

arpit int sum(int num)
 {

 }

sum(5); 1+2+...n
 15

validateFirstname(firstname)
{

 return "Firstname can not be null" / " can have only alphabets and . "
 return ""

}

validateFirstname("abcd");
""

validateFirstname("abcd#434");
can have only alphabets and .

validateFirstname("");
can not be blank

Steps to implement testing using Jasmin framework

1 Download jasmine framework

2 Extract the framework zip file

3 src

 keep js logic files

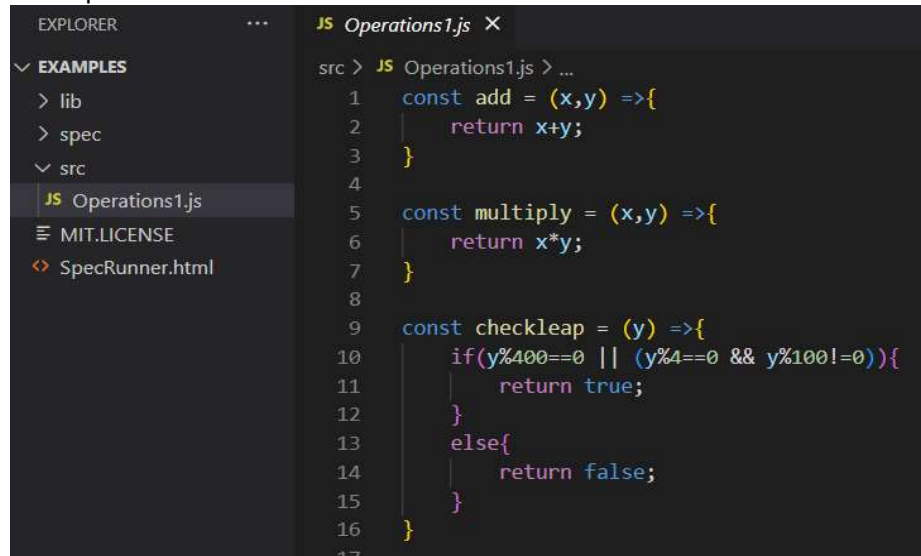
 spec

 keep test case files

4 SpecRunner.html

add above js files references

example src folder



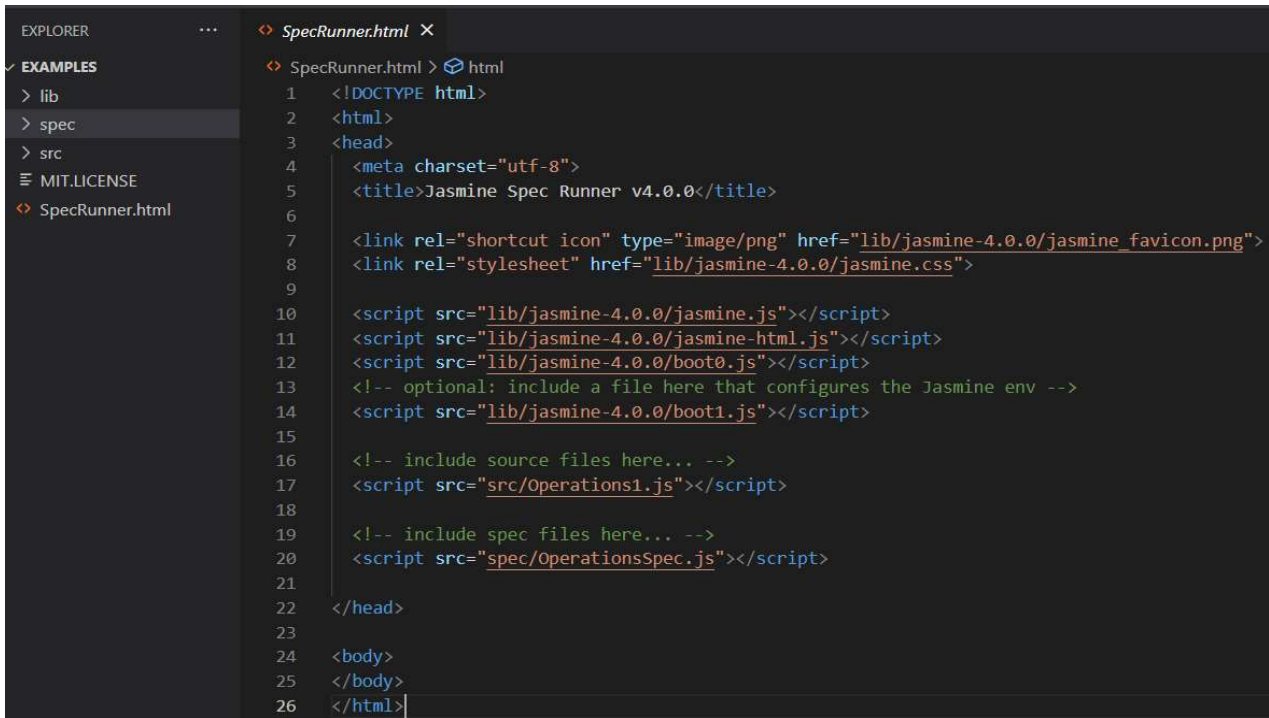
The screenshot shows a code editor with a dark theme. On the left is the 'EXPLORER' sidebar showing a project structure under 'EXAMPLES'. It includes folders 'lib' and 'spec', and a 'src' folder containing 'Operations1.js' (highlighted), 'MIT.LICENSE', and 'SpecRunner.html'. The main editor area shows the content of 'Operations1.js' with the following JavaScript code:

```
src > JS Operations1.js > ...
1  const add = (x,y) =>{
2      return x+y;
3  }
4
5  const multiply = (x,y) =>{
6      return x*y;
7  }
8
9  const checkleap = (y) =>{
10     if(y%400==0 || (y%4==0 && y%100!=0)){
11         return true;
12     }
13     else{
14         return false;
15     }
16 }
17
```

spec example

```
spec > JS OperationsSpec.js > ...
1
2 // describe() creates testsuite
3 describe("Operations-add() method testing", ()=>{
4
5     // in testsuite, creates test case
6     it("Test add() with positive result", ()=>{
