JavaScript Fundamentals- [Built-in Functions-Method chaining]

1. Take the array below, double the values, filter out those less than 10, and sort them descending:

```
const numbers = [2, 5, 8, 10, 3];
```

2. Chain string methods to take the input " learn-javascript ", trim it, convert to uppercase, and replace "-" with " "

```
const tags = ["JS", "", "React", "NODE", "", "Express"];
```

3. Given this array of strings, remove empty strings, convert all to lowercase, and reverse the order:

```
const tags = ["JS", "", "React", "NODE", "", "Express"];
```

4. Using chaining, filter products that have a price over $100, then get their names in uppercase:

```
const products = [
  { name: "Laptop", price: 1200 },
  { name: "Book", price: 30 },
  { name: "Phone", price: 800 },
  { name: "Pen", price: 2 }
];
```

5. Use method chaining to convert the following text into "Hello World"

```
const messyText = "  hello_world ";
```

6. From this list, return only the names of users with role "admin" and capitalize the names:

```
const users = [
  { name: "alice", role: "admin" },
  { name: "bob", role: "user" },
  { name: "charlie", role: "admin" }
];
```

7. Chain methods to extract words longer than 4 characters, capitalize them, and reverse the order:

```
const sentence = "Method chaining makes code cleaner and readable";
```

8. Use array methods to remove duplicates from the following list and sort it alphabetically:

```javascript
const skills = ["JS", "React", "Node", "JS", "React"];
```

9. Using Object.entries() and map(), convert this object into an array of strings like "name: Alice":

```javascript
const person = { name: "Alice", age: 30, city: "Kigali" };
```

10. Take this array of prices, add 10% tax to each, round to 2 decimal places, and return the updated array:

```javascript
const prices = [100, 59.99, 200, 20.5];
```

11. Use array methods to count how many even numbers are in this array:

```javascript
const nums = [1, 4, 6, 9, 10, 13, 14];
```

12. Convert the string "javascript-is-fun" into "Javascript Is Fun" using string built-in methods.

13. Using map(), transform this list of users by adding a new property isActive: true without mutating the original array:

```javascript
const users = [
  { name: "John" },
  { name: "Jane" },
  { name: "Doe" }
];
```

14. Refactor the following code into a clean method chain:

```javascript
const arr = [1, 2, 3, 4, 5];
const doubled = arr.map(n => n * 2);
const even = doubled.filter(n => n % 2 === 0);
const total = even.reduce((sum, val) => sum + val, 0);
```

15. Write a reusable function formatNames that takes an array of names and returns a string of capitalized names, sorted alphabetically and joined with a comma. Use chaining.

```javascript
formatNames(["bob", "Alice", "david"]) // "Alice,Bob,David"
```