## What is string concatenation in JavaScript

String concatenation means the same thing in all programming languages. It simply adds one or more strings to another string, usually to the end of that string. For example, if you want to concatenate "Hello" and "Joshua", it becomes "Hello Joshua" by adding Joshua to the end of Hello.

#### Ways to concatenate strings in Javascript

- 1. "+" operator
- 2. Template literals (\$ {"})
- 3. concat() method
- 4. array.join() method

### 1)Using the "+" operator

In JavaScript, the "+" operator can be used to add strings together. You can add as many strings as you want.

#### Example:

```
let greeting = "hello";
let name = "Joshua";
let is = "is"
let a = "a'
let aboutMe = "programmer";
console.log(greeting + name + is + a + aboutMe);
```

Output: helloJoshuaisaprogrammer

We can see there is no space between the variables that were concatenated. This can be corrected by adding a space between each concatenated variable.

```
let greeting = "hello";
let name = "Joshua";
let is = "is"
let a = "a'
let aboutMe = "programmer";
```

```
console.log(greeting + " " + name + " " + is + " " + a + " " + aboutMe);
```

Output: hello Joshua is a programmer

literal, so it takes care of it.

#### 2)Using the template literals (\${``})

The template literals is a special character in JavaScript that serves various purposes, such as multiline strings, string concatenation, etc. An ES6 feature, it was introduced in 2015 and is supported in all modern browsers except Internet Explorer. One major feature, "variable substitution", allows JavaScript string concatenation.

```
Example:

let greeting = "hello";

let name = "Joshua";

let aboutMe = "programmer";

console.log(`${greeting} ${name} is a ${aboutMe}`);

The example shows that you don't need to put a space like with the "+" operator. It is a template
```

## 3)Using the concat() method

concat() is a built-in method that combines strings in JS. It adds the new string to the old string and returns the overall string.

#### Example:

```
const myName = "Joshua";
console.log(myName.concat(" said that he loves programming"));
Output:
// Joshua said that he loves programming
```

# 4)Using array.join() method

This will concatenate all the values in an array and return a new string from an array, which by default is separated by a comma. You can use other string parameters or separators to join the string together.

#### Example:

```
const sport = ["Football", "Tennis", "Cricket", "Golf"];
console.log(sport.join());
```

Output: Football, Tennis, Cricket, Golf