7         expect(add(3,4)).toEqual(7);
8     });
9     it("Test add() with positive result", ()=>{
10         expect(add(4,9)).toEqual(13);
11     });
12
13 });
14
15 describe("Operations-checkleap() method testing", ()=>{
16
17     it("Test checkleap() : passing leap", ()=>{
18         expect(checkleap(2023)).toBeFalsy();
19     });
20
21
22     it("Test checkleap() : passing non leap", ()=>{
23         expect(checkleap(2024)).toBeTruthy();
24     });
25
26 });
27
```

add src / spec js files references in html file



```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <meta charset="utf-8">
5   <title>Jasmine Spec Runner v4.0.0</title>
6
7   <link rel="shortcut icon" type="image/png" href="lib/jasmine-4.0.0/jasmine_favicon.png">
8   <link rel="stylesheet" href="lib/jasmine-4.0.0/jasmine.css">
9
10  <script src="lib/jasmine-4.0.0/jasmine.js"></script>
11  <script src="lib/jasmine-4.0.0/jasmine-html.js"></script>
12  <script src="lib/jasmine-4.0.0/boot0.js"></script>
13  <!-- optional: include a file here that configures the Jasmine env -->
14  <script src="lib/jasmine-4.0.0/boot1.js"></script>
15
16  <!-- include source files here... -->
17  <script src="src/Operations1.js"></script>
18
19  <!-- include spec files here... -->
20  <script src="spec/OperationsSpec.js"></script>
21
22 </head>
23
24 <body>
25 </body>
26 </html>
```

describe ()

used to make test suite

describe (____ , ____);

title of test suite

callback with test case(s)

it()

used to make testcase

describe (____ , ____);

title of testcase

callback with function test