String.prototype.lastIndexOf()

Summary: in this tutorial, you'll learn how to use the JavaScript String `lastIndexOf()` method to locate the last occurrence of a substring in a string.

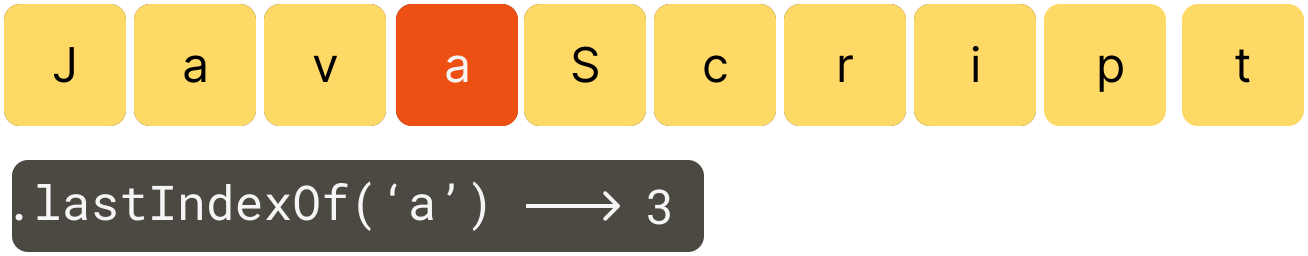
Introduction to the JavaScript String lastIndexOf() Method

The `String.prototype.lastIndexOf()` returns the last occurrence of a substring (`substr`) in a string (`str`).

Here's the syntax of the `lastIndexOf()` method:

```
str.lastIndexOf(substr, [, fromIndex]);
```

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



By default, the `lastIndexOf()` method searches for the substring backward from the end of a string. It searches for the substring using a case-sensitive match.

The `fromIndex` argument is optional and defaults to `+Infinity` . It means that if you omit the `fromIndex` , the search starts from the end of the string.

If the `fromIndex` is greater or equal to `str.length` , the `lastIndexOf()` will search for the `substr` in the whole string.

If the `fromIndex` is less than zero, the search behavior is the same as if the `fromIndex` were zero.

> To find the index of the first occurrence of a substring within a string, you use the last `indexOf()` method.

JavaScript String lastIndexOf() examples

Let's take some examples of using the `lastIndexOf()` method.

1) Basic JavaScript lastIndexOf() method example

The following example uses the `lastIndexOf()` method to locate the last occurrence of the substring `'a'` in the string `'JavaScript'` :

```
let str = 'JavaScript';
let index = str.lastIndexOf('a');

console.log(index);
```

Output:

```
{ index: 3 }
```

If you pass the `fromIndex` argument to the string, the `lastIndexOf()` method will start searching backward from the `fromIndex` as shown in the following example:

```
let str = "JavaScript";
let index = str.lastIndexOf("a", 2);

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

Output:

```
{ index: 1 }
```

2) The lastIndexOf() method and case-sensitivity

The `lastIndexOf()` always perform a case-sensitive search. For example, the following uses the `lastIndexOf()` method to search for the substring `"L"` in `"Hello, World!"` :

```
let str = "Hello, World!";
let substr = "L";

let index = str.lastIndexOf(substr);

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

Output:

```
{ index: -1 }
```

To perform a case-insensitive search for the index of the last occurrence of a substring within a string, you can convert both substring and string to lowercase before applying the `lastIndexOf()` method as follows:

```
let str = "Hello, World!";
let substr = "L";

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

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

Output:

```
{ index: 10 }
```

Summary

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