

ES6 Modules Assignment

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Assignment: ES6 Modules

Objective:

This assignment aims to familiarize students with ES6 module syntax, including exporting and importing modules in JavaScript. By the end of this assignment, students should be able to create modular code that is easier to maintain, debug, and understand.

Skills Practiced:

- Creating JavaScript modules
- Exporting and importing functions, objects, and variables
- Understanding the scope of modules
- Using named and default exports/imports

Tasks:

****Task 1: Create and Export Modules****

1. Create a file named `mathOperations.js`.
2. Inside `mathOperations.js`, define four functions: `add`, `subtract`, `multiply`, and `divide`, each accepting two parameters and returning their respective mathematical operation result.
3. Use named exports to export these functions from `mathOperations.js`.

****Task 2: Import and Use Modules****

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1. Create a file named `calculate.js`.
2. Import the `add` and `multiply` functions from `mathOperations.js` into `calculate.js`.
3. In `calculate.js`, write code to call `add(10, 5)` and `multiply(4, 3)` and log their results to the console.

****Task 3: Default Export****

1. In `mathOperations.js`, create a function named `square` that takes a single parameter and returns its square.
2. Export `square` as a default export.
3. Modify `calculate.js` to import the `square` function and use it to log the square of 9 to the console.

Submission Guidelines:

- Submit both `mathOperations.js` and `calculate.js` files.
- Ensure your code is properly formatted and commented, explaining the purpose and functionality of each part.

Assessment Criteria:

- Correct implementation of named and default exports.
- Successful import and use of functions from a module.
- Code readability and comments.