LEARN THIS BEFORE REACT

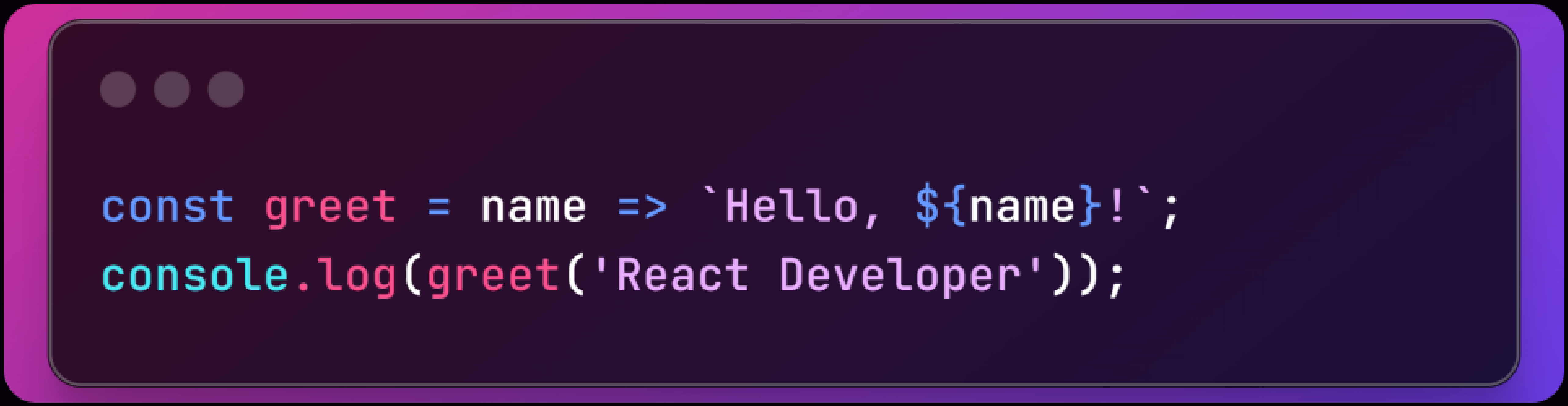
swipe »

7 JavaScript Concepts to Master Before React

Table of contents :

1. Arrow Functions

Arrow functions provide a concise way to write function expressions.



