Sri Lanka Institute of Information Technology

Software Engineering Process & Quality Management

SE3010

Lab 2 – JUnit

IT22251114 JINAD INDUWITHWA A.G

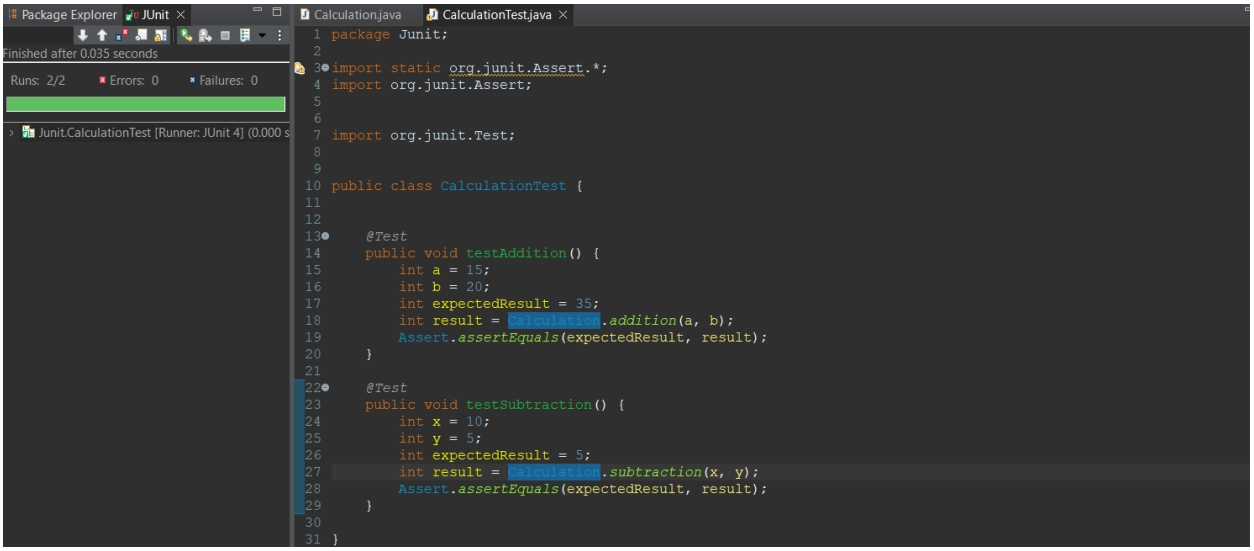
Creating a Java Project and Calculation Class

Calculation.java

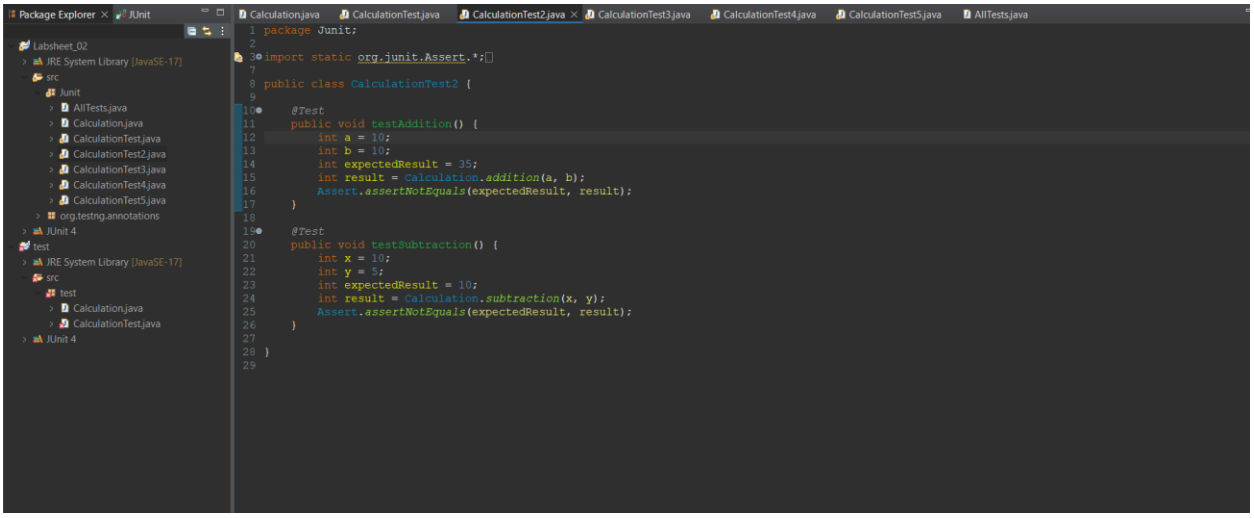
```java
package Junit;

public class Calculation {

    public int addition(int a, int b) {
        int total = a+b;
        return total;
    }

    public int subtraction(int x, int y) {
        int result = x-y;
        return result;
    }

}
```

