1. What is object de-structuring in JavaScript and how can you use it to assign default values?
2. What is the rest operator and how is it used in function parameters?
3. Describe how the spread operator can be used to copy an array.
4. What are template strings and how do they differ from regular strings in JavaScript?

1. Object Destructuring with Default Values

Object destructuring allows you to extract values from objects and assign them to variables in a concise way.

```
const user = { name: "Bharat", age: 22 };

const { name, age, city = "Unknown" } = user;


console.log(name);

console.log(age);

console.log(city);
```

2. Rest Operator (...) in Function Parameters

The **rest operator** collects **multiple arguments into a single array**. It's used in function parameters to accept a variable number of arguments.

```
function sum(...numbers) {
  return numbers.reduce((acc, val) => acc + val, 0);
}


console.log(sum(1, 2, 3, 4));
```

3. Spread Operator (...) to Copy an Array

The spread operator is used to expand elements of an array or object. You can use it to create a **s**hallow copy of an array.

```
const original = [1, 2, 3];

const copy = [...original];


copy.push(4);


console.log(original);

console.log(copy);
```

4. Template Strings (Template Literals)

Template strings (also called template literals) are enclosed by backticks (`) instead of quotes and allow:

- Multi-line strings
- Embedded expressions using ${}

```
const name = "Bharat";

const age = 22;

const intro = `My name is ${name} and I am ${age} years old.`;


console.log(intro);
```