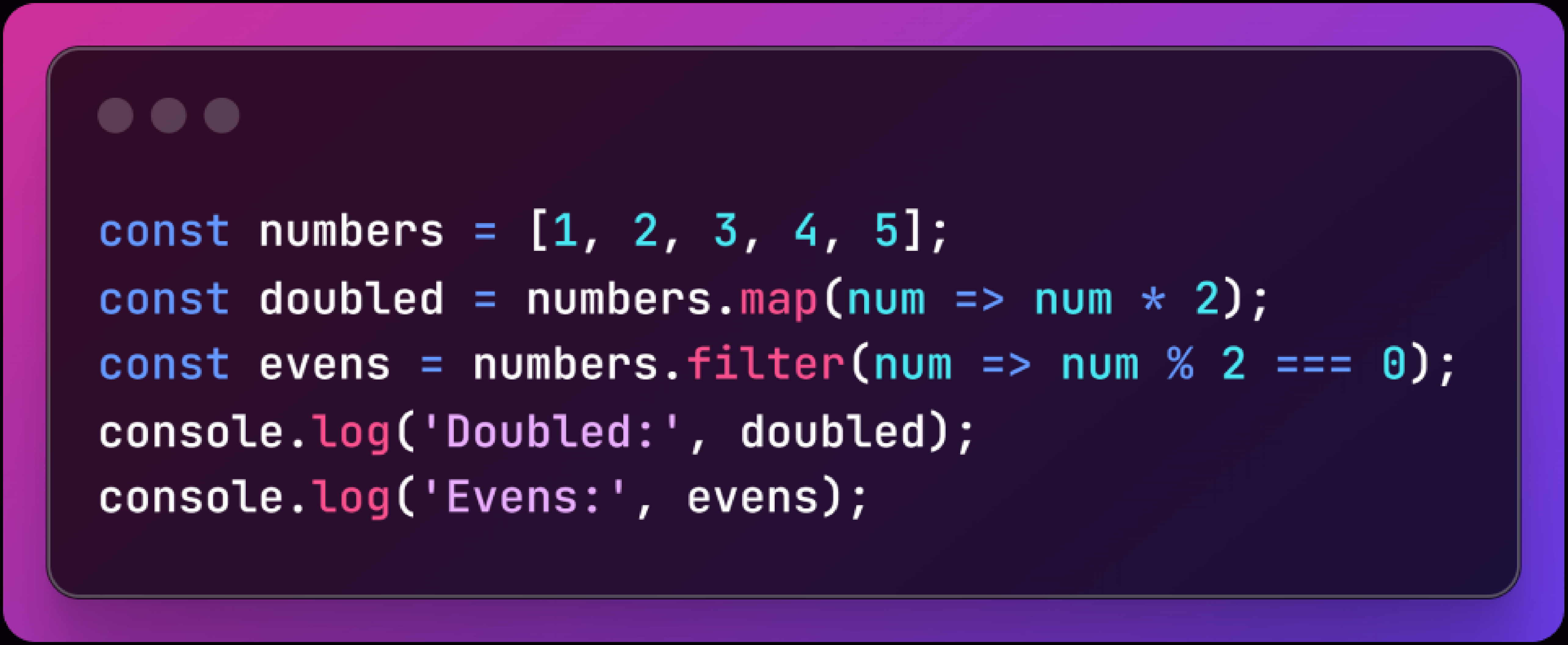
```javascript
const greet = name => `Hello, ${name}!`;
console.log(greet('React Developer'));
```

Ouput :

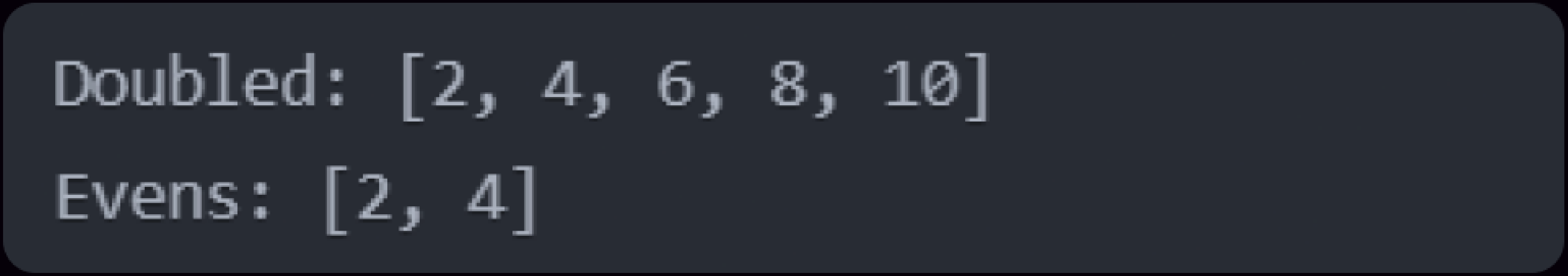
```
Hello, React Developer!
```

2. Map and Filter

Map creates a new array by transforming each element, while Filter creates a new array with elements that pass a test.



```javascript
const numbers = [1, 2, 3, 4, 5];
const doubled = numbers.map(num => num * 2);
const evens = numbers.filter(num => num % 2 === 0);
console.log('Doubled:', doubled);
console.log('Evens:', evens);
```



```
Doubled: [2, 4, 6, 8, 10]
Evens: [2, 4]
```

