

## JUnit Test in Java

// StringFunction.java with two methods

```
public class StringFunction {
    public String StringJoin(String str1, String str2)
    {
        if (str1.length() == 0 && str2.length()==0)
            return "Empty";
        else
            return str1 + str2;
    }

    public int Multiply(int x, int y){
        return(x * y);
    }
}
```

// RecSum.java

```
public class RecSum {
    public static void main(String[] args) {
        // if your input is 5 ==> 1+2+3+4+5
        Scanner in = new Scanner(System.in);
        System.out.print("Type a Number: ");
        int n = in.nextInt();
        RecSum r1 = new RecSum();

        System.out.println("Sum = " + r1.Sum(n));
    }
    public int Sum(int n)
    {
        if (n == 1)                //base case
            return 1;
        else
            return Sum(n-1) + n; //general case
    }
}
```

```

// Test Case

import static org.junit.Assert.*;

import org.junit.Test;

public class StringFunctionTest {

    @Test
    public void test() {
        StringFunction sf = new StringFunction();
        String Ooutput = sf.StringJoin("Renuka",
"Mohanraj");
        String Eoutput = "RenukaMohanra";
        assertEquals(Ooutput,Eoutput);
    }
    @Test
    public void test2()
    {
        StringFunction sf = new StringFunction();
        int ao =sf.Multiply(10, 20);
        int eo = 200;
        assertEquals(ao,eo);
    }

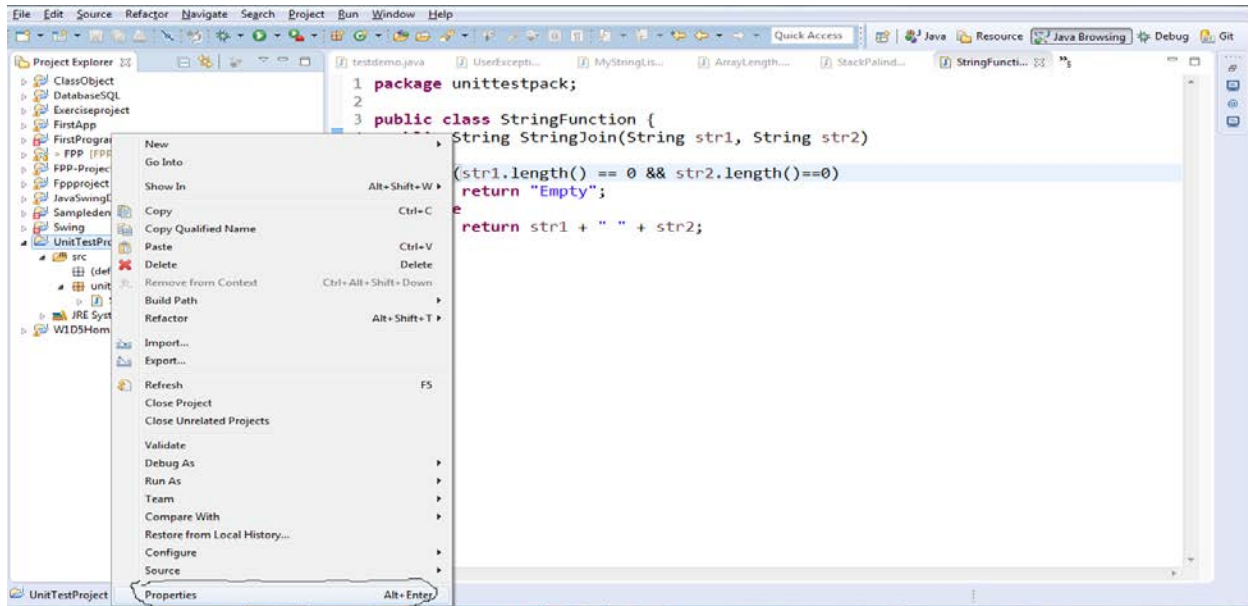
    @Test
    public void test3(){
        RecSum rs = new RecSum();
        int eo = 10;
        int op = rs.Sum(4);
        assertEquals(eo,op);
    }
}