Adding a JUnit Test Cases

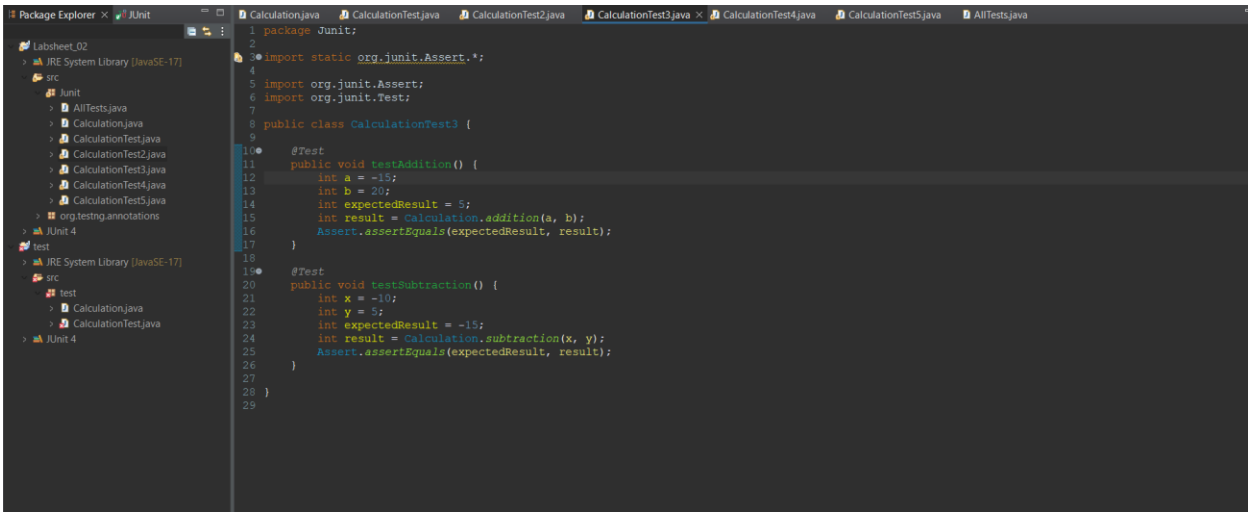
Test case 01



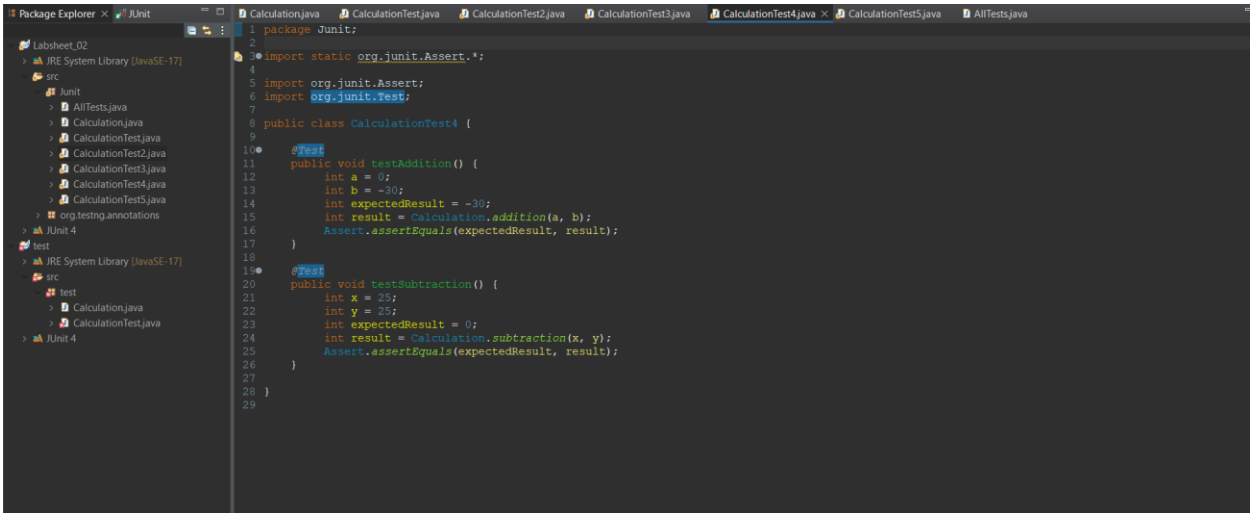
Test case 02



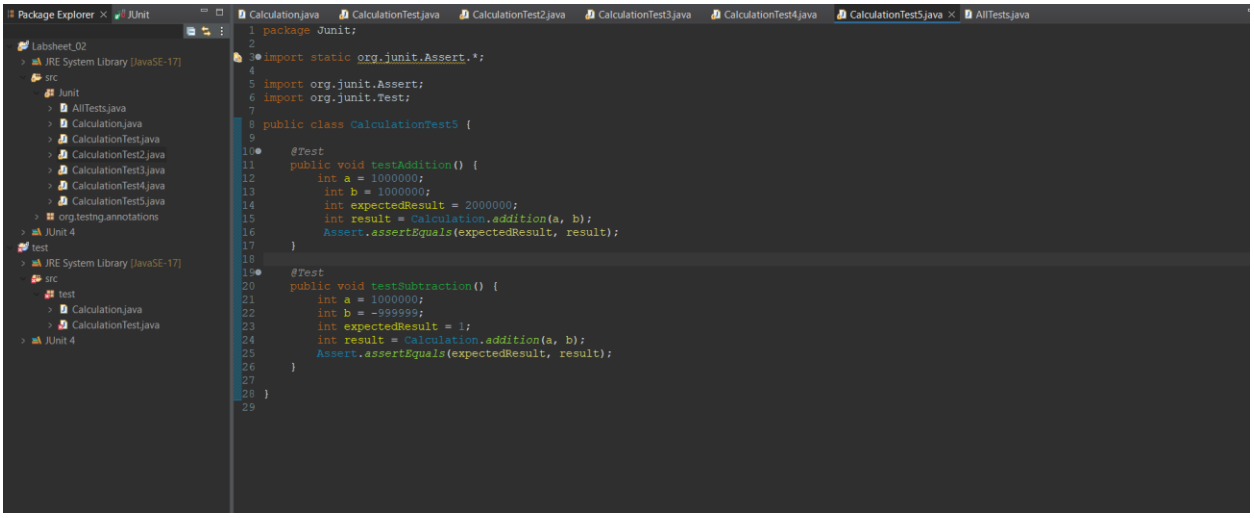
Test case 03



Test case 04

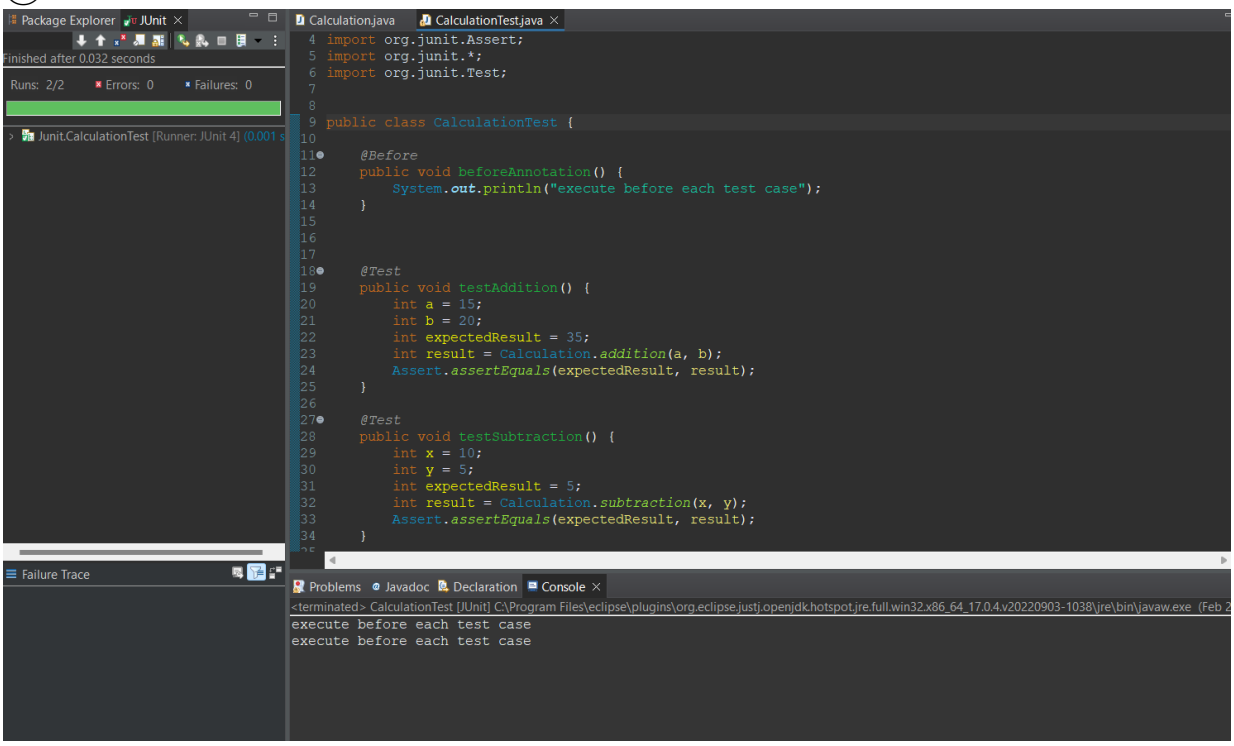


Test case 05

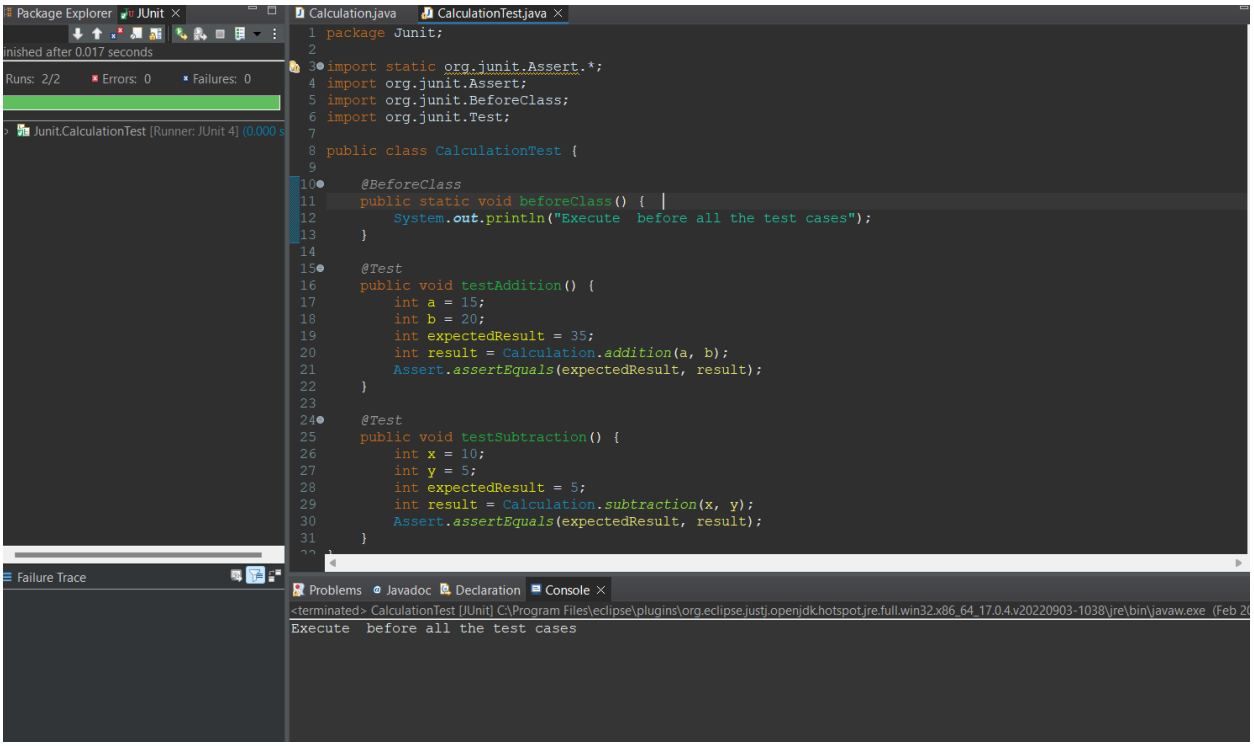

Package Explorer
JUnit
Labsheet_02
JRE System Library [JavaSE-17]
src
Junit
AllTests.java
Calculation.java
CalculationTest.java
CalculationTest2.java
CalculationTest3.java
CalculationTest4.java
CalculationTest5.java
org.testng.annotations
JUnit 4
test
JRE System Library [JavaSE-17]
src
test
Calculation.java
CalculationTest.java
JUnit 4
Calculation.java
CalculationTest.java
CalculationTest2.java
CalculationTest3.java
CalculationTest4.java
CalculationTest5.java
AllTests.java
package Junit;
import static org.junit.Assert.*;
import org.junit.Assert;
import org.junit.Test;
public class CalculationTest5 {
@Test
public void testAddition() {
int a = 1000000;
int b = 1000000;
int expectedResult = 2000000;
int result = Calculation.addition(a, b);
Assert.assertEquals(expectedResult, result);
}
@Test
public void testSubtraction() {
int a = 1000000;
int b = -999999;
int expectedResult = 1;
int result = Calculation.addition(a, b);
Assert.assertEquals(expectedResult, result);
}
}