3. Slice() and Splice()

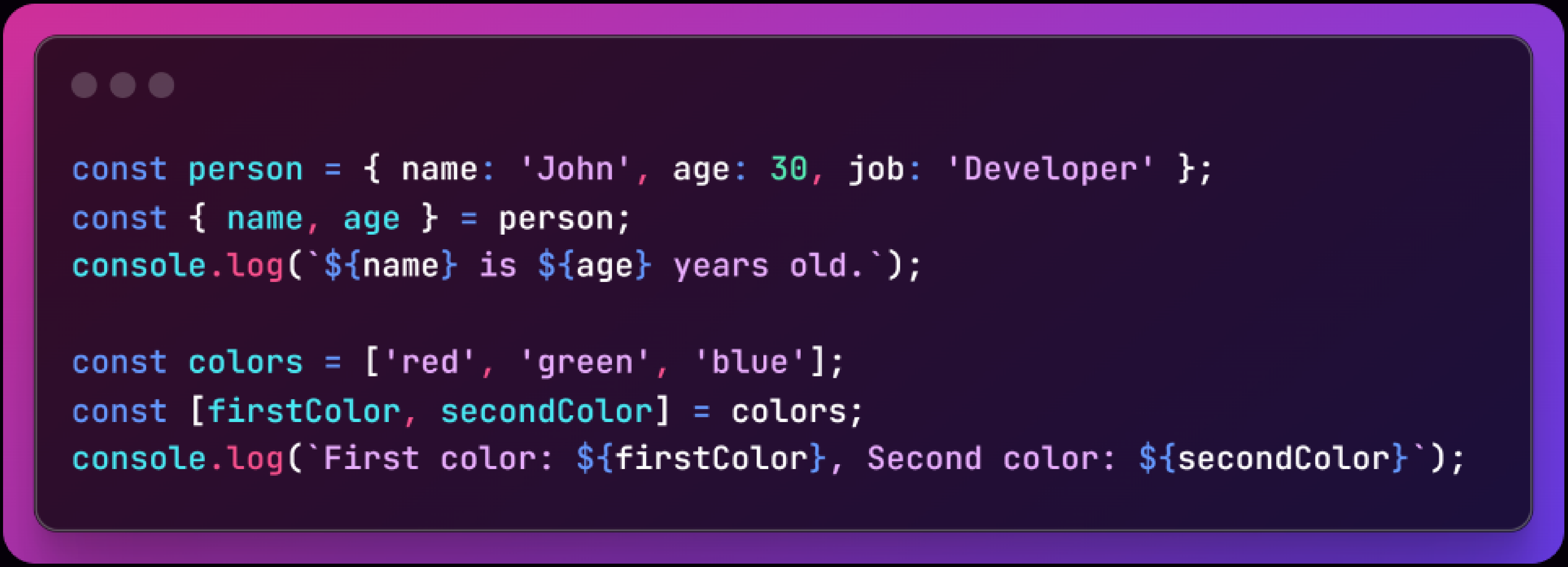
Slice() returns a shallow copy of a portion of an array. Splice() changes the contents of an array by removing or replacing existing elements and/or adding new elements.

```
const fruits = ['apple', 'banana', 'cherry', 'date'];
console.log('Slice:', fruits.slice(1, 3));
console.log('Original after slice:', fruits);

const veggies = ['carrot', 'broccoli', 'spinach', 'cucumber'];
console.log('Splice:', veggies.splice(1, 2, 'kale'));
console.log('Original after splice:', veggies);
```

