

Question 1: Form Validation and DOM Manipulation

Scenario:

You are developing a sign-up form with the following fields: Name, Email, and Password.

Task:

Write JavaScript code to:

- Validate that none of the fields are left empty.
 - Ensure the email follows a standard format using regular expressions.
 - Display error messages next to each field using DOM manipulation if validation fails.
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Question 2: Event Handling and DOM Update

Scenario:

You have a list of items displayed as an unordered list (``), and a button labeled "Add Item".

Task:

Using JavaScript:

- Write a function that handles the button click event.
 - When clicked, a new list item (``) should be added to the end of the list with the text "New Item X", where X is the current number of list items + 1.
 - Ensure the function uses DOM methods and event handling best practices.
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Question 3: Function Usage, Exception Handling

Scenario:

Create a function `divideNumbers(a, b)` that divides two numbers.

Task:

- If `b` is 0, throw an error using `throw`.
- Catch this error and log a custom message using `try-catch-finally`.

- Use `finally` to log a statement that the operation is completed.
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Question 4: Working with Ajax (Fetch API)

Scenario:

You want to fetch data from a public API and display it on your web page.

Task:

- Use the `fetch` API to asynchronously retrieve data from <https://dummyjson.com/quotes>
 - Parse the JSON response and display the product titles in a list.
 - Handle potential network or parsing errors with `catch`.
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Question 5: ES6 Code Feature

Scenario:

You want a JS Function that filters even numbers from an array.

Task:

- Use `filter()`
- Display the filtered array