

JavaScript String Functions, Operators and Properties

An easy reference for all JavaScript functions and operations on strings HTML-5.com is a great guide for web developers. [TV Series & Actors and Actresses](#). Follow [TV Series](#) and [HTML 5](#) on Google+.

[HTML-5.com](#) > [itemscopehttp://data-vocabulary.org/Breadcrumbitemprop="title">HTML 5](#) > [itemscopehttp://data-vocabulary.org/Breadcrumbitemprop="title">JavaScript Code](#) > [itemscopehttp://data-vocabulary.org/Breadcrumbitemprop="title">JavaScript DOM](#) > [itemscopehttp://data-vocabulary.org/Breadcrumb](#)

[JavaScript String Functions, Operators and Properties](#)

JavaScript String Functions, Operators and Properties

```
<script type="text/javascript"> var str = "HTML tags start with "<" & end with ">.";
window.addEventListener("load", function(ev) { document.getElementById("string-
length").textContent = str.length; document.getElementById("string-plus").textContent
= "This is" + " a test."; document.getElementById("string-plus-equals").textContent
= str + " Right on!"; // document.getElementById("string-bold").innerHTML =
htmlEncode(str).bold(); document.getElementById("string-charat").textContent
= str.charAt(2); document.getElementById("string-charcodeat").textContent =
str.charCodeAt(2); document.getElementById("string-concat").textContent = str.concat(" ",
"Right on!"); document.getElementById("string-indexof").textContent = str.indexOf("with");
document.getElementById("string-indexof-position").textContent = str.indexOf("with",
20); document.getElementById("string-lastindexof").textContent = str.lastIndexOf("with");
document.getElementById("string-lastindexof-position").textContent = str.lastIndexOf("with",
20); document.getElementById("string-localecompare-aa").textContent =
"A".localeCompare("a"); document.getElementById("string-localecompare-ab1").textContent
= "A".localeCompare("b"); document.getElementById("string-localecompare-
ab2").textContent = "a".localeCompare("B"); document.getElementById("string-
match").textContent = str.match(/with/gi); document.getElementById("string-
replace").textContent = str.replace("start", "begin"); document.getElementById("string-
search").textContent = str.search(/[^a-z\s]/i); document.getElementById("string-
slice").textContent = str.slice(16, 31); document.getElementById("string-
split").textContent = str.split(" ")[2]; document.getElementById("string-split-
regex").textContent = str.split(/\s/)[3]; document.getElementById("string-
split-limit").textContent = "first " + str.split(" ", 5).length + " of " + str.split("
").length; document.getElementById("string-tolocalelowercase").textContent =
str.toLocaleLowerCase(); document.getElementById("string-tolocaleuppercase").textContent
= str.toLocaleUpperCase(); document.getElementById("string-tolowercase").textContent
= str.toLowerCase(); document.getElementById("string-tostring").textContent
= str.toString(); document.getElementById("string-touppercase").textContent
= str.toUpperCase(); document.getElementById("string-trim").textContent =
" TEST ".trim(); document.getElementById("string-valueof").textContent =
str.valueOf(); document.getElementById("string-from-char-code-dec").textContent
= String.fromCharCode(9733, 10003); document.getElementById("string-
from-char-code-hex").textContent = String.fromCharCode(0x2605, 0x2713);
document.getElementById("string-decodeuri").textContent = decodeURI("/The
%20Firm/"); document.getElementById("string-decodeuricomponent").textContent
```

```
= decodeURIComponent("decimal%E2%80%94To%E2%80%94%25") + "="
+ decodeURIComponent("pct%20%3D%20dec%23%20*%20100"); var elem
= document.createElement("a"); elem.href = encodeURI("http://TVSeries.com/
The Firm/"); elem.textContent = elem.href; document.getElementById("string-
encodeuri").appendChild(elem); document.getElementById("string-
encodeuricomponent").textContent = encodeURIComponent("decimal—To—%") +
"=" + encodeURIComponent("pct = dec# * 100"); document.getElementById("string-
escape").textContent = escape("decimal—To—%") + "=" + escape("pct = dec# *
100"); document.getElementById("string-eval").textContent = eval(".67 * 100") + "%";
document.getElementById("string-parsefloat").textContent = parseFloat("123.45");
document.getElementById("string-parseint").textContent = parseInt("123");
document.getElementById("string-json-parse").textContent = "typeof obj = " + (typeof
JSON.parse({'foo':"bar"})); document.getElementById("string-json-stringify").textContent
= JSON.stringify({'foo':"bar"}); }); var htmlEntities = [ "&gt;", "&amp;", "&apos;", "&quot;",
"&lt;" ]; function htmlEncode(str) { return str.replace(/&[&quot;&apos;&lt;&gt;]/g, function(str, offset, s) { return
htmlEntities[str.charCodeAt(0) % 25 % 6]; }); } </script>
```

