**JavaScript String Methods**

## **String Length**

The length property returns the length of a string.

**Example:**

var txt = "ABCDEFGHIJKLMNOPQRSTUVWXYZ";  
var sln = txt.length;

## **Finding a String in a String**

The indexOf() method returns the index of (the position of) the first occurrence of a specified text in a string.

**Example:**

var str = "Please locate where 'locate' occurs!";  
var pos = str.indexOf("locate");

## **Searching for a String in a String**

The search() method searches a string for a specified value and returns the position of the match.

**Example:**

var str = "Please locate where 'locate' occurs!";  
var pos = str.search("locate");

## **The slice() Method**

slice() extracts a part of a string and returns the extracted part in a new string.

The method takes 2 parameters. The start position, and the end position (end not included).This example slices out a portion of a string from position 7 to position 12 (13-1):

**Example:**

var str = "Apple, Banana, Kiwi";  
var res = str.slice(7, 13);

## **The substring() Method**

substring() is similar to slice().The difference is that substring() cannot accept negative indexes.

**Example:**

var str = "Apple, Banana, Kiwi";  
var res = str.substring(7, 13);

## **The substr() Method**

substr() is similar to slice().The difference is that the second parameter specifies the **length** of the extracted part.

**Example:**

var str = "Apple, Banana, Kiwi";  
var res = str.substr(7, 6);

## **Replacing String Content**

The replace() method replaces a specified value with another value in a string.

**Example:**

str = "Please visit Microsoft!";  
var n = str.replace("Microsoft", "W3Schools");

## **Converting to Upper and Lower Case**

A string is converted to upper case with toUpperCase().

**Example:**

var text1 = "Hello World!";       // String  
var text2 = text1.toUpperCase();  // text2 is text1 converted to upper

A string is converted to lower case with toLowerCase().

**Example:**

var text1 = "Hello World!";       // String  
var text2 = text1.toLowerCase();  // text2 is text1 converted to lower

## **The concat() Method**

concat() joins two or more strings.

**Example:**

var text1 = "Hello";  
var text2 = "World";  
var text3 = text1.concat(" ", text2);

## **String.trim() Method**

The trim() method removes whitespace from both sides of a string.

**Example:**

var str = "       Hello World!        ";  
alert(str.trim());

## **The charAt() Method**

The charAt() method returns the character at a specified index (position) in a string.

**Example:**

var str = "HELLO WORLD";  
str.charAt(0);            // returns H

## **The charCodeAt() Method**

The charCodeAt() method returns the unicode of the character at a specified index in a string. The method returns a UTF-16 code (an integer between 0 and 65535).

**Example:**

var str = "HELLO WORLD";  
str.charCodeAt(0);         // returns 72

# JavaScript Array Methods

## **Converting Arrays to Strings**

The JavaScript method toString() converts an array to a string of (comma separated) array values.

**Example:**

var fruits = ["Banana", "Orange", "Apple", "Mango"];  
document.getElementById("demo").innerHTML = fruits.toString();

## **Popping**

The pop() method removes the last element from an array.

**Example:**

var fruits = ["Banana", "Orange", "Apple", "Mango"];  
fruits.pop();         // Removes the last element ("Mango") from fruits

## **Pushing**

The push() method adds a new element to an array (at the end).

**Example:**

var fruits = ["Banana", "Orange", "Apple", "Mango"];  
fruits.push("Kiwi");       //  Adds a new element ("Kiwi") to fruits

## **Shifting Elements**

Shifting is equivalent to popping, working on the first element instead of the last. The shift() method removes the first array element and "shifts" all other elements to a lower index.

**Example:**

var fruits = ["Banana", "Orange", "Apple", "Mango"];  
fruits.shift();      // Removes the first element "Banana" from fruits

## **Changing Elements**

Array elements are accessed using their **index number**.

**Example:**

var fruits = ["Banana", "Orange", "Apple", "Mango"];  
fruits[0] = "Kiwi";   // Changes the first element of fruits to "Kiwi"

## **Deleting Elements**

Since JavaScript arrays are objects, elements can be deleted by using the JavaScript operator delete.

**Example:**

var fruits = ["Banana", "Orange", "Apple", "Mango"];  
delete fruits[0];   // Changes the first element in fruits to **undefined**

## **Splicing an Array**

The splice() method can be used to add new items to an array.

**Example:**

var fruits = ["Banana", "Orange", "Apple", "Mango"];  
fruits.splice(2, 0, "Lemon", "Kiwi");

## **Using splice() to Remove Elements**

With clever parameter setting, you can use splice() to remove elements without leaving "holes" in the array.

**Example:**

var fruits = ["Banana", "Orange", "Apple", "Mango"];  
fruits.splice(0, 1);        // Removes the first element of fruits

## **Merging Arrays**

The concat() method creates a new array by merging (concatenating) existing arrays.

**Example:**

var myGirls = ["Cecilie", "Lone"];  
var myBoys = ["Emil", "Tobias", "Linus"];  
var myChildren = myGirls.concat(myBoys); // Concatenates (joins) myGirls and myBoys

## **Slicing an Array**

The slice() method slices out a piece of an array into a new array.This example slices out a part of an array starting from array element 1 ("Orange").

**Example:**

var fruits = ["Banana", "Orange", "Lemon", "Apple", "Mango"];  
var citrus = fruits.slice(1);