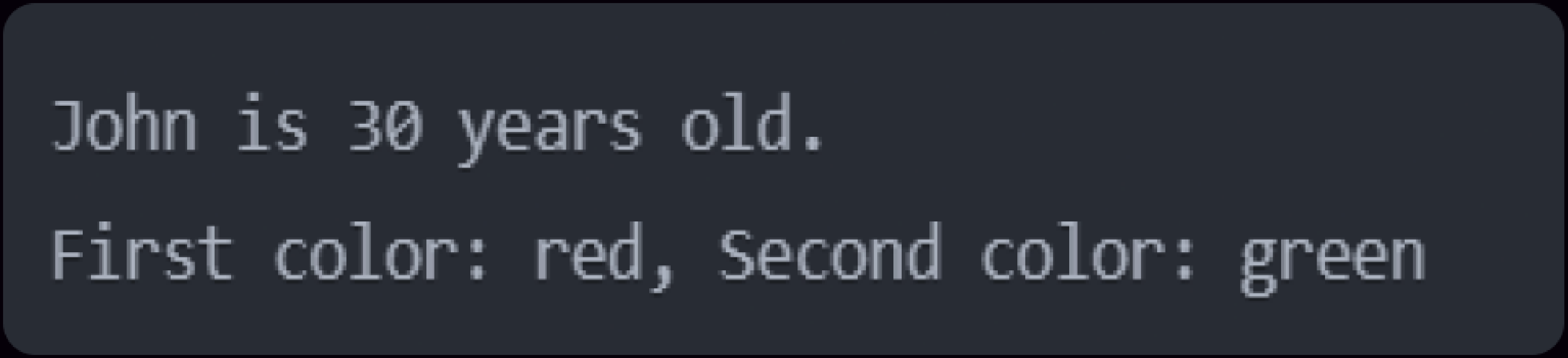
```
Slice: ['banana', 'cherry']
Original after slice: ['apple', 'banana', 'cherry', 'date']
Splice: ['broccoli', 'spinach']
Original after splice: ['carrot', 'kale', 'cucumber']
```

4. Destructuring

Destructuring allows you to extract values from objects or arrays into distinct variables.



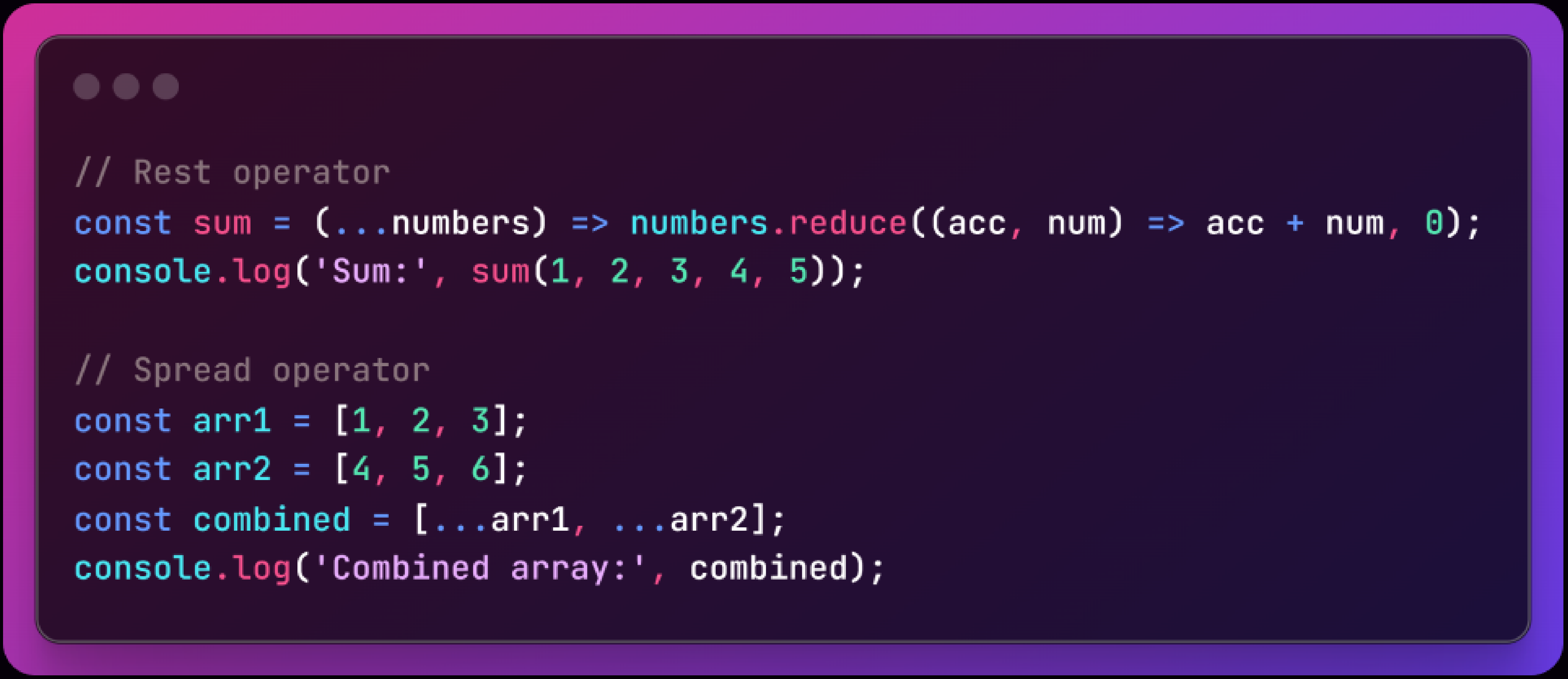
```javascript
const person = { name: 'John', age: 30, job: 'Developer' };
const { name, age } = person;
console.log(`${name} is ${age} years old.`);

const colors = ['red', 'green', 'blue'];
const [firstColor, secondColor] = colors;
console.log(`First color: ${firstColor}, Second color: ${secondColor}`);
```



