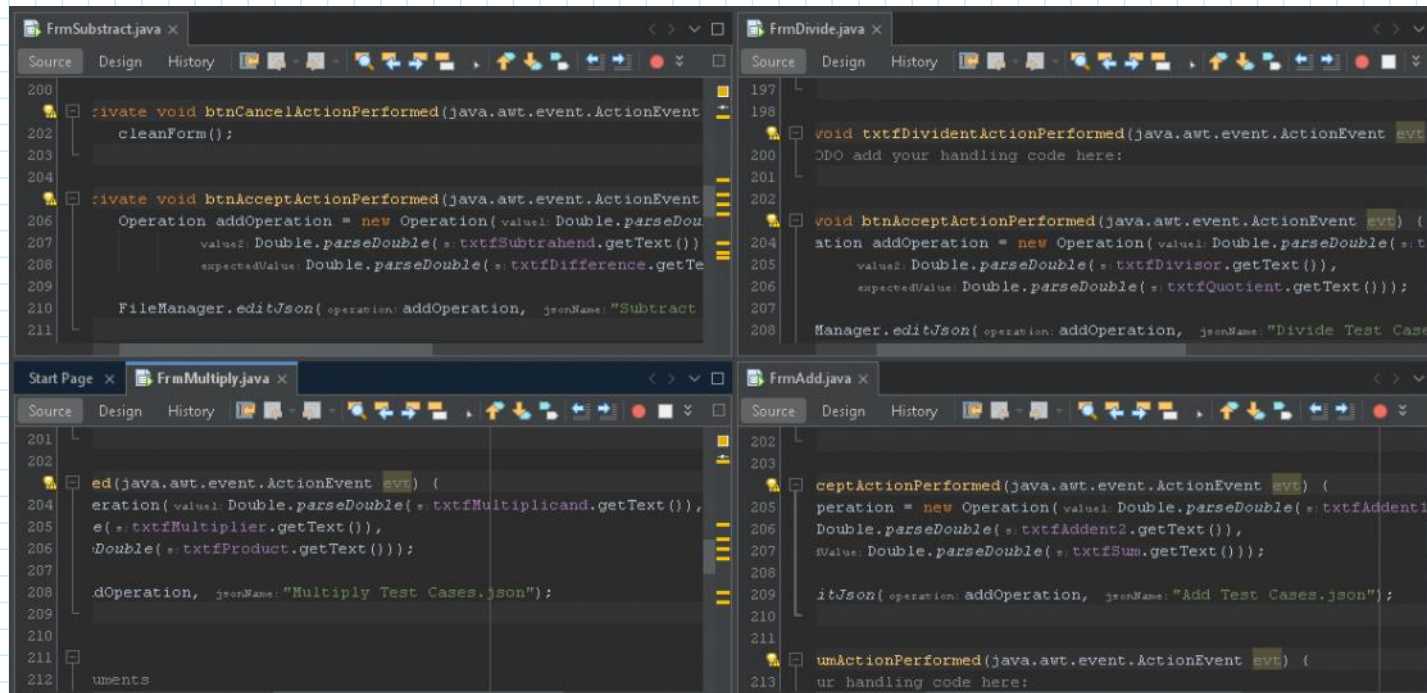


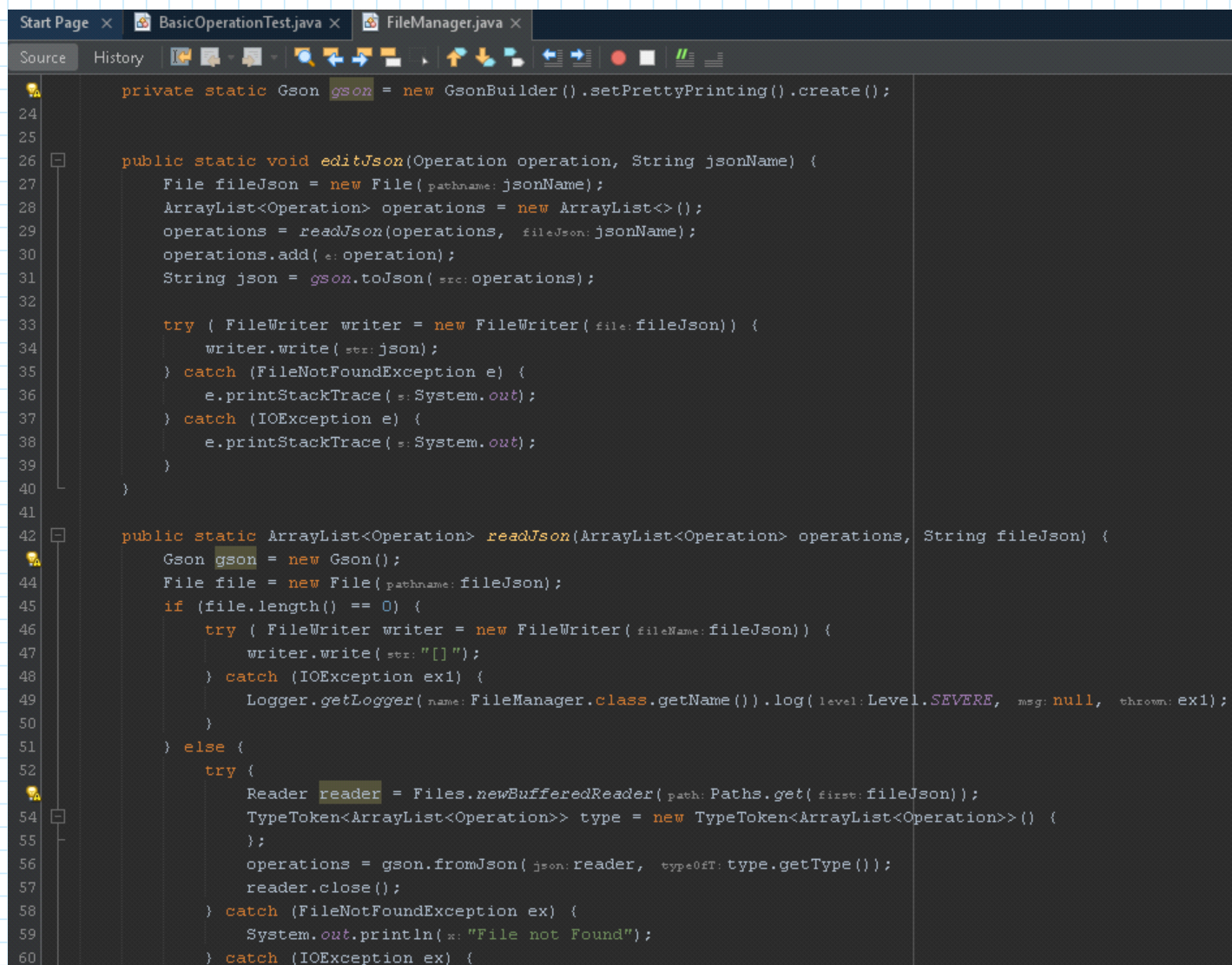
# HW18testCaseJSON

jueves, 2 de febrero de 2023 22:17



The screenshot displays four Java IDE windows, each showing a different form's action logic. The windows are titled 'FrmSubtract.java', 'FrmDivide.java', 'FrmMultiply.java', and 'FrmAdd.java'. Each window has tabs for 'Source', 'Design', and 'History'. The code in each window is as follows:

- FrmSubtract.java:** Contains two methods: `btnCancelActionPerformed` which calls `cleanForm()`, and `btnAcceptActionPerformed` which creates an `Operation` object with values from `txtfSubtrahend` and `txtfDifference`, and then calls `FileManager.editJson` with `jsonName: "Subtract"`.
- FrmDivide.java:** Contains two methods: `txtfDividentActionPerformed` which has a placeholder comment 'TODO add your handling code here:', and `btnAcceptActionPerformed` which creates an `Operation` object with values from `txtfDivisor` and `txtfQuotient`, and then calls `Manager.editJson` with `jsonName: "Divide Test Case"`.
- FrmMultiply.java:** Contains a single method `ed` which creates an `Operation` object with values from `txtfMultiplicand` and `txtfMultiplier`, and then calls `FileManager.editJson` with `jsonName: "Multiply Test Cases.json"`.
- FrmAdd.java:** Contains two methods: `ceptActionPerformed` which creates an `Operation` object with values from `txtfAddent1` and `txtfAddent2`, and then calls `itJson` with `jsonName: "Add Test Cases.json"`; and `umActionPerformed` which has a placeholder comment 'ur handling code here:'.



