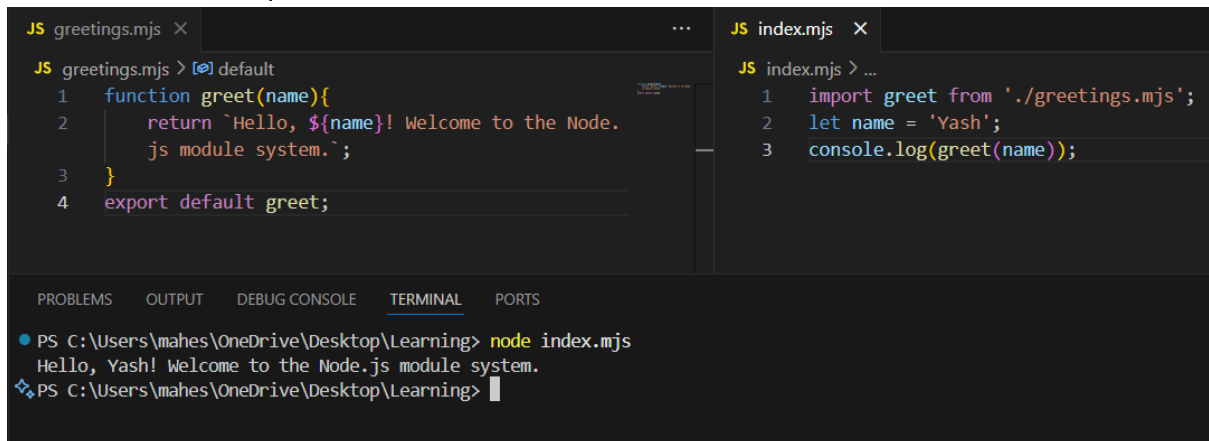


1. Create a `greetings.js` Module –

- Write a function `greet(name)` that returns: "Hello, ! Welcome to the Node.js module system."
- Export the function as a module



The screenshot shows two editor windows in VS Code. The left window, titled 'JS greetings.mjs', contains the following code:

```
1 function greet(name){
2   return `Hello, ${name}! Welcome to the Node.
   js module system.`;
3 }
4 export default greet;
```

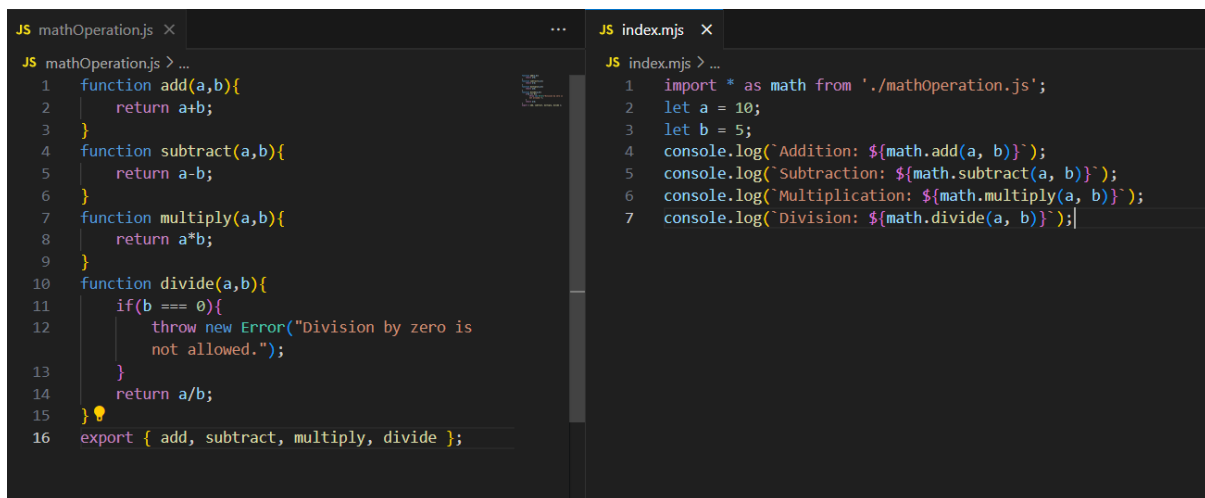
The right window, titled 'JS index.mjs', contains the following code:

```
1 import greet from './greetings.mjs';
2 let name = 'Yash';
3 console.log(greet(name));
```

At the bottom, the TERMINAL panel shows the command `node index.mjs` being executed, resulting in the output: `Hello, Yash! Welcome to the Node.js module system.`

2. Create a `mathOperations.js` Module –

- Write and export the following functions: -
 - `add(a, b)` - returns the sum of two numbers.
 - `subtract(a, b)` - returns the difference between two numbers.
 - `multiply(a, b)` - returns the product of two numbers.
 - `divide(a, b)` - returns the quotient of two numbers.



The screenshot shows two editor windows in VS Code. The left window, titled 'JS mathOperation.js', contains the following code:

```
1 function add(a,b){
2   return a+b;
3 }
4 function subtract(a,b){
5   return a-b;
6 }
7 function multiply(a,b){
8   return a*b;
9 }
10 function divide(a,b){
11   if(b === 0){
12     throw new Error("Division by zero is
      not allowed.");
13   }
14   return a/b;
15 }
16 export { add, subtract, multiply, divide };
```

The right window, titled 'JS index.mjs', contains the following code:

```
1 import * as math from './mathOperation.js';
2 let a = 10;
3 let b = 5;
4 console.log(`Addition: ${math.add(a, b)}`);
5 console.log(`Subtraction: ${math.subtract(a, b)}`);
6 console.log(`Multiplication: ${math.multiply(a, b)}`);
7 console.log(`Division: ${math.divide(a, b)}`);
```

3. Create a `main.js` File

- Import both `greetings.js` and `mathOperations.js`.
- Use `greet(name)` to greet a user.
- Perform all four math operations and log the results.

```
JS mathOperation.js × ... JS index.mjs × ... JS greeting.mjs ×

JS mathOperation.js > ...
1 function add(a,b){
2   return a+b;
3 }
4 function subtract(a,b){
5   return a-b;
6 }
7 function multiply(a,b){
8   return a*b;
9 }
10 function divide(a,b){
11   if(b === 0){
12     throw new Error("Division
13       by zero is not allowed.");
14   }
15   return a/b;
16 }
17 export { add, subtract, multiply,
18   divide };

JS index.mjs > ...
1 import * as math from './mathOperation.
2   js';
3 import greet from './greeting.mjs';
4
5 let name = 'Yash';
6 console.log(greet(name));
7
8 let a = 10;
9 let b = 5;
10 console.log(`Addition: ${math.add(a, b)}
11   `);
12 console.log(`Subtraction: ${math.subtract
13   (a, b)} `);
14 console.log(`Multiplication: ${math.
15   multiply(a, b)} `);
16 console.log(`Division: ${math.divide(a,
17   b)} `);

JS greeting.mjs > greet
1 function greet(name) {
2   return `Hello, ${name}!
3     Welcome to the Node.js
4     module system.`;
5 }
```