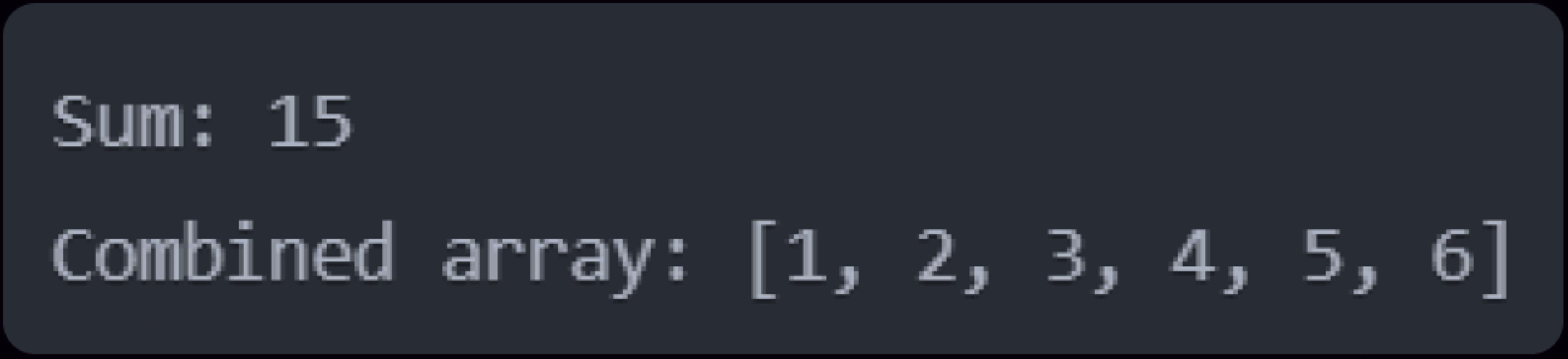
```
John is 30 years old.
First color: red, Second color: green
```

5. Rest and Spread Operators

The rest operator collects multiple elements into an array. The spread operator expands an iterable into individual elements.



