

JavaScript Assessment Tasks (MERN Job Training)

This document contains JavaScript array method tasks, const-related tasks, and DOM tasks to evaluate a student's JavaScript understanding without logic-heavy problems.

Part 1: Array Methods Tasks

Use the following array for most tasks:

```
const users = [ { id: 1, name: "Anu", age: 22, role: "student", active: true }, { id: 2, name: "Meena", age: 25, role: "developer", active: false }, { id: 3, name: "Riya", age: 21, role: "student", active: true }, { id: 4, name: "Kiran", age: 28, role: "trainer", active: true } ];
```

- 1 Use `forEach` to print each user name.
- 2 Use `map` to create a new array of only user names.
- 3 Use `map` to create a new array of objects with name and role only.
- 4 Use `filter` to get all active users.
- 5 Use `filter` to get users whose role is 'student'.
- 6 Use `find` to get the user with id 3.
- 7 Use `reduce` to count total users.
- 8 Use `reduce` to create an array of user names.
- 9 Use `some` to check if any user is inactive.
- 10 Use `every` to check if all users are active.
- 11 Sort users by age in ascending order.
- 12 Use `slice` to get first two users.
- 13 Use `splice` to remove one user from index 1.

Part 2: const Tasks

- 1 Declare a `const` variable and try to reassign it. Explain the error.
- 2 Create a `const` array and add a new value to it.
- 3 Remove a value from the `const` array and explain why it works.
- 4 Create a `const` object and update one property.
- 5 Add a new property to the `const` object.
- 6 Try replacing the entire `const` object and explain the result.
- 7 Use `const` inside a `for...of` loop and explain why it works.

Part 3: DOM Tasks

- 1 Select an element by id and change its text.
- 2 Select elements by class name.
- 3 Select all `li` elements using `querySelectorAll`.
- 4 Change background color of a `div` using JavaScript.
- 5 Create a new `li` element and append it to a `ul`.
- 6 Add a click event to a button.
- 7 On button click, change text inside a `div`.
- 8 Get value from an input field and display it in a `span`.
- 9 Add, remove, and toggle a class using `classList`.
- 10 Prevent form reload using `preventDefault` and read input values.