span/
h6")).getText();
        Assert.assertEquals(txt, login);
    }

    @BeforeMethod
    public void beforeMethod() throws InterruptedException {
        EdgeOptions co=new EdgeOptions();
        co.addArguments("--remote-allow-origins=*");
        WebDriverManager.edgedriver().setup();
        driver=new EdgeDriver();
        driver.get("https://opensource-demo.orangehrmlive.com/web/index.php/auth/login");
        driver.manage().window().maximize();
        Thread.sleep(6000);
    }

    @AfterMethod
    public void afterMethod() {
        driver.close();
    }
}

```

## XML File :

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">
<suite parallel="false" name="Suite">
<listeners>
<listener class-name="Day9.Listener1"></listener></listeners>
<test name="Test">
<classes>
<class name="Day9.CE5"/>
</classes>
</test> <!-- Test -->
</suite> <!-- Suite -->

```

## Listener File :

```

package Day9;

import org.testng.ITestContext;
import org.testng.ITestListener;
import org.testng.ITestResult;

public class Listener1 implements ITestListener{

    public void onFinish(ITestContext context) {
        // TODO Auto-generated method stub
    }
}

```

```
}

public void onStart(ITestContext context) {
    // TODO Auto-generated method stub
    System.out.println("On Start"+context.getName());
}

public void onTestFailedButWithinSuccessPercentage(ITestResult result) {
    // TODO Auto-generated method stub
    System.out.println("onTestFailedButWithinSuccessPercentage"+result.getName());
}

public void onTestFailedWithTimeout(ITestResult result) {
    // TODO Auto-generated method stub
    System.out.println("onTestFailedWithTimeout"+result.getName());
}

public void onTestFailure(ITestResult result) {
    // TODO Auto-generated method stub
    System.out.println("onTestFailure"+result.getName());
}

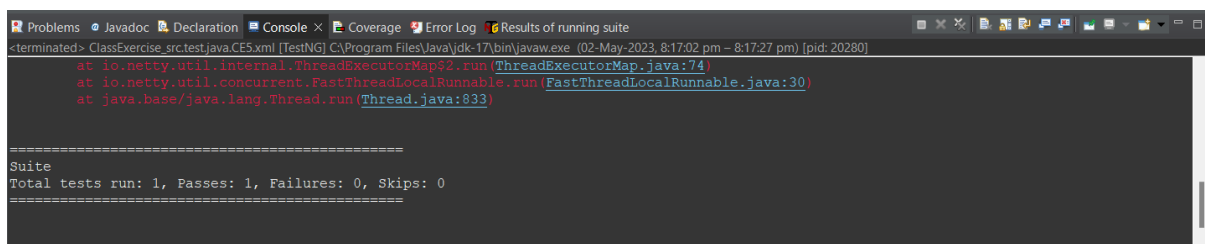
public void onTestSkipped(ITestResult result) {
    // TODO Auto-generated method stub
    System.out.println("onTestSkipped"+result.getName());
}

public void onTestStart(ITestResult result) {
    // TODO Auto-generated method stub
    System.out.print("On test start"+result.getTestName());
}

public void onTestSuccess(ITestResult result) {
    // TODO Auto-generated method stub
    System.out.print("onTestSuccess"+result.getTestName());
}

}
```

## OUTPUT :



The screenshot shows an IDE console window with the following content:

```
<terminated> ClassExercise_src\test\java\CE5.xml [TestNG] C:\Program Files\Java\jdk-17\bin\javaw.exe (02-May-2023, 8:17:02 pm - 8:17:27 pm) [pid: 20280]
at io.netty.util.concurrent.FastThreadLocalRunnable.run(FastThreadLocalRunnable.java:30)
at java.base/java.lang.Thread.run(Thread.java:833)

=====
Suite
Total tests run: 1, Passes: 1, Failures: 0, Skips: 0
=====
```

