# spread operator JS

The spread operator in JavaScript (represented by " ... ") is a handy feature from ECMAScript 6 (ES6). It lets you easily expand arrays, objects, and strings into individual elements or key-value pairs. This makes tasks like array manipulation, object merging, and passing multiple function arguments simpler and more concise. It enhances code readability by allowing iterable contents to be used in contexts where multiple elements or properties are needed.

### **Expanding Arrays:**

```
const numbers = [1, 2, 3];
const expandedNumbers = [...numbers];
// expandedNumbers is now [1, 2, 3]
```

#### **Concatenating Arrays:**

```
const array1 = [1, 2, 3];
const array2 = [4, 5, 6];
const concatenatedArray = [...array1, ...array2];
// concatenatedArray is now [1, 2, 3, 4, 5, 6]
```

## Passing Array Elements as Function Arguments:

```
const numbers = [1, 2, 3];
const sum = (x, y, z) => x + y + z;
console.log(sum(...numbers)); // Outputs 6
```

### **Copying Objects:**

```
const originalObj = { x: 1, y: 2 };
const copyObj = { ...originalObj };
// copyObj is now { x: 1, y: 2 }
```

### **Merging Objects:**

```
const obj1 = { x: 1, y: 2 };
const obj2 = { z: 3 };
const mergedObj = { ...obj1, ...obj2 };
// mergedObj is now { x: 1, y: 2, z: 3 }
```

