

COMP 3133

Lab02 – ScreenShots

1) Terminal Output

```
PS C:\Sem - 6\COMP - 3133\Lab - 2\lab2_mocha_test\lab2_mocha_test> npm test
⊙ PS C:\Sem - 6\COMP - 3133\Lab - 2\lab2_mocha_test\lab2_mocha_test> npm test

> lab2_mocha_test@1.0.0 test
> mocha

Calculator Test Cases
ADD
ADD PASS
  ✓ PASS: add(5,2) should be 7
  1) FAIL: add(5,2) should be 8
SUB
SUB PASS
  ✓ PASS: sub(5,2) should be 3
  2) FAIL: sub(5,2) should be 5
MUL
MUL PASS
  ✓ PASS: mul(5,2) should be 10
  3) FAIL: mul(5,2) should be 12
DIV
DIV PASS
  ✓ PASS: div(10,2) should be 5
  4) FAIL: div(10,2) should be 2

4 passing (9ms)
4 failing
```

1) Calculator Test Cases

ADD

FAIL: add(5,2) should be 8:

AssertionError: expected 7 to equal 8

+ expected - actual

-7

+8

at Context.<anonymous> (test\calculator.test.js:17:25)

at process.processImmediate (node:internal/timers:505:21)

2) Calculator Test Cases

SUB

FAIL: sub(5,2) should be 5:

AssertionError: expected 3 to equal 5

+ expected - actual

-3

+5

at Context.<anonymous> (test\calculator.test.js:31:25)

at process.processImmediate (node:internal/timers:505:21)

3) Calculator Test Cases

MUL

FAIL: mul(5,2) should be 12:

AssertionError: expected 10 to equal 12

+ expected - actual

-10

+12

at Context.<anonymous> (test\calculator.test.js:45:25)

at process.processImmediate (node:internal/timers:505:21)

4) Calculator Test Cases

DIV

FAIL: div(10,2) should be 2:

