

# Replacing Characters of a String

This lesson will teach you a number of methods to replace characters in a string.

## The Replace Method

The `replace` string method returns a new string, where the first substring specified by its first argument is replaced with its second argument:

```
const numbers = '1 2 3 4';  
console.log(numbers.replace( ' ', ',' ));  
// "1,2 3 4"
```



Notice that only the first space was replaced. If you want to replace all spaces inside a string, you can use the `split` and `join` methods:

```
const numbers = '1 2 3 4';  
console.log(numbers.split( ' ' ).join( ',' ));  
// "1,2,3,4"
```



## Replacing by using Regular Expression

Alternatively, you can also specify a regular expression as the first argument of the `replace` method, and apply a global flag on it to replace all matches.

```
const numbers = '1 2 3 4';  
console.log(numbers.replace( / /g, ',' ));  
// "1,2,3,4"
```



This solution is a bit advanced. Head over to my article [Regular Expressions in JavaScript](#) if you want to learn more.

You can replace any number of characters including zero. In case of replacing the empty string, the second argument is inserted before the first character:

```
console.log('help'.replace( '', '--' ))  
//"--help"  
console.log('help'.replace( new RegExp( '', 'g' ), '--' ))  
//"--h--e--l--p--"  
console.log('1 2 3 4'.replace( '2 3', 'five' ))  
//"1 five 4"
```