JUnit Annotations

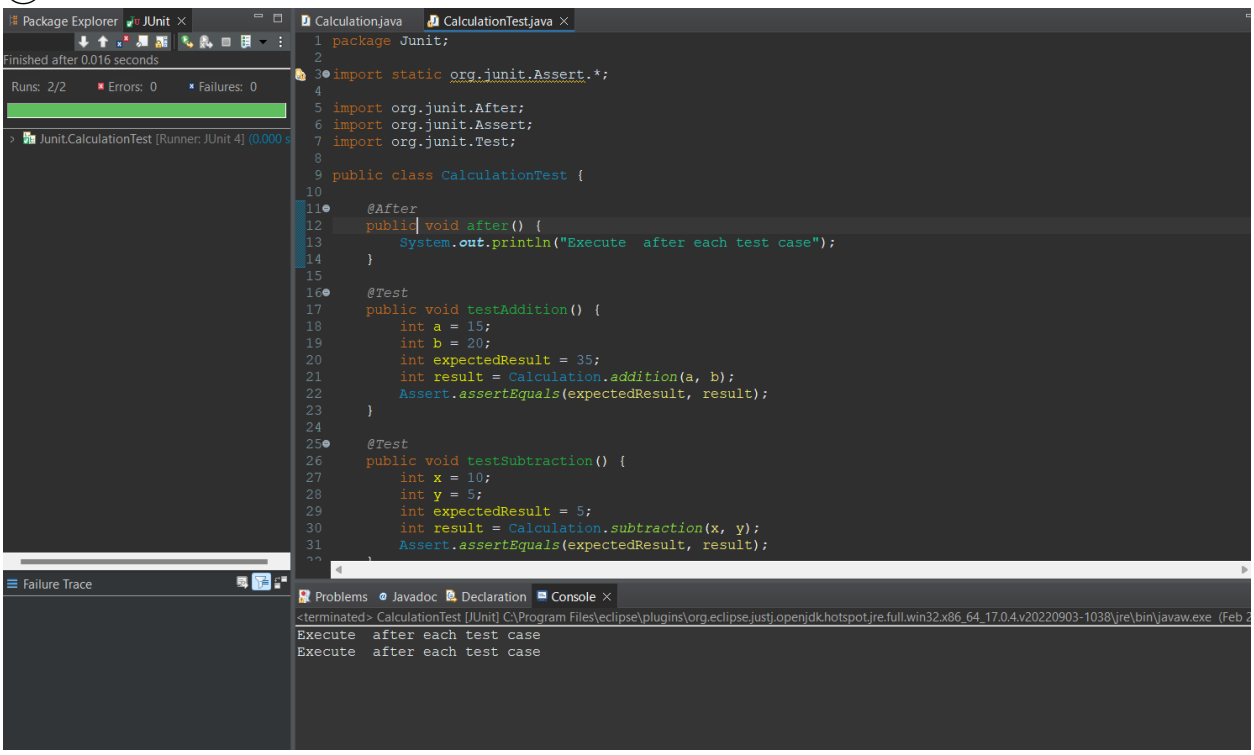
@Before annotation



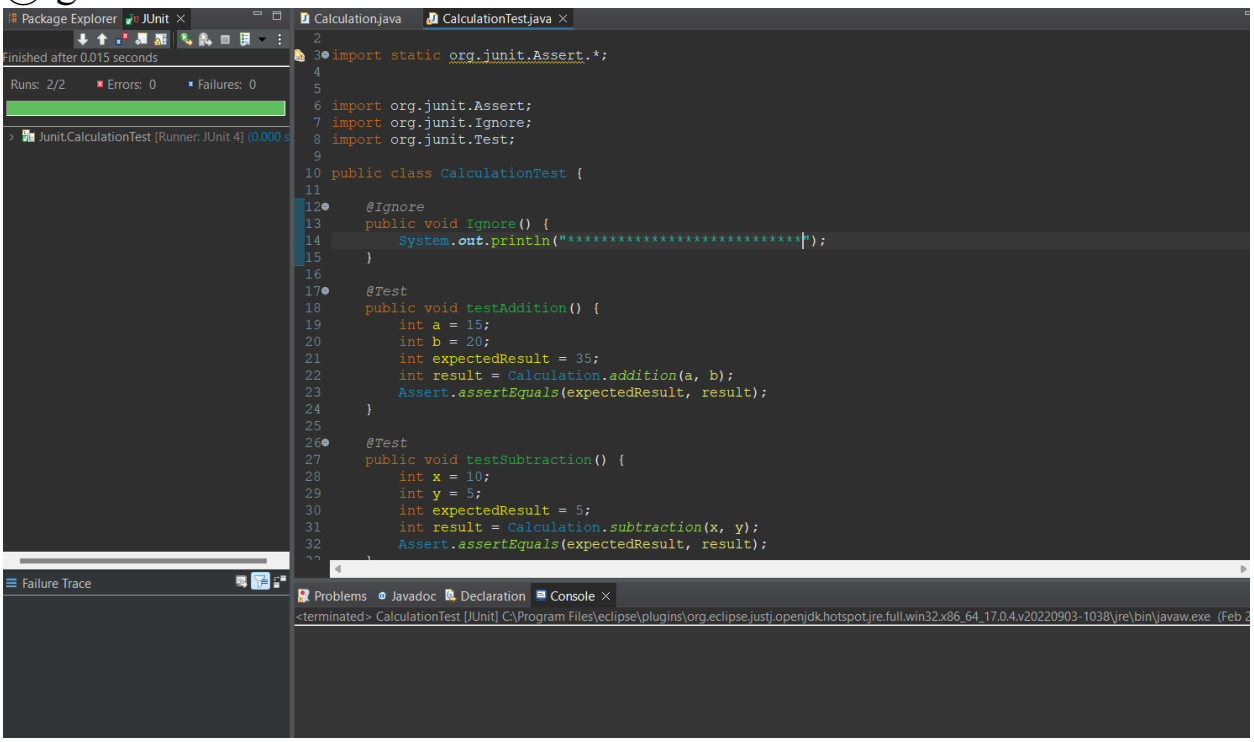
@BeforeClass annotation



@After annotation



@Ignore annotation



Creating a Test Suite