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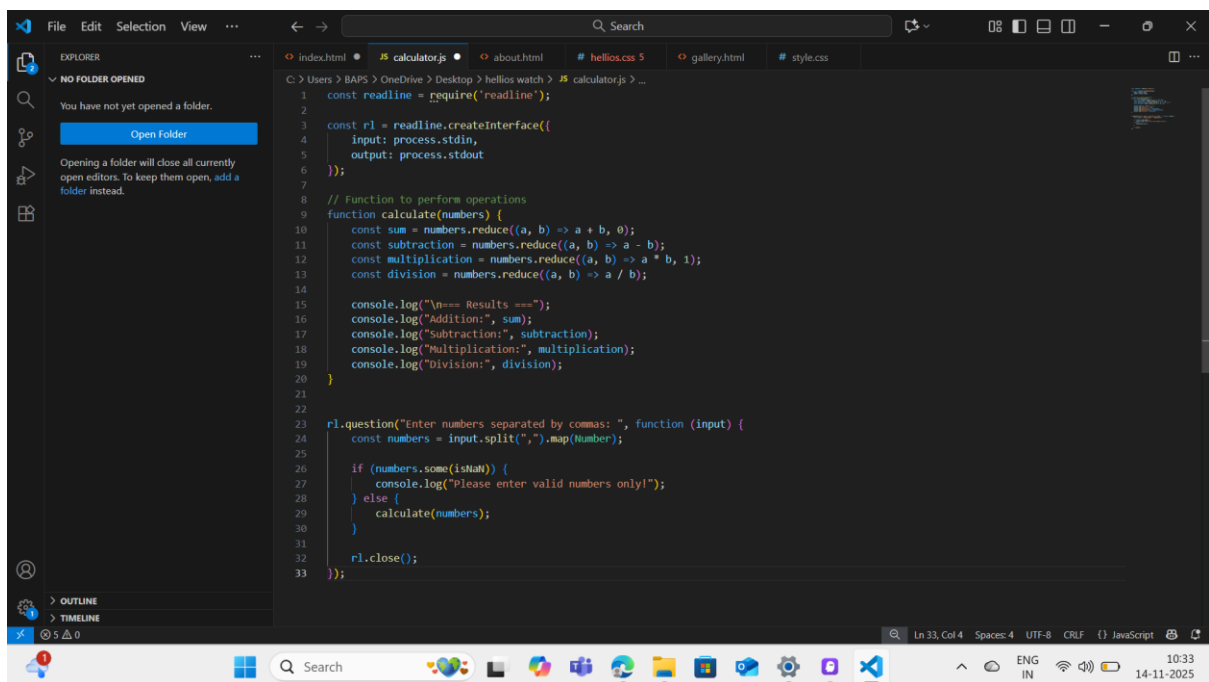
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Course: bsc computer science

### Portfolio report for week1:-

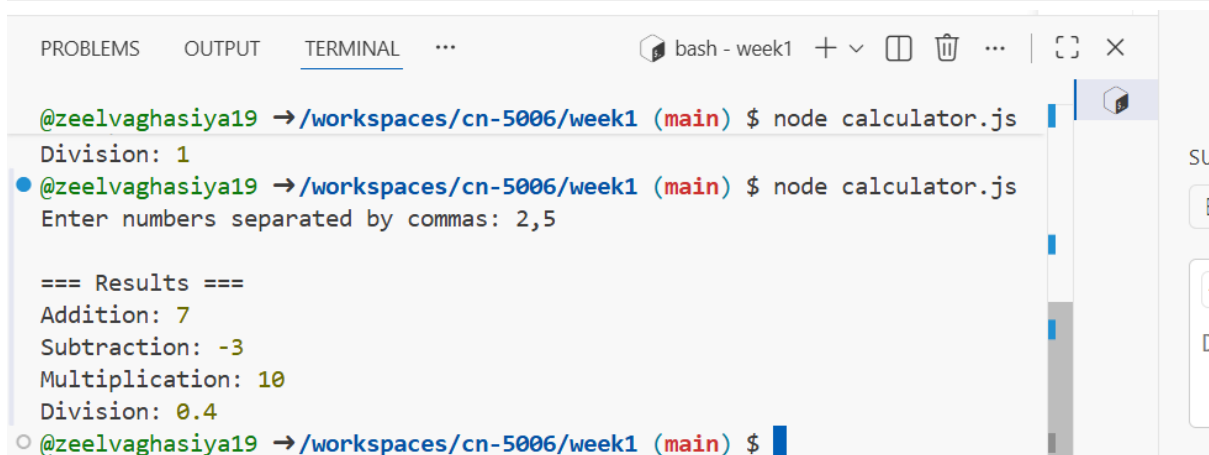
**Task Description: Create a JavaScript program that performs basic arithmetic operations—addition, subtraction, multiplication, and division—on two or more numbers.**

In today's week1 lab activities I got valuable insight of javascript and I learned how to print word using console log moreover I learned to make basic arithmetic operations like addition, subtraction, multiplication and division. It was my great experience to learn all these things and I got to know how this all works. Challenge I faced was in creating user input number how it will work then I asked my tutor they explained all and I was able to make a complete program. In this lab tutorial I had learned about if and else statements.



The screenshot shows the Visual Studio Code editor with a file named `calculator.js` open. The code is written in JavaScript and uses the `readline` module for user input. It defines a `calculate` function that takes an array of numbers and performs addition, subtraction, multiplication, and division using the `Array.prototype.reduce` method. The results are logged to the console. The main logic uses `rl.question` to prompt the user for numbers separated by commas, splits the input, and calls the `calculate` function. The program ends by closing the `readline` interface.

```
1 const readline = require('readline');
2
3 const rl = readline.createInterface({
4   input: process.stdin,
5   output: process.stdout
6 });
7
8 // Function to perform operations
9 function calculate(numbers) {
10   const sum = numbers.reduce((a, b) => a + b, 0);
11   const subtraction = numbers.reduce((a, b) => a - b);
12   const multiplication = numbers.reduce((a, b) => a * b, 1);
13   const division = numbers.reduce((a, b) => a / b);
14
15   console.log("\n=== Results ===");
16   console.log("Addition:", sum);
17   console.log("Subtraction:", subtraction);
18   console.log("Multiplication:", multiplication);
19   console.log("Division:", division);
20 }
21
22
23 rl.question("Enter numbers separated by commas: ", function (input) {
24   const numbers = input.split(",").map(Number);
25
26   if (numbers.some(ishNaN)) {
27     console.log("Please enter valid numbers only!");
28   } else {
29     calculate(numbers);
30   }
31
32   rl.close();
33 });
```



The screenshot shows the terminal window of the VS Code editor. It displays the command `node calculator.js` being executed twice. The first execution shows the output "Division: 1". The second execution shows the prompt "Enter numbers separated by commas: 2,5" followed by the output "=== Results ===", "Addition: 7", "Subtraction: -3", "Multiplication: 10", and "Division: 0.4".

```
@zeelvaghasiya19 →/workspaces/cn-5006/week1 (main) $ node calculator.js
Division: 1
@zeelvaghasiya19 →/workspaces/cn-5006/week1 (main) $ node calculator.js
Enter numbers separated by commas: 2,5

=== Results ===
Addition: 7
Subtraction: -3
Multiplication: 10
Division: 0.4
@zeelvaghasiya19 →/workspaces/cn-5006/week1 (main) $
```