

String.prototype.indexOf()

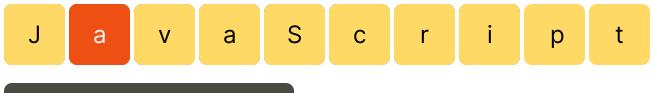
Summary: in this tutorial, you'll learn how to use the JavaScript String <u>index0f()</u> method to find the index of the first occurrence of a substring within a string.

JavaScript String indexOf() method

The String.prototype.indexOf() returns the index of the first occurrence of the substring (substr) in a string (str):

```
let index = str.indexOf(substr, [, fromIndex]);
```

The indexOf() method returns -1 if the str does not contain the substr.



.index0f('a') \longrightarrow 1

The fromIndex is an optional parameter that specifies the index at which the search starts. It defaults to zero (0), meaning that if you omit fromIndex, the search will start from the beginning of the string.

It's important to note that the indexOf() always perform a case-sensitive search.

Note that you use the <code>lastIndexOf()</code> method to find the index of the last occurrence of a substring in a string.

JavaScript String indexOf() examples

Let's take some examples of using the JavaScript string indexOf() method.

Basic JavaScript string indexOf() method example

The following example uses the indexOf() to get the index of the first occurrence of the substring
'str' in the string 'finding substring in string':

```
let str = 'finding substring in string';
let index = str.indexOf('str');
console.log(index); // 11
```

2) Using indexOf() to count occurrences of a substring in a string

The following example uses the indexOf() method to count the number of occurrences of the substring 'know' in the string 'You do not know what you do not know until you know.' :

```
let str = "You do not know what you do not know until you know.";
let substr = "know";

let count = 0;

let index = str.indexOf(substr);
while (index !== -1) {
   count++;
   index = str.indexOf(substr, index + 1);
}

console.log({ count });
```

Output:

```
{ count: 3 }
```

How it works:

• First, use the indexOf() method to find the first occurrence of the substr in the str.

• Then, use the while loop to repeatedly find the next position of the substr in the str starting from the last found position + 1.

3) The indexOf() method and case-sensitivity

The indexOf() is case-sensitive. See the following example:

```
let str = "JS indexOf";
let substr = "js";

let index = str.indexOf(substr);

console.log({ index }); // -1
```

In this example, the indexOf() returns -1 because the string JS IndexOf does not contain the substring js but JS.

To perform a case-insensitive search for the index of a substring within a string, you can convert both substring and string to lowercase before using the indexOf() method like this:

```
let str = "JS indexOf";
let substr = "js";

let index = str.toLocaleLowerCase().indexOf(substr.toLocaleLowerCase());

console.log(index); // 0
```

Summary

- The indexOf() returns the index of the first occurrence of a substring in a string, or -1 if the string does not contain the substring.
- The indexOf() always performs a case-sensitive search.