AssertionError: expected 5 to equal 2

+ expected - actual

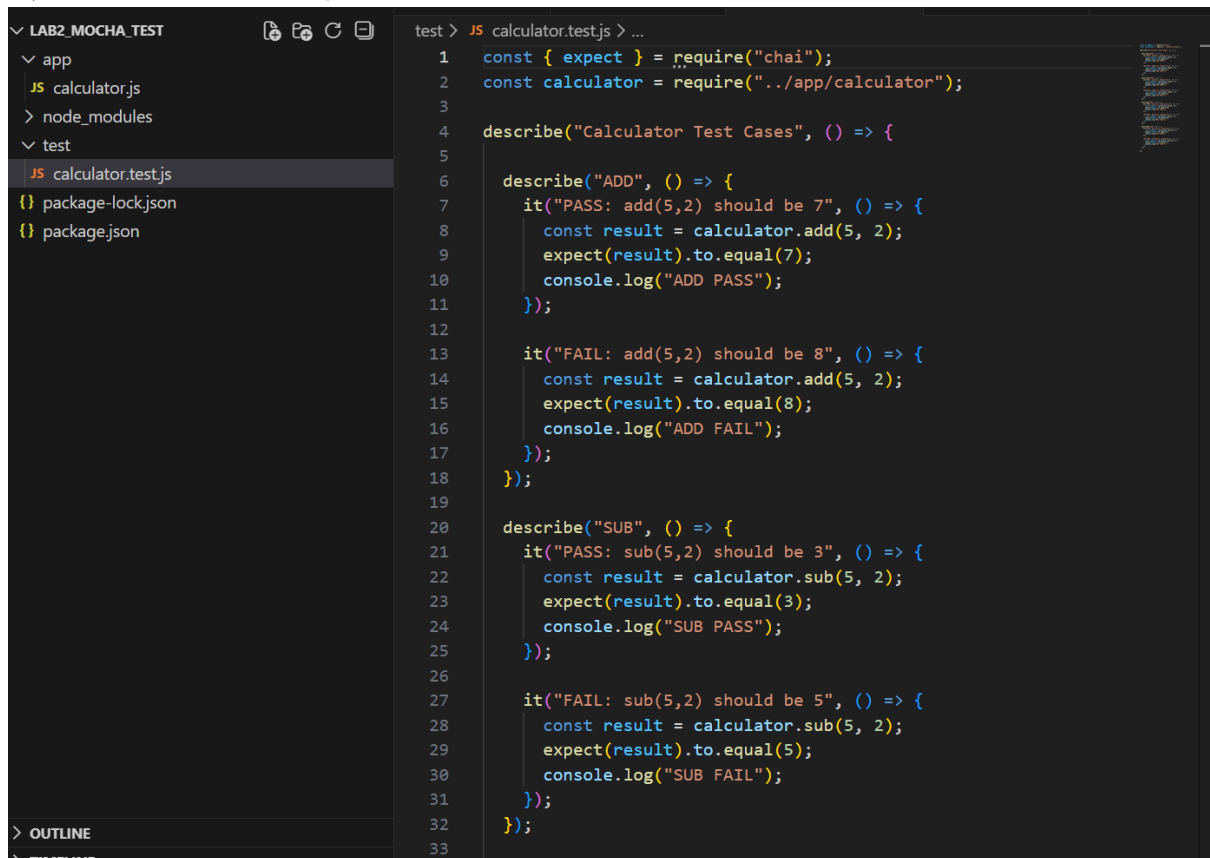
-5

+2

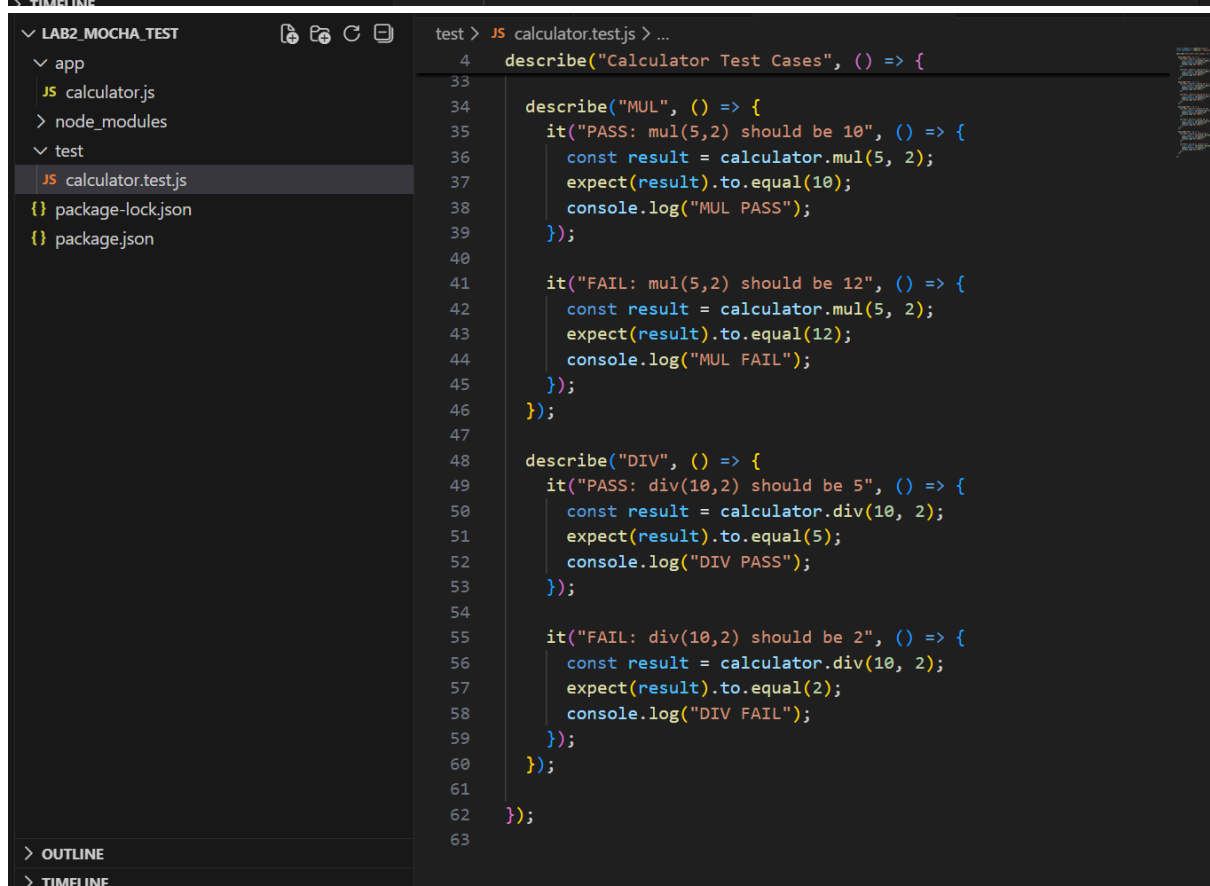
at Context.<anonymous> (test\calculator.test.js:59:25)

at process.processImmediate (node:internal/timers:505:21)

