

JavaScript RegExp Reference

[< Previous](#)[Next >](#)

The RegExp Object

A regular expression is a **pattern** of characters.

The pattern is used for **searching and replacing** characters in strings.

The **RegExp Object** is a regular expression with added **Properties** and **Methods**.

Syntax

```
/pattern/modifier(s);
```

Example

```
let pattern = /w3schools/i;
```

[Try it Yourself »](#)

Example explained:

w3schools

The pattern to search for

For a tutorial about Regular Expressions, read our [JavaScript RegExp Tutorial](#).

Browser Support

/regexp/ is an ECMAScript1 (JavaScript 1997) feature.

It is supported in all browsers:

Chrome	Edge	Firefox	Safari	Opera	IE
Yes	Yes	Yes	Yes	Yes	Yes

Modifiers

Modifiers define how to perform the search:

Modifier	Description
/g	Perform a global match (find all)
/i	Perform case-insensitive matching
/m	Perform multiline matching

Brackets

Brackets are used to find a range of characters:

Bracket	Description
[abc]	Find any character between the brackets
[^abc]	Find any character NOT between the brackets
[0-9]	Find any character between the brackets (any digit)

Metacharacters

Metacharacters are characters with a special meaning:

Character	Description
<code>.</code>	Find a single character, except newline or line terminator
<code>\w</code>	Find a word character
<code>\W</code>	Find a non-word character
<code>\d</code>	Find a digit
<code>\D</code>	Find a non-digit character
<code>\s</code>	Find a whitespace character
<code>\S</code>	Find a non-whitespace character
<code>\b</code>	Find a match at the beginning/end of a word, beginning like this: <code>\bHI</code> , end like this: <code>HI\b</code>
<code>\B</code>	Find a match, but not at the beginning/end of a word
<code>\0</code>	Find a NULL character
<code>\n</code>	Find a new line character

<u>\t</u>	Find a tab character
<u>\v</u>	Find a vertical tab character
<u>\xxx</u>	Find the character specified by an octal number xxx
<u>\xdd</u>	Find the character specified by a hexadecimal number dd
<u>\udddd</u>	Find the Unicode character specified by a hexadecimal number dddd

Quantifiers

Quantifier	Description
<u>n+</u>	Matches any string that contains at least one <i>n</i>
<u>n*</u>	Matches any string that contains zero or more occurrences of <i>n</i>
<u>n?</u>	Matches any string that contains zero or one occurrences of <i>n</i>
<u>n{X}</u>	Matches any string that contains a sequence of <i>X</i> <i>n</i> 's
<u>n{X,Y}</u>	Matches any string that contains a sequence of <i>X</i> to <i>Y</i> <i>n</i> 's
<u>n{X,}</u>	Matches any string that contains a sequence of at least <i>X</i> <i>n</i> 's
<u>n\$</u>	Matches any string with <i>n</i> at the end of it
<u>^n</u>	Matches any string with <i>n</i> at the beginning of it
<u>?=n</u>	Matches any string that is followed by a specific string <i>n</i>
<u>?!n</u>	Matches any string that is not followed by a specific string <i>n</i>

RegExp Object Properties

Property	Description
<u>constructor</u>	Returns the function that created the RegExp object's prototype
<u>global</u>	Checks whether the "g" modifier is set

multiline Checks whether the "m" modifier is set

source Returns the text of the RegExp pattern

RegExp Object Methods

Method	Description
<u>compile()</u>	Deprecated in version 1.5. Compiles a regular expression
<u>exec()</u>	Tests for a match in a string. Returns the first match
<u>test()</u>	Tests for a match in a string. Returns true or false
<u>toString()</u>	Returns the string value of the regular expression

[< Previous](#)
[Next >](#)

Track your progress - it's free!

[Sign Up](#)
[Log in](#)



COLOR PICKER

[PLUS](#)[SPACES](#)[GET CERTIFIED](#)[FOR TEACHERS](#)[FOR BUSINESS](#)[CONTACT US](#)

Top Tutorials

[HTML Tutorial](#)
[CSS Tutorial](#)

[Tutorials ▼](#)[Exercises ▼](#)[Services ▼](#)[Sign Up](#)[Log in](#)[CSS](#) [JAVASCRIPT](#) [SQL](#) [PYTHON](#) [JAVA](#) [PHP](#) [HOW TO](#) [W3.CSS](#) [C](#)[PHP Tutorial](#)
[Java Tutorial](#)
[C++ Tutorial](#)
[jQuery Tutorial](#)

Top References

[HTML Reference](#)
[CSS Reference](#)
[JavaScript Reference](#)
[SQL Reference](#)
[Python Reference](#)
[W3.CSS Reference](#)
[Bootstrap Reference](#)
[PHP Reference](#)
[HTML Colors](#)
[Java Reference](#)
[Angular Reference](#)
[jQuery Reference](#)

Top Examples

[HTML Examples](#)
[CSS Examples](#)
[JavaScript Examples](#)
[How To Examples](#)
[SQL Examples](#)
[Python Examples](#)
[W3.CSS Examples](#)
[Bootstrap Examples](#)
[PHP Examples](#)
[Java Examples](#)
[XML Examples](#)
[jQuery Examples](#)

Get Certified

[HTML Certificate](#)
[CSS Certificate](#)
[JavaScript Certificate](#)
[Front End Certificate](#)
[SQL Certificate](#)
[Python Certificate](#)
[PHP Certificate](#)
[jQuery Certificate](#)
[Java Certificate](#)
[C++ Certificate](#)
[C# Certificate](#)
[XML Certificate](#)[FORUM](#) [ABOUT](#) [ACADEMY](#)

W3Schools is optimized for learning and training. Examples might be simplified to improve reading and learning.

Tutorials, references, and examples are constantly reviewed to avoid errors, but we cannot warrant full correctness

of all content. While using W3Schools, you agree to have read and accepted our [terms of use](#), [cookie and privacy policy](#).

Copyright 1999-2025 by Refsnes Data. All Rights Reserved. [W3Schools is Powered by W3.CSS](#).