Array Methods

Concat:

The Concat () methods creates a new array by joining (concatenating) existing arrays.

Syntax:

array. Concat (value1, value2, ..., value)

Examples:

Const arr1= [‘Apple’, ‘Kiwi’, ‘Watermelon’, ‘Pineapple’]

Const arr2= [1,2,3,4,5,6,7]

Let Concat array=arr1.concat(arr2);

Console.log (Concat array)

Output

['Apple', 'Kiwi', 'Watermelon', 'pineapple', 1, 2, 3, 4, 5, 6, 7]

Every:

The Every () method is used primarily with arrays in JavaScript. It tests whether all elements in the array satisfy the provided testing function. It returns a boolean value (true or false).

Syntax:

array. every (function (current Value, index, array), this Value)

Examples:

let words = ["apple", "banana", "orange", "grape"];

let all Fruits words = words. Every (word => word. Length > 3);

console.log (all Fruits words);

Output

All fruits words are longer than 3 characters? true

Fill:

The **Fill ()** method is used primarily with arrays in JavaScript. It fills all the elements of an array from a start index to an end index with a static value.

Syntax:

array. Fill (value, start, end)

Examples:

let array = [1, 2, 3, 4, 5];

array. Fill (0, 2, 4);

console.log(array);

Output

[1,2,3,4,5]

[1, 2, 0, 0, 5]

Find:

The **Find ()** method is used primarily with arrays in JavaScript. It returns the value of the first element in the array that satisfies the provided testing function.

Syntax:

array. Find (function (current Value, index, array), this ary)

Examples:

let numbers = [1, 3, 5, 8, 10];

let first Even = numbers. Find (num => num % 2 === 0);

console.log (first Even);

Output

First even number: 8

FindIndex

The **FindIndex()** method is used primarily with arrays in JavaScript.It returns the index of the first element in the array that satisfies the provided testing function. If no elements satisfy the function, -1 is returned.

Syntax:

array.findIndex(function(currentValue, index, array), this ary)

Examples:

let numbers = [1, 3, 5, 8, 10];

let index = numbers.findIndex(num => num % 2 === 0);

console.log( index);

Output:

Index of first even number: 3

Flat

The **Flat()** method is used primarily with arrays in JavaScript. It flattens nested arrays recursively up to a specified depth. it flattens nested arrays with a depth of 1.

Syntax:

array.flat(depth)

Examples:

const myArr = [[1,2],[3,4],[5,6]];  
const newArr = myArr.flat();

console.log(newarr)

output:

[1, 2, 3, 4, 5, 6]

Includes

The **Includes()** method is used primarily with arrays in JavaScript. It checks whether an array includes a certain value, returning true or false as appropriate

Syntax

array.includes(searchElement, fromIndex)

examples:

let array = ['apple', 'banana', 'cherry', 'date'];

let includesCherry = array.includes('cherry', 2);

console.log(includesCherry);

Output:

Array includes 'cherry' from index 2: true

Indexof

The **IndexOf()** method is used primarily with arrays in JavaScript. It returns the first index at which a given element can be found in the array, or -1 if it is not present.

**Syntax:**

indexOf(searchValue, fromIndex)

Examples:

let array = ['apple', 'banana', 'cherry', 'date'];

let indexOfCherry = array.indexOf('cherry', 2);

console.log(indexOfCherry);

Output:

Index of 'cherry' starting from index 2: 2

Join

The **Join()** method converts all elements of an array into a string and concatenates them, optionally separating each element with a specified separator string. If no separator is provided, a comma is used by default.

**Syntax:**

array.join(separator)

Examples:

let arrayfruits = ['apple', 'banana', 'cherry'];

let result = arrayfruits.join(“and”);

console.log(result);

Output: "apple and banana and cherry"

Lastindexof

The **Lastindexof()** method of string values searches this string and returns the index of the last occurrence of the specified substring. It takes an optional starting position and returns the last occurrence of the specified substring at an index less than or equal to the specified number.u

**Syntax:**

**array.lastIndexOf(searchElement, fromIndex)**

Examples:

let array = ['apple', 'banana', 'cherry', 'date', 'banana'];

let lastIndexof = array.lastIndexOf('banana', 3);

console.log(lastIndexof);

Output:

Last index of 'banana' from index 3: -1

Pop

The **pop()** method is used with arrays in JavaScript to remove the last element from an array and return that element.