```

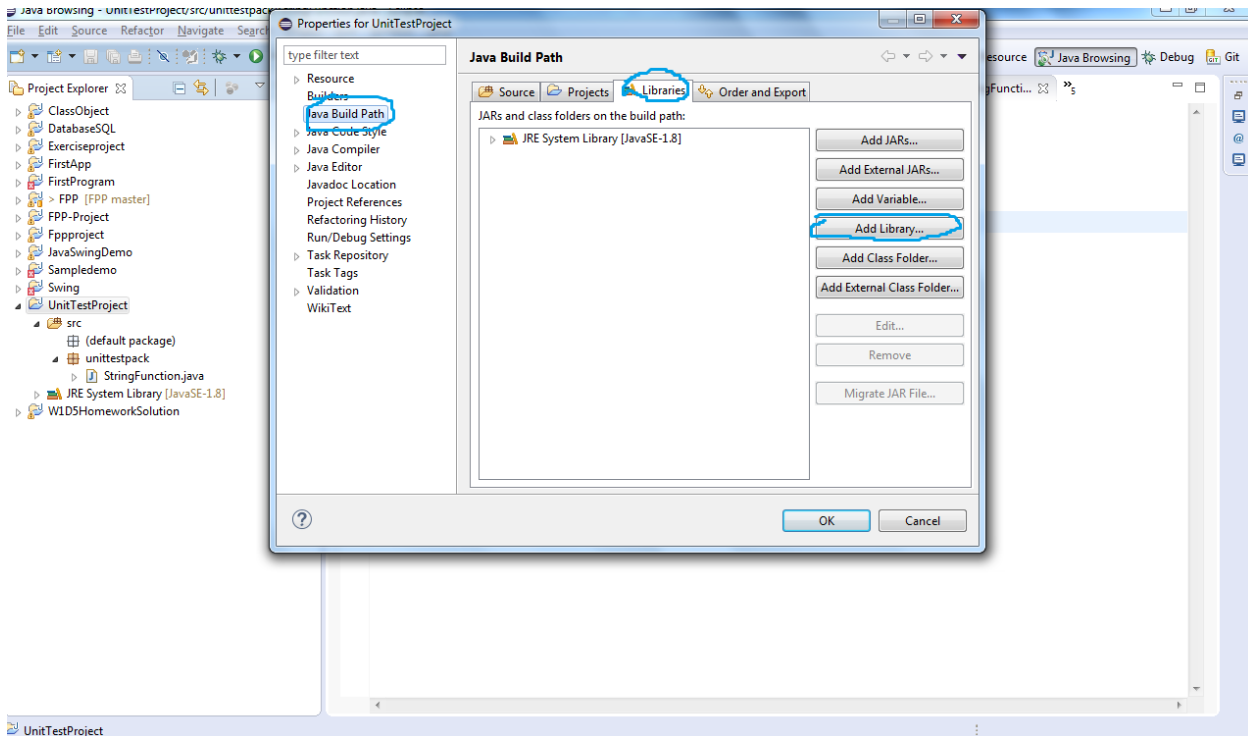
**To run the above code follow to perform JUnit test follow the steps given below**

Step 1:

