# **Regular Expression Flags**

### **Regular Expressions for JavaScript**

Character	Description
g	global match
i	ignore case
gi	both global match and ignore cas

# **Methods that use Regular Expressions**

<b>Method</b> exec	<b>Type</b> RegExp	<b>Description</b> Executes a search for a match in a string. It returns an array of information.
test	RegExp	Tests for a match in a string. It returns true or false.
match	String	Executes a search for a match in a string. It returns an array of information or null on a mismatch.
search	String	Tests for a match in a string. It returns the index of the match, or -1 if the search fails.
replace	String	Executes a search for a match in a string, and replaces the matched substring with a replacement substring.
split	String	Uses a regular expression or a fixed string to break a string into an array of substrings.

# **Pattern Syntax**

Character	Meaning
\	Indicates next character should <i>not</i> be interpreted literally if it normally is, and <i>should</i> be interpreted literally if it normally isn't.
^	Matches beginning of input or line.
\$	Matches end of input or line.
*	Matches 0 or more instances of preceding character.
	Matches 1 or more instances of preceding character.
?	Matches 0 or 1 instances of preceding character.
į	Matches any single character other than the newline character.
(x)	Matches x and remembers the match.
x y	Matches either x or y.
{n}	Matches exactly $n$ instances of preceding character (where $n$ is an integer).
{n,}	Matches at least $n$ instances of preceding character (where $n$ is an integer).
{n,m}	Matches it least $n$ and at most $m$ instances of preceding character (where $n$ and $m$ are integers).
[xyz]	Matches any one of enclosed characters (specify range using hyphen, such as [0-9].
[^xyz]	Matches any character not enclosed (specify range using hyphen, such as [^0-9].
[\b]	Matches a backspace.
\b	Matches a word boundary, such as a space.
\B	Matches a nonword boundary.
\c <i>X</i>	Matches a control character, X.
\d	Matches a digit character (same as [0-9]).
\D	Matches a nondigit character (same as [^0-9]).
\f	Matches a form feed.
\n	Matches a line feed.
\r	Matches a carriage return.
\s	$\label{thm:matches} \begin{tabular}{ll} Matches a single white space character, including space, tab, form feed, and line feed (same as $[\f\n\r\t\v]$).$
\S	Matches a single non-white-space character (same as [^\f\n\r\t\v]).
\t	Matches a tab.
\v	Matches a vertical tab.
\w	Matches any alphanumeric character, including the underscore (same as [A-Za-z0-9_]).
\W	Matches any nonword character (same as [^A-Za-z0-9_]).
\ <i>n</i>	A reference to the last substring matching the $n$ th parenthetical (where $n$ is a positive integer).
\o <i>octal</i> \x <i>hex</i>	Matches an octal or hexadecimal escape value (for embedding ASCII codes).

#### **Property Summary**

#### **Regular Expressions for JavaScript**

Property Description

\$1, ..., \$9 Parenthesized substring matches, if any.

constructor Specifies the function that creates an object's prototype.

global Whether or not to test the regular expression against all possible matches in a string, or only against the first.

ignoreCase Whether or not to ignore case while attempting a match in a string.

\$\_input The string against which a regular expression is matched.

lastIndex The index at which to start the next match.

\$&lastMatch The last matched characters.

\$lastParen The last parenthesized substring match, if any.

\$`leftContext The substring preceding the most recent match.

\$\*multiline Whether or not to search in strings across multiple lines.

prototype Allows the addition of properties to all objects.

\$'rightContext The substring following the most recent match.

source The text of the pattern.

#### **Method Summary**

Method	Description
MEUIUU	Description

compile Compiles a regular expression object.

exec Executes a search for a match in its string parameter.

test Tests for a match in its string parameter.

toSource Returns an object literal representing the specified object; you can use this value to create a new object. Overrides

the Object.toSource method.

toString Returns a string representing the specified object. Overrides the Object.toString method.

valueOf Returns the primitive value of the specified object. Overrides the Object.valueOf method.

### **Creating the Regular Expression Object**

Туре	Usage	Example	Note
Literal way	/pattern/flags	var objRegex = /ab?	Do not use quotation marks to indicate strings.
Constructor method	new RegExp("pattern"[, "flags"])	var objRegex = new RegExp("ab", "i")	The normal escape rules apply (using the \ character).