**Syntax:**

**array.pop()**

Examples:

const fruit = ['Kiwi', 'Apple', 'Orange', 'Mango'];

const remove fruits = fruit. Pop ();

console.log (remove fruits);

output:

Mango

Push

The **push()** is an array method that adds one or more elements to the end of an array and returns the new length of the array.

**Syntax:**

**Array.push()**

Example:

const numbers = [1, 2, 3];

numbers.push(4);

console.log(numbers);

Output: [1, 2, 3, 4]

Reverse

The reverse() method reverses the order of the elements in an array.

**Syntax**

array.reverse()

Example

const numbers = [1, 2, 3,4];

numbers.reverse();

console.log(numbers);

Output: [4,3,2,1]

Unshift

The unshift() method adds new elements to **the beginning** of an array.

Syntax:

Array.unshift()

Example:

const fruits = ["Banana", "Orange", "Apple", "Mango"];

const added= fruits.unshift("Lemon", "Pineapple");

console.log(added);

output:

["Lemon", "Pineapple", "Banana", "Orange", "Apple", "Mango"];

shift

The shift() method removes the first item of an array.

Syntax:

Array.shift()

Example

const fruits = ["Banana", "Orange", "Apple", "Mango"];

const remove= fruits.shift();

console.log(remove);

output:

[ "Orange", "Apple", "Mango"]

Slice

The slce() method returns a shallow copy of a portion of an array into a new array object selected from start to end

Syntax:

array.slice(start, end)

Example:

const numbers = [1,2,3,4,5]

const citrus = fruits.slice(1, 3);

console.log()

output:

[ 2,3 ]

Some

The some() method checks if any array elements pass a test provided as a callback function, returning true if any do and false if none do.

**Syntax:**

arr.some(callback(element,index,array),thisAry

);

Example:

const numbers = [1, 2, 3, 4, 5];

const GreaterThanTen = numbers.some(number => number > 10);

console.log(GreaterThanTen);

Output: false

Sort

The Sort() method in JavaScript arranges the elements of an array in place and returns the sorted array.

Syntax

arr.sort();

Example:

let sorting = ["yellow", "blue", "green"]

console.log(sorting.sort());

output:

['blue', 'green', 'yellow']

Splice

The splice() Method is an inbuilt method in JavaScript that is used to change the contents of an array by removing or replacing existing elements and/or adding new elements.

Syntax:

Array.splice( )

Example:

const colors = ["white", "Green","Yellow","Red"];

colors.splice(1, 2, "Blue");

console.log(colors);

Output:

['white', 'Blue', 'Red']

Tostring

The Tostring()method converts array in to string, and returns the results,

Syntax:

array.toString()

Example:

const fruits = ["Banana", "Orange", "Apple", "Mango"];

let text = fruits.toString();

console.log( );

output:

Banana,Orange,Apple,Mango

Filter

The filter() is an array method that creates a new array with all elements that pass the test implemented by the provided function.

Syntax:

const newArray = array.filter(callback(element, index, array), thisArg)

Example:

const numbers = [1, 2, 3, 4, 5];

const evenNumbers = numbers.filter(number => number % 2 === 0);

console.log(evenNumbers);

Output:

[2, 4]

Reduce

The reduce() method is used to "reduce" an array of values down to a single value. It does this by iterating over each element in the array and applying a callback function (also known as a "reducer" function) to each one. The reducer function takes the accumulated result from the previous iteration and the current element as arguments, and returns a new accumulated result.

syntax:

array.reduce(callback(accumulator, currentValue, index, array), initialValue);

Example:

const numbers = [1, 2, 3, 4, 5];

const sum = numbers.reduce((abc,cab)=>{

return abc+cab },0);

Output : 15

Map

The map( ) method it creates a new array by applying a provided function to each element of the original array.

Syntax:

array.map(function(currentValue, index, arr), thisValue)

Example: const numbers = [1, 2, 3, 4, 5];

const doubled = numbers.map(num => num \* 2);

console.log(doubled);

Output: [2, 4, 6, 8, 10]

Foreach

The forEach( ) method that allows you to iterate over an array and perform an operation on each element of the array.

Syntax:

array.forEach(function(currentValue, index, array) {

});

Example:

const numbered = [1, 2, 3, 4, 5];

numbers.forEach(function(numbered){

console.log(numbered \* 2);

});

Output:

2 ,6,10,16,20

string methods

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padStart

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replace

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slice

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substring

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