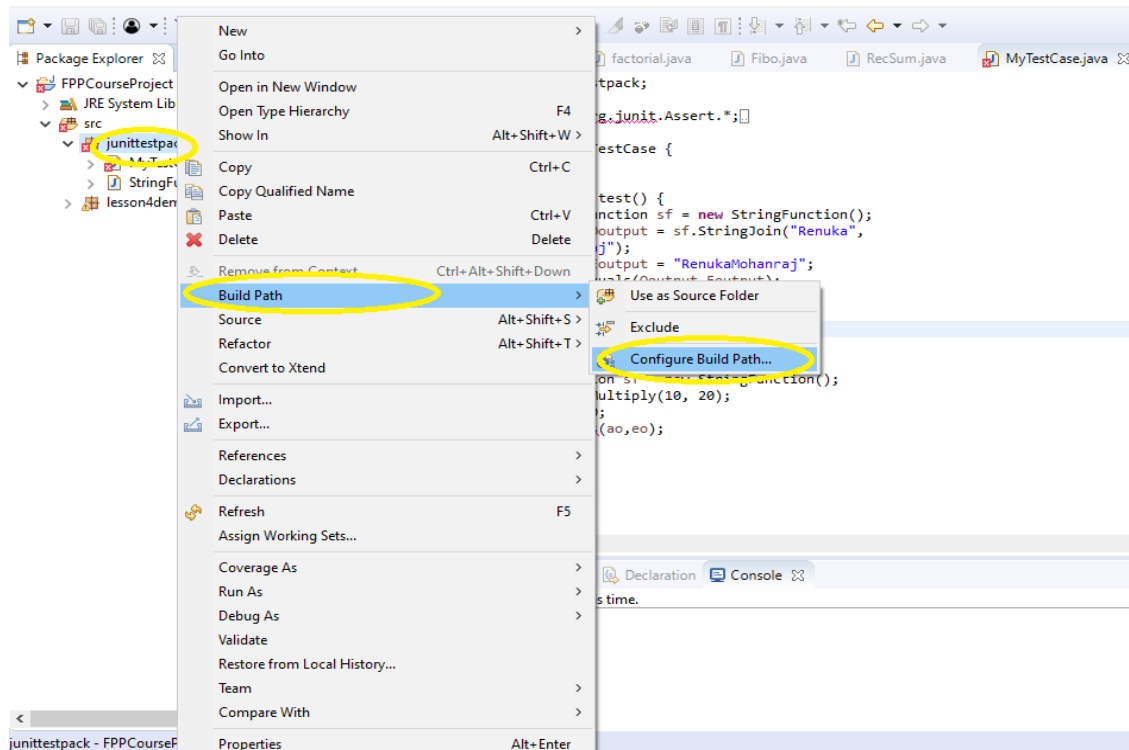
Right click on the your project ->Properties



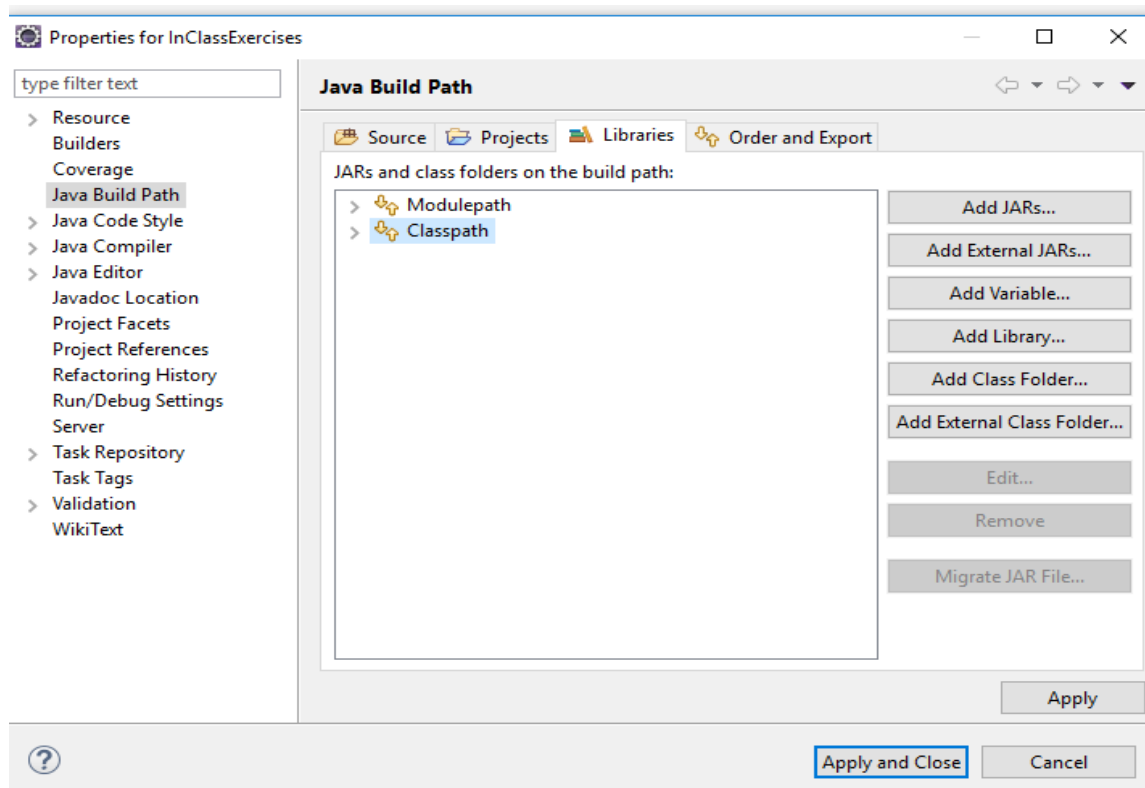
Step 2 :



Step 1 and Step 2 does not work, follow the highlighted options from the below screenshot.