2) calculator.test.js

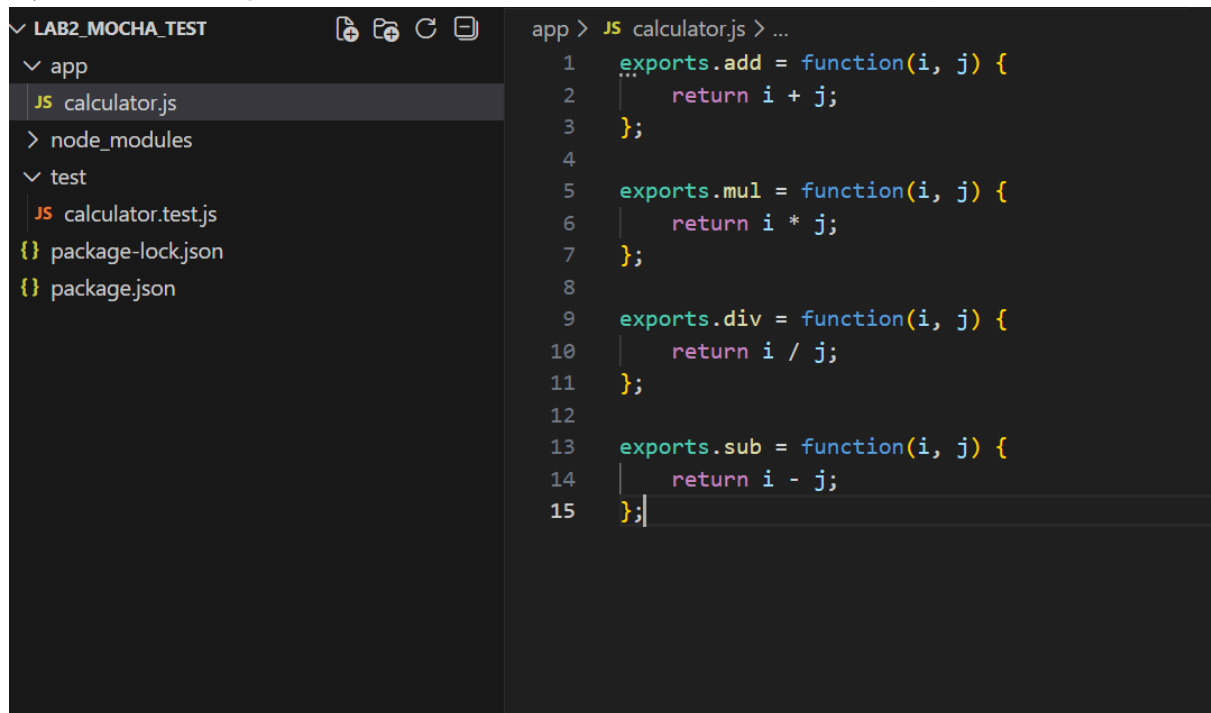


```
test > JS calculator.test.js > ...
1  const { expect } = require("chai");
2  const calculator = require("../app/calculator");
3
4  describe("Calculator Test Cases", () => {
5
6      describe("ADD", () => {
7          it("PASS: add(5,2) should be 7", () => {
8              const result = calculator.add(5, 2);
9              expect(result).to.equal(7);
10             console.log("ADD PASS");
11         });
12
13         it("FAIL: add(5,2) should be 8", () => {
14             const result = calculator.add(5, 2);
15             expect(result).to.equal(8);
16             console.log("ADD FAIL");
17         });
18     });
19
20     describe("SUB", () => {
21         it("PASS: sub(5,2) should be 3", () => {
22             const result = calculator.sub(5, 2);
23             expect(result).to.equal(3);
24             console.log("SUB PASS");
25         });
26
27         it("FAIL: sub(5,2) should be 5", () => {
28             const result = calculator.sub(5, 2);
29             expect(result).to.equal(5);
30             console.log("SUB FAIL");
31         });
32     });
33 }
```



```
test > JS calculator.test.js > ...
4      describe("Calculator Test Cases", () => {
33
34          describe("MUL", () => {
35              it("PASS: mul(5,2) should be 10", () => {
36                  const result = calculator.mul(5, 2);
37                  expect(result).to.equal(10);
38                  console.log("MUL PASS");
39              });
40
41              it("FAIL: mul(5,2) should be 12", () => {
42                  const result = calculator.mul(5, 2);
43                  expect(result).to.equal(12);
44                  console.log("MUL FAIL");
45              });
46          });
47
48          describe("DIV", () => {
49              it("PASS: div(10,2) should be 5", () => {
50                  const result = calculator.div(10, 2);
51                  expect(result).to.equal(5);
52                  console.log("DIV PASS");
53              });
54
55              it("FAIL: div(10,2) should be 2", () => {
56                  const result = calculator.div(10, 2);
57                  expect(result).to.equal(2);
58                  console.log("DIV FAIL");
59              });
60          });
61      });
62  });
63 }
```

3) calculator.js



The image shows a code editor interface. On the left is a file explorer with the following structure:

- LAB2_MOCHA_TEST
 - app
 - calculator.js**
 - node_modules
 - test
 - calculator.test.js
 - package-lock.json
 - package.json

On the right, the code for `calculator.js` is displayed, with line numbers 1 through 15 on the left margin:

```
1  exports.add = function(i, j) {  
2    |    return i + j;  
3  };  
4  
5  exports.mul = function(i, j) {  
6    |    return i * j;  
7  };  
8  
9  exports.div = function(i, j) {  
10   |    return i / j;  
11 };  
12  
13 exports.sub = function(i, j) {  
14   |    return i - j;  
15 };|
```