## Finding the Index of a Substring inside a String

An introduction to the indexOf and lastIndexOf methods which help us to find the index of a specified substring in a string

The indexOf and the lastIndexOf string methods return the first and last index of a substring inside a string.

```
let print;
let sequence = '1,2,3,4,5';
print = sequence.indexOf( ',' )
console.log(print);
//1
print = sequence.lastIndexOf( ',' )
console.log(print);
//7
print = sequence.indexOf( ',3' )
console.log(print);
//3
print = sequence[3]
console.log(print);
//","
```

When the argument of indexOf is a string of length higher than 1, the return value is the position of the first character.

At this point, we assume that you don't use *long unicode characters*. As soon as you know you will use these characters, check out my article Strings and Template Literals in ES6 to know how to deal with them.

## What if the string does not contain the specified substring?

When string s does not contain a specific substring s0, then s.indexOf(s0) returns -1:

```
let print;
let sequence = '1,2,3,4,5';
print = sequence.indexOf( 'abc' )
```

Assuming you want to enumerate the indices of all matches, you can specify a second argument, indicating the first index of the string from where we start searching:

```
let print;
                                                                                         6
let sequence = '1,2,3,4,5';
print = sequence.indexOf( ',' )
console.log(print)
//1
print = sequence.indexOf( ',', 1 + 1 )
console.log(print)
//3
print = sequence.indexOf( ',', 3 + 1 )
console.log(print)
//5
print = sequence.indexOf( ',', 5 + 1 )
console.log(print)
//7
print = sequence.indexOf( ',', 7 + 1 )
console.log(print)
//-1
```

The question "Does string s include the substring so?" is commonly asked during programming problems. We could use indexOf to implement the answer:

```
let print;
let sequence = '1,2,3,4,5';
let s0 = '8,9'
print = sequence.indexOf(s0) >= 0
console.log(print)
```