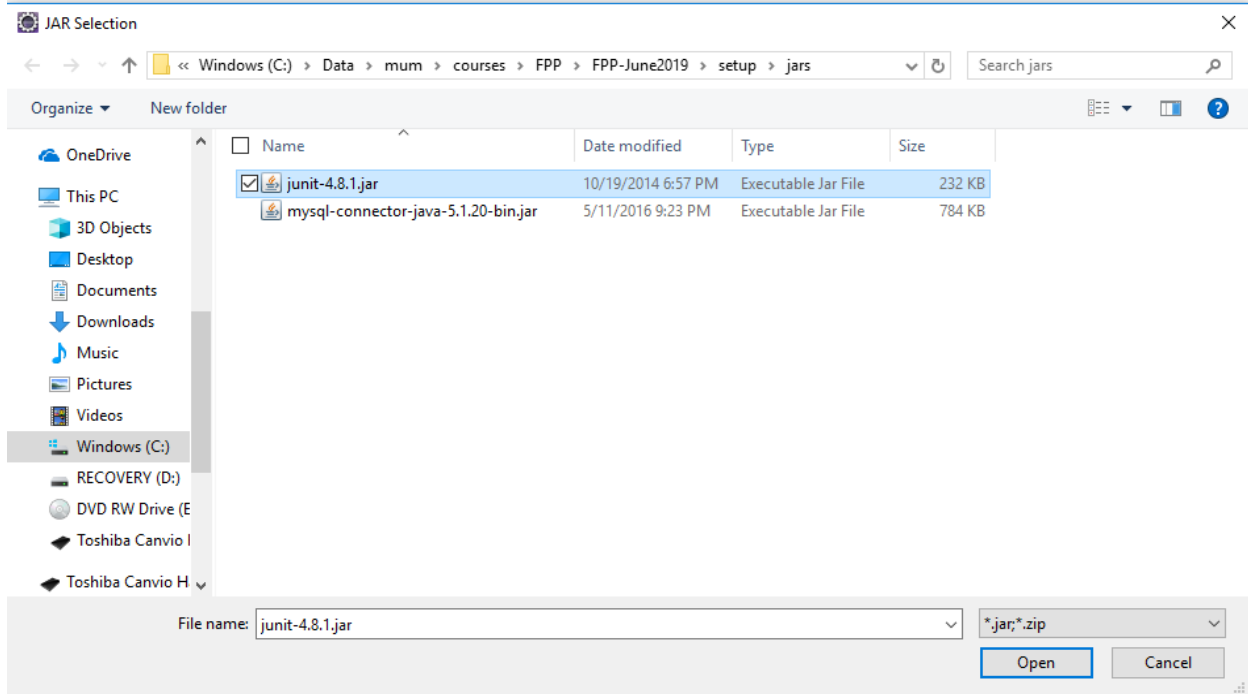


Step 3 : You need to add junit-4.8.1.jar to the "classpath". select Classpath, and click Add External Jars...