The screenshot displays two Java IDE windows, each showing a different class's code. The windows are titled 'BasicOperationTest.java' and 'FileManager.java'. The code in each window is as follows:

- BasicOperationTest.java:** Contains a single method `ed` which creates an `Operation` object with values from `txtfMultiplicand` and `txtfMultiplier`, and then calls `FileManager.editJson` with `jsonName: "Multiply Test Cases.json"`.
- FileManager.java:** Contains two static methods: `editJson` which takes an `Operation` object and a `String` `jsonName`, and `readJson` which takes an `ArrayList<Operation>` and a `String` `fileJson`. The `editJson` method creates a `Gson` object, reads the existing JSON data, adds the new operation, and writes it back to the file. The `readJson` method creates a `Gson` object, reads the JSON data from the file, and returns the `ArrayList<Operation>`.

```
Start Page x BasicOperationTest.java x FileManager.java x
Source History
13
14 public BasicOperationTest() {
15 }
16
17 ArrayList<Operation> operations = new ArrayList<>();
18
19 /**
20  * Test of add method, of class BasicOperation.
21  */
22 @Test
23 public void testAdd() {
24     operations = FileManager.readJson(operations, fileJson:"Add Test Cases.json");
25     System.out.println( x:"add");
26     for (int i = 0; i < operations.size(); i++) {
27         double addend1 = operations.get( index:i).getValue1();
28         double addend2 = operations.get( index:i).getValue2();
29         double expResult = operations.get( index:i).getExpectedValue();
30         double result = BasicOperation.add(addend1, addend2:addend2);
31         assertEquals( expected:expResult, actual:result, delta:0);
32     }
33 }
34
35 /**
36  * Test of subtract method, of class BasicOperation.
37  */
38 @Test
39 public void testSubtract() {
40
41     operations = FileManager.readJson(operations, fileJson:"Subtract Test Cases.json");
42     System.out.println( x:"subtract");
43     for (int i = 0; i < operations.size(); i++) {
44         double minuend = operations.get( index:i).getValue1();
45         double subtrahend = operations.get( index:i).getValue2();
46         double expResult = operations.get( index:i).getExpectedValue();
47         double result = BasicOperation.subtract(minuend, subtrahend);
48         assertEquals( expected:expResult, actual:result, delta:0);
49     }
50 }
51
52 /**
53  * Test of multiply method, of class BasicOperation.
54  */
55 @Test
56 public void testMultiply() { ...12 lines }
57
58
59 /**
60  * Test of divide method, of class BasicOperation.
61  */
62 @Test
63 public void testDivide() { ...11 lines }
64
65 }
```

**Add**

Return

Addent1		Addent2		Expected Sum
-11.55	+	7.6	=	-3.95

Accept Cancel

```
1  [
2    {
3      "value1": -11.55,
4      "value2": 7.6,
5      "expectedValue": -3.95
6    }
7  ]
```

**Subtract**

Return

Minuend		Subtrahend		Difference
-7.88	-	11	=	-18.88

Accept Cancel

```
1  Subtract Test Cases.json
2  [
3    {
4      "value1": -7.88,
5      "value2": 11.0,
6      "expectedValue": -18.88
7    }
8  ]
```

**Multiply**

Return

Multiplicand		Multiplier		Product
78	x	899.333	=	70147.974

Accept Cancel

```
1  Multiply Test Cases.json
2  [
3    {
4      "value1": 78.0,
5      "value2": 899.333,
6      "expectedValue": 70147.974
7    }
8  ]
```

**Divide**

Return

Divident		Quotient
999999	/	170067.857

Divisor 5.88

Accept Cancel

```
1  [
2    {
3      "value1": 999999.0,
4      "value2": 5.88,
5      "expectedValue": 170067.857
6    }
7  ]
```

 Add Test Cases.json	05/02/2023 21:09
 build.xml	31/01/2023 15:03
 Divide Test Cases.json	05/02/2023 21:15
 manifest.mf	31/01/2023 9:03
 Multiply Test Cases.json	05/02/2023 21:12
 Subtract Test Cases.json	05/02/2023 21:11

```
16         for (int i = 0; i < operations.size(); i++) {
17             double addend1 = operations.get( index:i).getValue1();
18             double addent2 = operations.get( index:i).getValue2();
19             double expResult = operations.get( index:i).getExpectedValue();
```

Test Results ×    Output - UnitTestWithAnd (test)

ec.edu.espe.calculator.controller.BasicOperationTest ×

Tests passed: 100,00 %

All 4 tests passed. (0,073 s)

- ✓ ec.edu.espe.calculator.controller.BasicOperationTest passed
  - ✓ testAdd passed (0,023 s)
  - ✓ testSubtract passed (0,0 s)
  - ✓ testDivide passed (0,001 s)
  - ✓ testMultiply passed (0,001 s)

add  
substract  
divide  
multiply