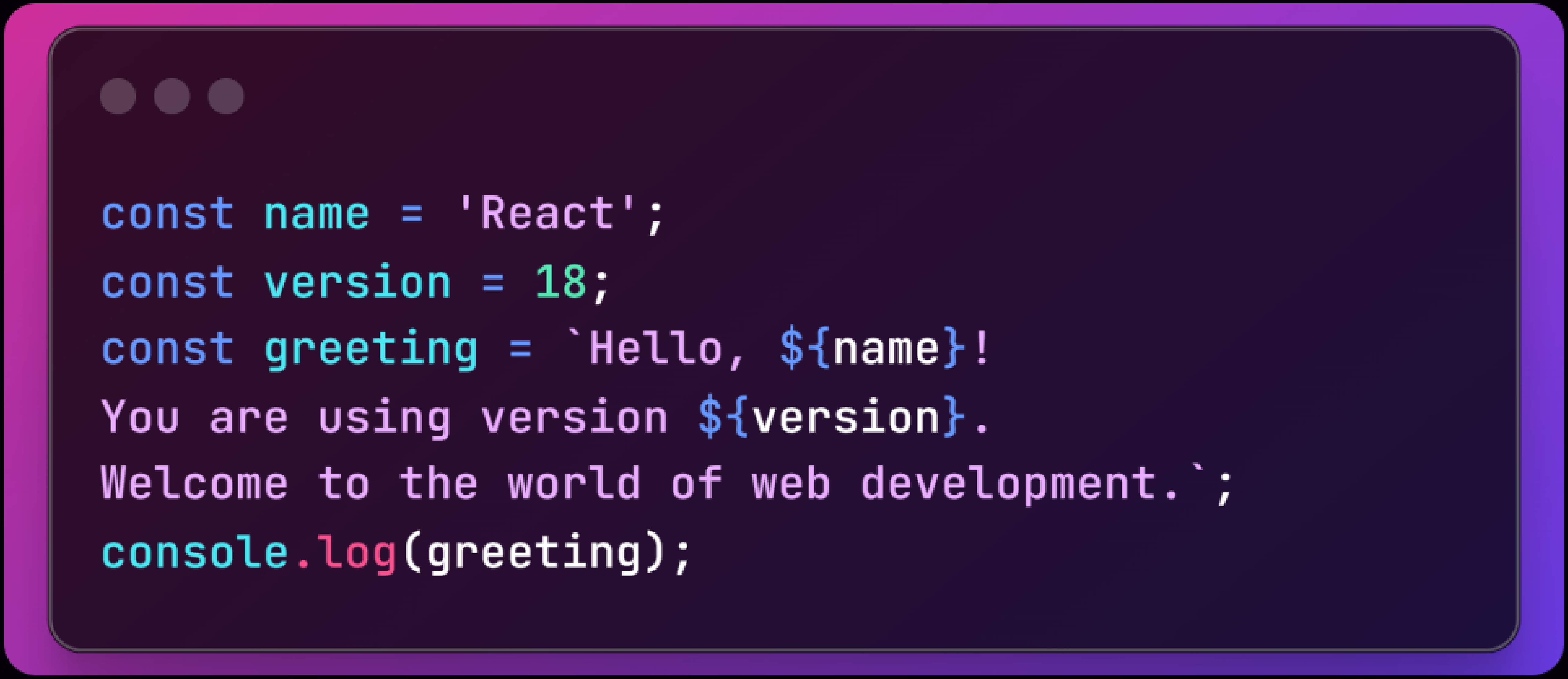
```javascript
// Rest operator
const sum = (...numbers) => numbers.reduce((acc, num) => acc + num, 0);
console.log('Sum:', sum(1, 2, 3, 4, 5));

// Spread operator
const arr1 = [1, 2, 3];
const arr2 = [4, 5, 6];
const combined = [...arr1, ...arr2];
console.log('Combined array:', combined);
```



```
Sum: 15
Combined array: [1, 2, 3, 4, 5, 6]
```

6. Template Literals

Template literals allow embedded expressions and multi-line strings.