String used in examples below

```
var str = "HTML tags start with &#x201c;&#x201d; &amp; end with
&#x201c;>&#x201d;.";
```

The results in the examples below are from actual *working* examples of JavaScript, resulting from running actual JavaScript code in your browser, rather than simply the expected results put in HTML code. For example, a *locale-sensitive comparison* as performed by [localeCompare](#) will be based on the locale in *your* browser.

String properties

	Result	String property	Use / Result
get only	Number	<var>string</var>. length	get length of String
Example:	<code>str.length</code>		

String operators

Result	String operator	Use / Result
String	= <var>value</var>	String assignment operator (JavaScript equals)
Example:	<code>var newstr = "value"</code>	a String with a value of "value"
String	<var>string1</var> + <var>string2</var>	concatenate two Strings
Example:	<code>var newstr = "This is" + " a test.";</code>	
String	+= <var>string2</var>	append a String to another String
Example:	<code>str += " Right on!";</code>	

Static methods of String global object

Static Method	Use / Result	
String	new String (<var>value</var>)	String constructor
Examples:	<code>var newstr = new String("value")</code>	a String with a value of "value"
<code>var newstr = new String()</code>	an empty String	
String	String (<var>object</var>)	cast <var>object</var> to String
Examples:	<code>String(obj)</code>	
String	String.fromCharCode (<var>char1</var>, ... <var>charN</var>)	create a String from character codes
Examples:	<code>var newstr = String.fromCharCode(97, 100, 108, 104)</code>	
<code>var newstr = String.fromCharCode(0x2605, 0x2713)</code>		

String functions

Result	String function	Use / Result
String	<var>string</var>. charAt (<var>position</var>)	get character at position in string
Example:	<code>str.charAt(2)</code>	
Number	<var>string</var>. charCodeAt (<var>position</var>)	get character code at position in string
Example:	<code>str.charCodeAt(2)</code>	
String	<var>string</var>. concat (<var>string1</var>, ... <var>stringN</var>)	append one or more Strings
Example:	<code>str.concat(" ", "Right on!")</code>	
Number	<var>string</var>. indexOf (<var>searchString</var>, <var>position</var>)	find position of <var>searchString</var> within string; you can also search for a regular expression

		using String.search(/<var>regexp</var>/<var>flags</var>)
Examples:	<code>str.indexOf("with")</code>	
	<code>str.indexOf("with", 16)</code>	
Number	<code><var>string</var>.lastIndexOf(<var>searchString</var>[, <var>position</var>])</code>	find last position of <code>String</code> within string
Examples:	<code>str.lastIndexOf("with")</code>	
	<code>str.lastIndexOf("with", 31)</code>	
Number	<code><var>string</var>.localeCompare(<var>string1</var>, <var>string2</var>)</code>	locale-sensitive comparison of one string with another string Note that: <ul style="list-style-type: none"> • comparison is dependent on the <i>client</i> system's locale, <i>not</i> the server-side system's locale, and • although a case-sensitive comparison is used, which letter in the alphabet is considered a higher priority for determining order than its case - in English, for example, lower case comes before upper case, so the order of alphabetic characters is "a", "A", "b", "B", etc. (see examples below)
Example:	<code>"A".localeCompare("a")</code>	
	<code>"A".localeCompare("b")</code>	
	<code>"a".localeCompare("B")</code>	
Array	<code><var>string</var>.match(/<var>regexp</var>/[<var>flags</var>])</code>	retrieve substrings of a <code>String</code> that match a given regular expression
Example:	<code>str.match(/with/gi)</code>	
String	<code><var>string</var>.replace(<var>searchString</var>, <var>with</var>)</code>	replace part of one string with another string

