Home Tasks:

Home Task 1:

Write a test case for the below java file

public class Junit4Test {

    public int compare(int n1, int n2) {

        if (n1 > n2) return 1;

        return -1;

    }

}

Code:

public class Junit4Test {

public int compare(int n1, int n2) {

if (n1 > n2) return 1;

return -1;

}

}

Testcase:

import org.junit.Test;

import static org.junit.Assert.\*;

public class Junit4TestTest {

@Test

public void testCompare\_WhenFirstIsGreater() {

Junit4Test obj = new Junit4Test();

int result = obj.compare(5, 3);

assertEquals(1, result);

}

@Test

public void testCompare\_WhenSecondIsGreater() {

Junit4Test obj = new Junit4Test();

int result = obj.compare(2, 4);

assertEquals(-1, result);

}

@Test

public void testCompare\_WhenEqual() {

Junit4Test obj = new Junit4Test();

int result = obj.compare(3, 3);

assertEquals(-1, result); // This is based on your logic

}

}

Output:

Tests run: 3, Failures: 0, Errors: 0

BUILD SUCCESS

**Home task 2:**

public int compare(int n1, int n2) {

    if (n1 > n2) return 1;

    else if (n1 < n2) return -1;

    return 0;

}

Code:

public class Junit4Test {

public int compare(int n1, int n2) {

if (n1 > n2) return 1;

else if (n1 < n2) return -1;

return 0;

}

}

Testcase:

public class Junit4Test {

public int compare(int n1, int n2) {

if (n1 > n2) return 1;

else if (n1 < n2) return -1;

return 0;

}

}

Output:

Tests run: 3, Failures: 0, Errors: 0

BUILD SUCCESS

Hoe Task 3:

Include a test case and run the test suite.

Test Suite:

- its a bundle of unit test cases and run them

all together.

    @Suite

    @RunWith

TestSuite Demo

import org.junit.runner.RunWith;

import org.junit.runners.Suite;

@RunWith(Suite.class)

@Suite.SuiteClasses( {

    JunitTest01.class,

    JunitTest02.class,

    JunitTest03.class

})

public class TestSuiteDemo {

}

JunitTest01.java

import org,junit.Test;

import static org.junit.Assert.assetEquals;

import org.junit.Igore;

public class junitTest01 {

    String msg = "running test01 ";

    MessageUtil msgUtilobj = new MessageUtil(msg);

    //MessageUtil is a utility class

    //store a message

    @Test

    public void msgTest() {

        sout("we are inside the msgtest()");

        assertEquals(msg, msgUtilobj.printMessage());

    }

}

junitTest02.java

test Runner

code:

public class MessageUtil {

private String message;

public MessageUtil(String message) {

this.message = message;

}

public String printMessage() {

return message;

}

}

JunitTest01.java:

import org.junit.Test;

import static org.junit.Assert.assertEquals;

public class JunitTest01 {

String msg = "running test01";

MessageUtil msgUtilObj = new MessageUtil(msg);

@Test

public void msgTest() {

System.out.println("Inside JunitTest01 -> msgTest()");

assertEquals(msg, msgUtilObj.printMessage());

}

}

JunitTest02.java

import org.junit.Test;

import static org.junit.Assert.assertEquals;

public class JunitTest02 {

String msg = "running test02";

MessageUtil msgUtilObj = new MessageUtil(msg);

@Test

public void msgTest() {

System.out.println("Inside JunitTest02 -> msgTest()");

assertEquals(msg, msgUtilObj.printMessage());

}

}

JunitTest03.java

import org.junit.Test;

import static org.junit.Assert.assertEquals;

public class JunitTest03 {

String msg = "running test03";

MessageUtil msgUtilObj = new MessageUtil(msg);

@Test

public void msgTest() {

System.out.println("Inside JunitTest03 -> msgTest()");

assertEquals(msg, msgUtilObj.printMessage());

}

}

TestSuiteDemo.java

import org.junit.runner.RunWith;

import org.junit.runners.Suite;

@RunWith(Suite.class)

@Suite.SuiteClasses({

JunitTest01.class,

JunitTest02.class,

JunitTest03.class

})

public class TestSuiteDemo {

// no code needed here

}

Output:

Inside JunitTest01 -> msgTest()

Inside JunitTest02 -> msgTest()

Inside JunitTest03 -> msgTest()

Tests run: 3, Failures: 0, Errors: 0

BUILD SUCCESS

Home Task 4:

Implement the above code also add one more test case and test runner.. And execute the test suite.

JunitTest01.java

import org,junit.Test;

import static org.junit.Assert.assetEquals;

import org.junit.Igore;

public class junitTest01 {

    String msg = "running test01 ";

    MessageUtil msgUtilobj = new MessageUtil(msg);

    //MessageUtil is a utility class

    //store a message

    @Test

    public void msgTest() {

        sout("we are inside the msgtest()");

        assertEquals(msg, msgUtilobj.printMessage());

    }

}

junitTest02.java

test Runner

code:

public class MessageUtil {

private String message;

public MessageUtil(String message) {

this.message = message;

}

public String printMessage() {

return message;

}

}

JunitTest01.java:

import org.junit.Test;

import static org.junit.Assert.assertEquals;

public class JunitTest01 {

String msg = "running test01";

MessageUtil msgUtilObj = new MessageUtil(msg);

@Test

public void msgTest() {

System.out.println("Inside JunitTest01 -> msgTest()");

assertEquals(msg, msgUtilObj.printMessage());

}

}

JunitTest02.java

import org.junit.Test;

import static org.junit.Assert.assertEquals;

public class JunitTest02 {

String msg = "running test02";

MessageUtil msgUtilObj = new MessageUtil(msg);

@Test

public void msgTest() {

System.out.println("Inside JunitTest02 -> msgTest()");

assertEquals(msg, msgUtilObj.printMessage());

}

}

JunitTest03.java

import org.junit.Test;

import static org.junit.Assert.assertEquals;

public class JunitTest03 {

String msg = "running test03";

MessageUtil msgUtilObj = new MessageUtil(msg);

@Test

public void msgTest() {

System.out.println("Inside JunitTest03 -> msgTest()");

assertEquals(msg, msgUtilObj.printMessage());

}

}

TestSuiteDemo.java

import org.junit.runner.RunWith;

import org.junit.runners.Suite;

@RunWith(Suite.class)

@Suite.SuiteClasses({

JunitTest01.class,

JunitTest02.class,

JunitTest03.class

})

public class TestSuiteDemo {

// no code needed here

}

import org.junit.runner.JUnitCore;

import org.junit.runner.Result;

import org.junit.runner.notification.Failure;

public class TestRunner {

public static void main(String[] args) {

Result result = JUnitCore.runClasses(TestSuiteDemo.class);

for (Failure failure : result.getFailures()) {

System.out.println("Failure: " + failure.toString());

}

System.out.println("All tests successful: " + result.wasSuccessful());

}

}

output:

Inside JunitTest01 -> msgTest()

Inside JunitTest02 -> msgTest()

Inside JunitTest03 -> msgTest()

Inside JunitTest03 -> upperCaseTest()

All tests successful: true