

JavaScript fundamentals

Built-in objects

Strings

Strings are immutable

```
let str = 'Hi';  
console.log(str[0]);
```

```
str[0] = 'h'; // error  
console.log( str[0] ); // doesn't work
```

- Primitives except null and undefined provide many helpful methods.
- Formally, these methods work via temporary objects.

Strings are immutable

```
let str = 'Hi';  
console.log(str[0]);
```

```
str = 'h' + str[1]; // replace the  
string  
console.log( str ); // hi
```

- The usual workaround is to create a whole new string and assign it to str instead of the old one.

String methods

<u>charAt()</u>	Returns the character at a specified index (position)
<u>charCodeAt()</u>	Returns the Unicode of the character at a specified index
<u>concat()</u>	Returns two or more joined strings
<u>constructor</u>	Returns the string's constructor function
<u>endsWith()</u>	Returns if a string ends with a specified value
<u>fromCharCode()</u>	Returns Unicode values as characters
<u>includes()</u>	Returns if a string contains a specified value
<u>indexOf()</u>	Returns the index (position) of the first occurrence of a value in a string
<u>lastIndexOf()</u>	Returns the index (position) of the last occurrence of a value in a string
<u>length</u>	Returns the length of a string
<u>localeCompare()</u>	Compares two strings in the current locale
<u>match()</u>	Searches a string for a value, or a regular expression, and returns the matches

String methods

<u>prototype</u>	Allows you to add properties and methods to an object
<u>repeat()</u>	Returns a new string with a number of copies of a string
<u>replace()</u>	Searches a string for a pattern, and returns a string where the first match is replaced
<u>replaceAll()</u>	Searches a string for a pattern and returns a new string where all matches are replaced
<u>search()</u>	Searches a string for a value, or regular expression, and returns the index (position) of the match
<u>slice()</u>	Extracts a part of a string and returns a new string
<u>split()</u>	Splits a string into an array of substrings
<u>startsWith()</u>	Checks whether a string begins with specified characters
<u>substr()</u>	Extracts a number of characters from a string, from a start index (position)
<u>substring()</u>	Extracts characters from a string, between two specified indices (positions)

String methods

<u>toLocaleLowerCase()</u>	Returns a string converted to lowercase letters, using the host's locale
<u>toLocaleUpperCase()</u>	Returns a string converted to uppercase letters, using the host's locale
<u>toLowerCase()</u>	Returns a string converted to lowercase letters
<u>toString()</u>	Returns a string or a string object as a string
<u>toUpperCase()</u>	Returns a string converted to uppercase letters
<u>trim()</u>	Returns a string with removed whitespaces
<u>trimEnd()</u>	Returns a string with removed whitespaces from the end
<u>trimStart()</u>	Returns a string with removed whitespaces from the start
<u>valueOf()</u>	Returns the primitive value of a string or a string object