	<pre>var>, <var>replacement</ var> <var>string</var>.replace(/ <var>regexp</var>/ <var>flags</var>, <var>replacement</var>)</pre>	
Example:	<pre>str.replace("start", "begin")</pre>	
Number	<pre><var>string</var>.search(/ <var>regexp</var>/ [<var>flags</var>])</pre>	get index of a substring that matches a regular expression; to match a string instead use String.indexOf(<var>substring</var>[, <var>position</var>])
Example:	<pre>str.search(/^[a-z\s]/ i)</pre>	
String	<pre><var>string</ var>.slice(<var>start</var>, <var>end</var>)</pre>	get a substring of a string
Example:	<pre>str.slice(16, 31)</pre>	
Array	<pre><var>string</ var>.split(<var>separator</ var>[, <var>limit</var>]) <var>string</var>.split(/ <var>regexp</var>/[, <var>limit</var>])</pre>	split String based on <var>separator</var>
Examples:	<pre>str.split(" ")[2] // third word</pre>	
	<pre>str.split(/\s/)[3] // fourth word</pre>	
	<pre>"first " + str.split(" ", 5).length + " of " + str.split(" ").length</pre>	
String	<pre><var>string</ var>.toLocaleLowerCase()</pre>	convert string to lower case based on client locale
Example:	<pre>str.toLocaleLowerCase()</pre>	
String	<pre><var>string</ var>.toLocaleUpperCase()</pre>	convert string to upper case based on client locale
Example:	<pre>str.toLocaleUpperCase()</pre>	
String	<pre><var>string</ var>.toLowerCase()</pre>	convert string to lower case

Example:	<code>str.toLowerCase()</code>	
String	<code><var>string</var>.toString()</code>	the String itself, same as String.valueOf()
Example:	<code>str.toString()</code>	
String	<code><var>string</var>.toUpperCase()</code>	convert string to upper case
Example:	<code>str.toUpperCase()</code>	
String	<code><var>string</var>.trim()</code>	remove leading and trailing spaces
Example:	<code>" TEST ".trim()</code>	
String	<code><var>string</var>.valueOf()</code>	the String itself, same as String.toString()
Example:	<code>str.valueOf()</code>	

Global functions with String parameters

For the difference between [encodeURIComponent](#), [encodeURIComponent](#) and [escape](#) and information on the specific characters used for encoding, see [JavaScript percent encoding functions](#).

Function / Operator	Use / Result	
String	decodeURI (<code><var>encodedURI</var></code>)	decode an encoded URI
Examples:	<code>decodeURI("/The %20Firm/")</code>	
String	decodeURIComponent (<code><var>encodedComponent</var></code>)	decode a component or other encoded URI component
Examples:	<code>decodeURIComponent("decimal%E2%80%94To%E2%80%94%25") + "=" + decodeURIComponent("pct%20%3D%20dec%23%20*%20100")</code>	
String	encodeURIComponent (<code><var>unencodedURI</var></code>)	encode a URI
Examples:	<code>document.createElement("a").href = encodeURIComponent("http://TVSeries.com/The Firm/");</code>	
String	encodeURIComponent (<code><var>encodedComponent</var></code>)	encode a component or other URI component

Examples:	<pre>encodeURIComponent("decimal&#x2014;To&#x2014;%") + "=" + encodeURIComponent("pct = dec# * 100")</pre>	
String	escape (<i><var>string</var></i>)	<i>deprecated</i> escape all special characters in a string
Examples:	<pre>escape("decimal&#x2014;To&#x2014;%") + "=" + escape("pct = dec# * 100")</pre>	
(any)	eval (<i><var>string1</var></i> [, ... <i><var>stringN</var></i>])	evaluate <i><var>string</var></i> as a JavaScript expression, returning the value of the last expression
Examples:	<pre>eval(".67 * 100") + "%"</pre>	
Number	parseFloat (<i><var>string</var></i> <i><var></i>)	convert String to a floating point Number
Examples:	<pre>var intval = parseFloat("123.45");</pre>	
Number	parseInt (<i><var>string</var></i>)	convert String to an integer Number
Examples:	<pre>var intval = parseInt("123");</pre>	

JSON functions

Result	JSON function	Result
Object	JSON.parse (<i><var>string</var></i> <i><var></i>)	convert JSON string to JavaScript object
Example:	<pre>var obj = JSON.parse('{ "foo": "bar" }');</pre>	
String	JSON.stringify (<i><var>object</var></i> <i><var></i>)	convert JavaScript object to JSON string
Example:	<pre>var newstr = JSON.stringify({ foo: "bar" });</pre>	

[back to top](#)***THE END***