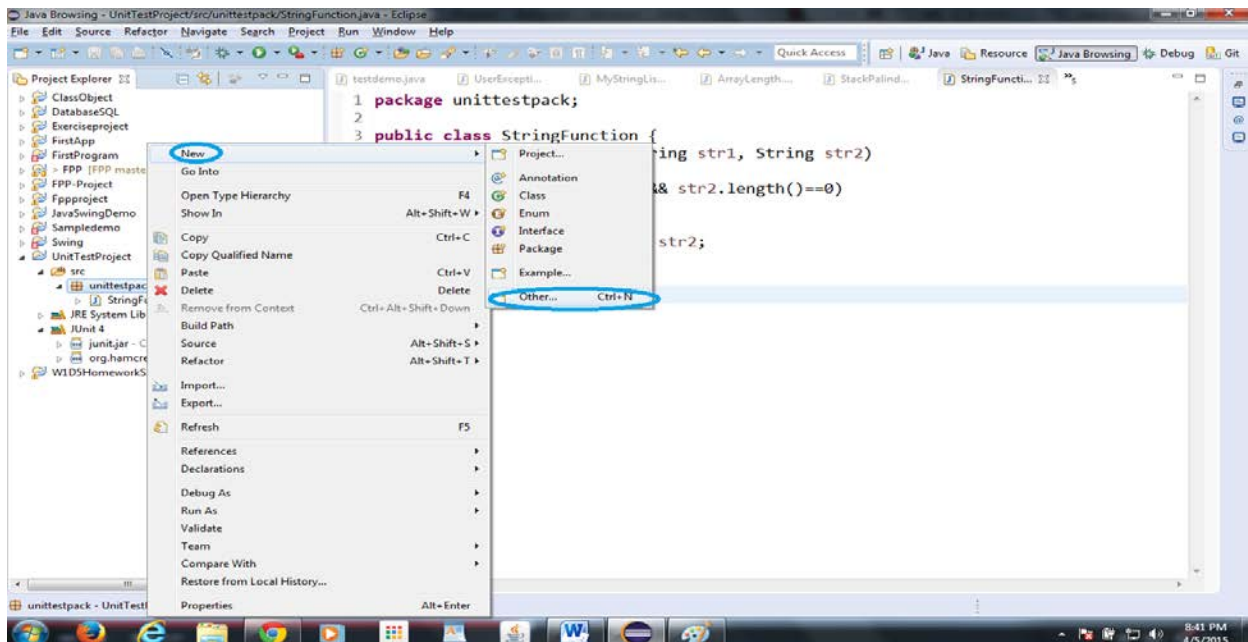


Step : 4

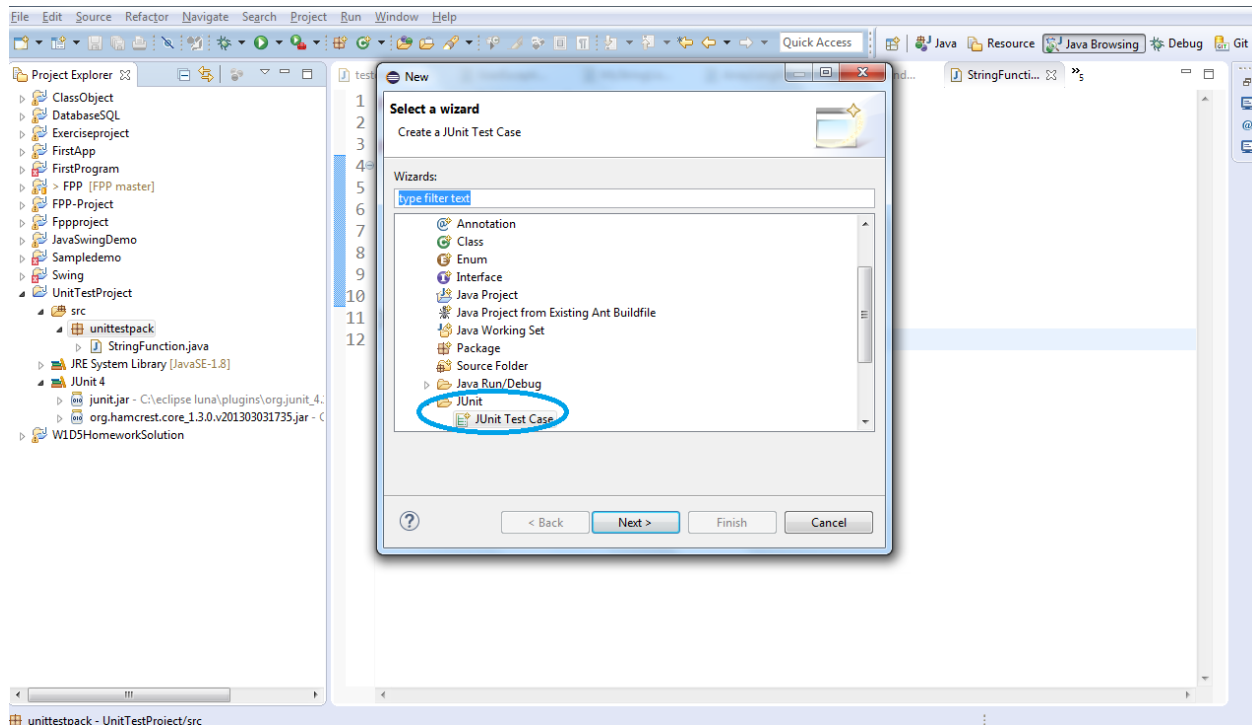
- Download the Junit jar file from Resources/DemoCode/lesson4/ junit-4.8.1.jar. Navigate the junit-4.8.1.jar path from your pc, then click open.



