

Certainly! Here are two examples of working with arrays in JavaScript:

### ### Example 1: Basic Array Operations

```
```javascript
// Creating an array
let fruits = ['Apple', 'Banana', 'Orange', 'Mango'];

// Accessing elements in an array
console.log(fruits[0]); // Output: Apple

// Modifying elements in an array
fruits[1] = 'Grapes';

// Adding elements to the end of an array
fruits.push('Strawberry');

// Removing the last element from an array
let lastFruit = fruits.pop();

// Iterating through an array
for (let i = 0; i < fruits.length; i++) {
  console.log(fruits[i]);
}

// Output:
// Apple
// Grapes
// Orange
// Strawberry
```
```

### ### Example 2: Array Methods

```
```javascript
// Creating an array
let numbers = [3, 1, 4, 1, 5, 9, 2, 6, 5, 3, 5];

// Sorting an array
numbers.sort();

// Output: [1, 1, 2, 3, 3, 4, 5, 5, 5, 6, 9]

// Finding the index of an element
```

```
let indexOfFive = numbers.indexOf(5);
```

```
// Output: 6 (index of the first occurrence of 5)
```

```
// Removing elements by index  
numbers.splice(indexOfFive, 1);
```

```
// Output: [1, 1, 2, 3, 3, 4, 5, 5, 6, 9] (5 removed)
```

```
// Using array forEach method  
numbers.forEach(function (number) {  
  console.log(number);  
});
```

```
// Output:
```

```
// 1
```

```
// 1
```

```
// 2
```

```
// 3
```

```
// 3
```

```
// 4
```

```
// 5
```

```
// 6
```

```
// 9
```

```
...
```

Certainly! Here are two more examples of working with arrays in JavaScript:

### ### Example 3: Filtering and Mapping Arrays

```
```javascript
```

```
// Creating an array of numbers
```

```
let numbers = [2, 5, 8, 10, 15, 20];
```

```
// Filtering even numbers
```

```
let evenNumbers = numbers.filter(function (number) {  
  return number % 2 === 0;  
});
```

```
// Output: [2, 8, 10, 20]
```

```
// Mapping each number to its square
```

```
let squaredNumbers = numbers.map(function (number) {  
  return number * number;  
});
```

```
});
```

```
// Output: [4, 25, 64, 100, 225, 400]
```

```
// Using arrow functions for brevity
```

```
let cubedNumbers = numbers.map((number) => number ** 3);
```

```
// Output: [8, 125, 512, 1000, 3375, 8000]
```

```
// Combining filtering and mapping
```

```
let filteredAndSquared = numbers
```

```
  .filter((number) => number > 5)
```

```
  .map((number) => number * number);
```

```
// Output: [64, 100, 225, 400]
```

```
console.log(evenNumbers);
```

```
console.log(squaredNumbers);
```

```
console.log(cubedNumbers);
```

```
console.log(filteredAndSquared);
```

```
``
```

### ### Example 4: Multi-dimensional Arrays

```
``javascript
```

```
// Creating a 2D array (matrix)
```

```
let matrix = [
```

```
  [1, 2, 3],
```

```
  [4, 5, 6],
```

```
  [7, 8, 9]
```

```
];
```

```
// Accessing elements in a 2D array
```

```
console.log(matrix[0][1]); // Output: 2
```

```
console.log(matrix[2][0]); // Output: 7
```

```
// Iterating through a 2D array
```

```
for (let i = 0; i < matrix.length; i++) {
```

```
  for (let j = 0; j < matrix[i].length; j++) {
```

```
    console.log(matrix[i][j]);
```

```
  }
```

```
}
```

```
// Output:
```

```
// 1
// 2
// 3
// 4
// 5
// 6
// 7
// 8
// 9

// Using forEach for iteration
matrix.forEach(function (row) {
  row.forEach(function (element) {
    console.log(element);
  });
});
````
```

These examples demonstrate additional array operations such as filtering, mapping, and working with multi-dimensional arrays. Feel free to modify and experiment with them to deepen your understanding of JavaScript arrays!