# Array methods

INTERVIEW QUESTIONS-52





### Array methods questions

- what are all the array methods you used in your project?
- explain map, filter and reduce methods?
- explain how reduce works with an example?
- what difference with shift and unshift?
- how splice method is useful?
- when do you use pop and push?

### Array methods

- map
- filter
- reduce
- shift
- unshift
- splice
- pop
- push
- concat

### map

## map() creates a new array by applying a function to each element in an array.

```
const numbers = [1, 2, 3];
const squaredNumbers = numbers.map((number) => number * number);
// squaredNumbers: [1, 4, 9]
```

#### fliter

## filter() creates a new array with elements that pass a given condition.

```
const numbers = [1, 2, 3, 4, 5];
const evenNumbers = numbers.filter((number) => number % 2 === 0);
// evenNumbers: [2, 4]
```

#### reduce

# reduce the elements of an array into a single value by applying a function to each element.

```
const numbers = [1, 2, 3, 4, 5];
const sum = numbers.reduce((accumulator, currentValue) => accumulator +
        currentValue, 0);
console.log(sum); // Output: 15 (the sum of all elements in the array)
```

# Will be explain in step by step as some guys will always it's weird to understand

#### Steps

numbers.reduce((accumulator, 1) => 0 + 1,0);

• numbers.reduce((1, 2) => 1 + 2);

• numbers.reduce((3, 3) => 3 + 3,);

numbers.reduce((6, 4) => 6 + 4,);

numbers.reduce((10, 5) => 10 + 5,); //15

#### unshift() and shift()

- unshift() adds one or more elements to the beginning of an array.
- shift() removes and returns the first element from an array.

```
const colors = ["red", "green"];
colors.unshift("blue"); // colors: ["blue", "red", "green"]
const removedColor = colors.shift();
// removedColor: "blue", colors: ["red", "green"]
```

#### push() and pop()

- push() adds one or more elements to the end of an array.
- pop() removes and returns the last element from an array.

#### Concat

# concat() combines two or more arrays and returns a new array.

```
const array1 = [1, 2];
const array2 = [3, 4];
const combinedArray = array1.concat(array2);
```

#### Slice

# slice() extracts a portion of an array into a new array.

```
const numbers = [1, 2, 3, 4, 5];
const subset = numbers.slice(1, 4); // subset: [2, 3, 4]
```