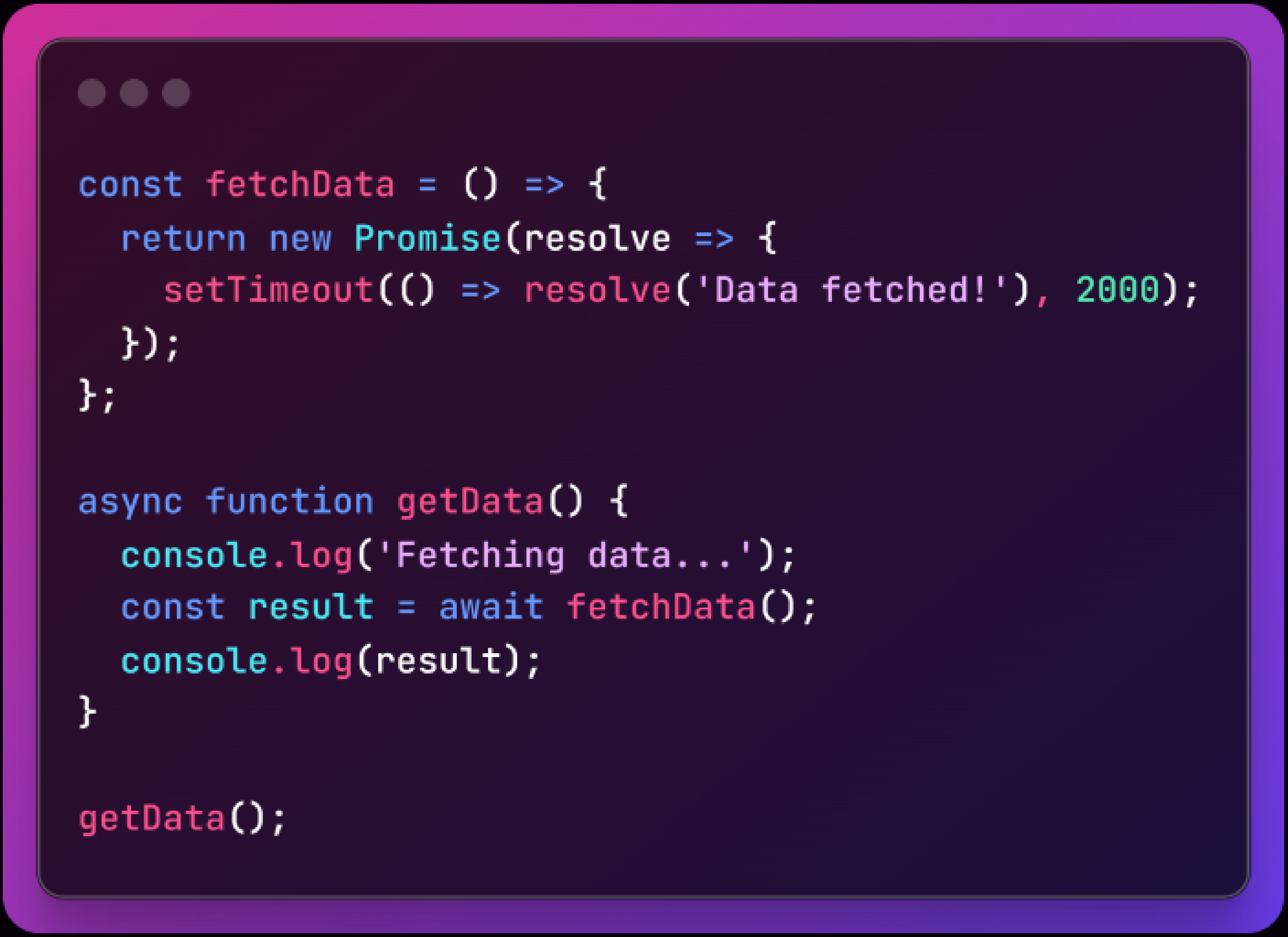


```
const name = 'React';
const version = 18;
const greeting = `Hello, ${name}!
You are using version ${version}.
Welcome to the world of web development.`;
console.log(greeting);
```

```
Hello, React!
You are using version 18.
Welcome to the world of web development.
```

7. Promises and Async/Await

Promises and async/await are used for handling asynchronous operations.



```javascript
const fetchData = () => {
  return new Promise(resolve => {
    setTimeout(() => resolve('Data fetched!'), 2000);
  });
};

async function getData() {
  console.log('Fetching data...');
  const result = await fetchData();
  console.log(result);
}

getData();
```

```
Fetching data...
(after 2 seconds)
Data fetched!
```