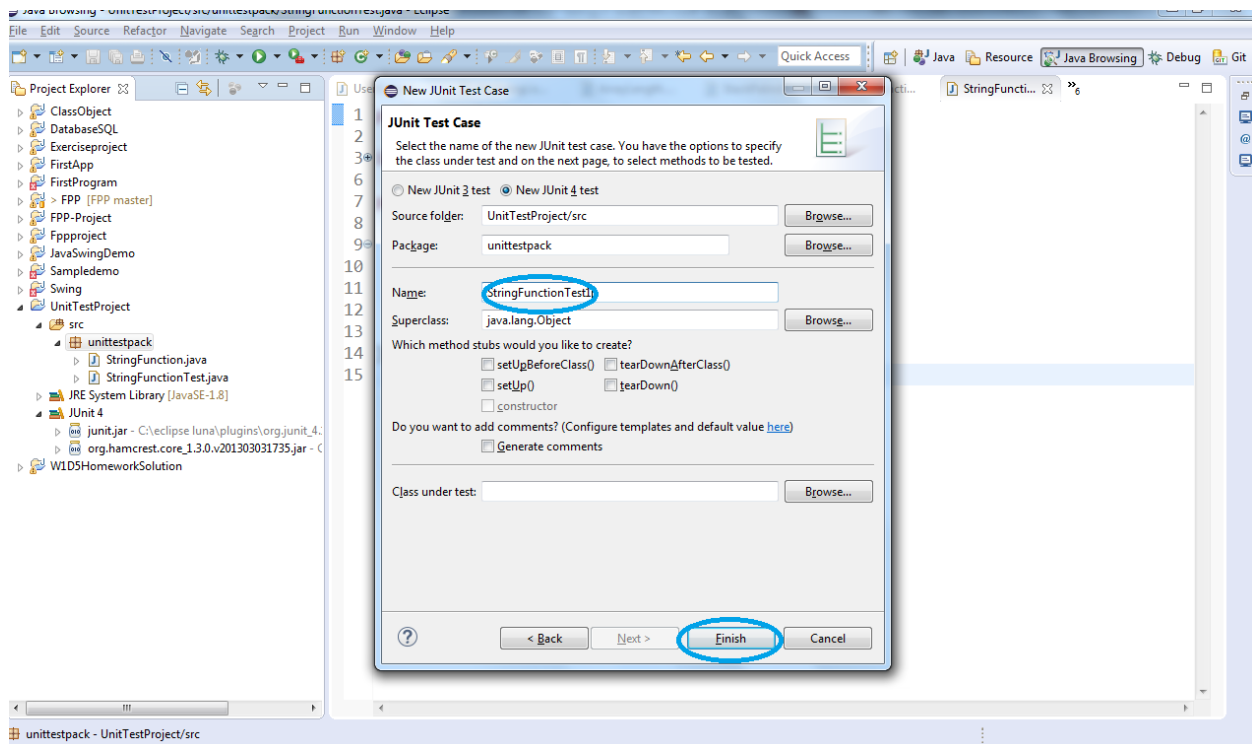
Step 5: Right click on your project, select New → Junit Test Case. If you not found click New→ other→Junit Test Case.



## Step 6:



## Step 7



## Step 8: Write the test case

