

// ✓ 1. length - Get total number of items in the array

```
let fruits = ["Apple", "Banana", "Orange"];
```

```
console.log(fruits.length); // Output: 3
```

// ✓ 2. push() - Add item(s) at the end

```
fruits.push("Mango");
```

```
console.log(fruits); // ["Apple", "Banana", "Orange", "Mango"]
```

// ✓ 3. pop() - Remove last item

```
fruits.pop();
```

```
console.log(fruits); // ["Apple", "Banana", "Orange"]
```

// ✓ 4. unshift() - Add item(s) at the beginning

```
fruits.unshift("Grapes");
```

```
console.log(fruits); // ["Grapes", "Apple", "Banana", "Orange"]
```

// ✓ 5. shift() - Remove first item

```
fruits.shift();
```

```
console.log(fruits); // ["Apple", "Banana", "Orange"]
```

// ✓ 6. indexOf() - Get index of an item

```
console.log(fruits.indexOf("Banana")); // Output: 1
```

// ✓ 7. includes() - Check if item exists

```
console.log(fruits.includes("Orange")); // true
```

// ✓ 8. join() - Join all items into a string

```
console.log(fruits.join(", ")); // "Apple, Banana, Orange"
```

```
// ✅ 9. slice() - Get part of the array  
console.log(fruits.slice(0, 2)); // ["Apple", "Banana"]
```

```
// ✅ 10. splice() - Add/Remove items  
fruits.splice(1, 1, "Kiwi"); // Remove 1 item at index 1 and insert "Kiwi"  
console.log(fruits); // ["Apple", "Kiwi", "Orange"]
```


```
// ✅ 11. sort() - Sort array alphabetically  
fruits.sort();  
console.log(fruits); // ["Apple", "Kiwi", "Orange"]
```

```
// ✅ 12. reverse() - Reverse the array  
fruits.reverse();  
console.log(fruits); // ["Orange", "Kiwi", "Apple"]
```

```
// ✅ 13. forEach() - Loop through array  
fruits.forEach((fruit, index) => {  
  console.log(index + ": " + fruit);  
});
```


```
// ✅ 14. map() - Create new array by modifying items  
let upperFruits = fruits.map(fruit => fruit.toUpperCase());  
console.log(upperFruits); // ["ORANGE", "KIWI", "APPLE"]
```

```
// ✅ 15. filter() - Create new array with matching condition  
let shortNames = fruits.filter(fruit => fruit.length <= 5);  
console.log(shortNames); // ["Kiwi", "Apple"]
```

//  16. find() - Return first match

```
let found = fruits.find(fruit => fruit.includes("i"));
```


```
console.log(found); // "Kiwi"
```

//  17. reduce() - Reduce to a single value

```
let numbers = [1, 2, 3, 4];
```

```
let total = numbers.reduce((sum, num) => sum + num, 0);
```

```
console.log(total); // 10
```

//  18. concat() - Merge arrays

```
let moreFruits = ["Pineapple", "Strawberry"];
```


```
let allFruits = fruits.concat(moreFruits);
```

```
console.log(allFruits); // ["Orange", "Kiwi", "Apple", "Pineapple", "Strawberry"]
```

//  19. flat() - Flatten nested arrays

```
let nested = [1, 2, [3, 4], [5, [6]]];
```

```
console.log(nested.flat(2)); // [1, 2, 3, 4, 5, 6]
```

//  20. findIndex() - Index of first match

```
let index = fruits.findIndex(fruit => fruit.startsWith("K"));
```


```
console.log(index); // 1
```

//  21. every() - Check if all match condition

```
console.log(numbers.every(num => num > 0)); // true
```


//  22. some() - Check if at least one matches

```
console.log(numbers.some(num => num > 3)); // true
```

//  23. fill() - Fill all/part of array with value

```
let filled = new Array(5).fill("X");
```

```
console.log(filled); // ["X", "X", "X", "X", "X"]
```

//  24. toString() - Convert array to string

```
console.log(fruits.toString()); // "Orange,Kiwi,Apple"
```