

Javascript map() method practice questions

1. Add Suffix to Strings

- **Problem:** Use `Array.map()` to add the suffix `"-fruit"` to each string in the array.
- **Input:** `["apple", "banana", "cherry"]`
- **Expected Output:** `["apple-fruit", "banana-fruit", "cherry-fruit"]`

2. Calculate Discounted Prices

- **Problem:** Given an array of prices, use `Array.map()` to apply a 10% discount to each price.
- **Input:** `[100, 200, 300]`
- **Expected Output:** `[90, 180, 270]`

3. Convert Celsius to Fahrenheit

- **Problem:** Use `Array.map()` to convert an array of temperatures in Celsius to Fahrenheit. Formula: $F = (C * 9/5) + 32$.
- **Input:** `[0, 25, 100]`
- **Expected Output:** `[32, 77, 212]`

4. Transform Array of Objects

Problem: Given an array of objects, use `Array.map()` to transform each object into a new object with `id` and `fullName` properties. `fullName` should be a combination of `firstName` and `lastName`.

Input

```
[
  { id: 1, firstName: "John", lastName: "Doe" },
  { id: 2, firstName: "Jane", lastName: "Smith" }
]
```

Expected output:

```
[
  { id: 1, fullName: "John Doe" },
  { id: 2, fullName: "Jane Smith" }
]
```

5. Map with Conditional Logic

- **Problem:** Use `Array.map()` to create a new array where even numbers are doubled and odd numbers are tripled.
- **Input:** `[1, 2, 3, 4, 5]`
- **Expected Output:** `[3, 4, 9, 8, 15]`

React map() method practice questions

1. Display User Cards

Question: Create a React component that displays user information (name, email, and profile picture) in a card layout.

Input:

```
const users = [  
  { id: 1, name: "Alice", email: "alice@example.com", image: "https://via.placeholder.com/150" },  
  { id: 2, name: "Bob", email: "bob@example.com", image: "https://via.placeholder.com/150" },  
  { id: 3, name: "Charlie", email: "charlie@example.com", image: "https://via.placeholder.com/150" }  
];
```

Expected output:

You need create the ui template in react to show the list of users in card layout

Use the `map()` function to iterate over an array of user objects and render the list. Each user should be displayed in a card layout with proper styling.

Use CSS styles to ensure the cards have:

- A neat layout (grid or flexbox)
- A shadow effect
- Proper padding and spacing

Make the design responsive, ensuring cards adjust properly on different screen sizes. Provide a hover effect that slightly scales up the card when hovered.

2. Display a Table of Products

Question: Create a React component that displays product information (name, price, and quantity) in a table.

Input:

```
const products = [
  { id: 1, name: "Laptop", price: 999, quantity: 5 },
  { id: 2, name: "Phone", price: 699, quantity: 10 },
  { id: 3, name: "Tablet", price: 499, quantity: 8 }
];
```

Expected output:

You need to create the table component.

3. Display a List of Cars with Details

Question: Create a React component that displays a list of cars along with their make, model, and year.

Input:

```
const cars = [
  { id: 1, make: "Toyota", model: "Corolla", year: 2020 },
  { id: 2, make: "Honda", model: "Civic", year: 2019 },
  { id: 3, make: "Ford", model: "Mustang", year: 2021 }
];
```

Expected output:

You need to create the react ui template for above card object in card layout

4. Display a List of E-Commerce Products in card layout like amazon products

Question: Create a React component that displays a list of e-commerce products with their name, price, and a "Add to Cart" button.

Input:

```
const products = [
  { id: 1, name: "Wireless Mouse", price: 25.99, inStock: true },
  { id: 2, name: "Mechanical Keyboard", price: 89.99, inStock: false },
  { id: 3, name: "Noise-Cancelling Headphones", price: 199.99, inStock: true }
];
```

5. Display a List of Job Postings

Question: Create a React component that displays a list of job postings with their title, company, location, and a "Apply Now" button.

Input:

```
const jobs = [
  { id: 1, title: "Frontend Developer", company: "Tech Corp", location: "Remote" },
  { id: 2, title: "Data Scientist", company: "Data Inc", location: "New York, NY" },
  { id: 3, title: "UX Designer", company: "Design Co", location: "San Francisco, CA" }
];
```

Expected output:

You need to show the below templates with different css styles

