

REGEX CHEATSHEET

<https://regexlearn.com/learn/regex101>

Expression	Examples		
	text	expression	returns
Intro			
	"I have no special talents. I am only passionately curious ." — Albert Einstein	/curious/gm	curious
	"Every man takes the limits of his own field of vision for the limits of the world." — Arthur Schopenhauer	/of/g	of, of, of
Period The period <code>.</code> allows selecting any character, including special characters and spaces.	abcABC123 .:!?	/./gm	a, b, c, A, B, C, 1, 2, 3, ., :, !, ?
	az AZ 09 _ - = !? ., ;:	/./g	All characters
Character Sets If one of the characters in a word can be various characters, we write it in square brackets <code>[]</code> with all alternative characters.	bar ber bir bor bur	/b[aeiou]r/g	bar, ber, bir, bor, bur
	beer deer feer	/[bdf]eer/g	beer, deer, feer
Negated Character Sets If one of the characters in a word cannot be within various characters, we write it in square brackets with all unwanted characters preceded by a caret <code>^[^]</code> .	bar ber bir bor bur	b[^eou]r	bar, bir, bur
	bear beor beer beur	/be[^ou]r/g	bear, beer
Letter Range To find the letters in the specified range, the starting letter and the ending letter are written in square brackets <code>[]</code> with a dash between them <code>-</code> . It is case-sensitive.	abcdefghijklmnopqrstuv wxyz	/[e-o]/g	e, f, g, h, i, j, k, l, m, n, o
	abcdefghijklmnopqrstuv wxyz	/[g-k]/g	g, h, i, j, k
Number Range To find the numbers in the specified range, the starting number and the ending number are written in square brackets <code>[]</code> with a dash <code>-</code> between them.	0123456789	/[3-6]/g	3, 4, 5, 6
	0123456789	/[2-7]/g	2, 3, 4, 5, 6, 7
Repetition			

*	Asterisk We put an asterisk `*` after a character to indicate that the character may either not match at all or can match many times.	br ber beer	/be*r/g	br, ber, beer
		dp dep deep	/de*p/g	dp, dep, deep
+	Plus Sign To indicate that a character can occur one or more times, we put a plus sign `+` after a character.	br ber beer	/be+r/g	ber, beer
		dp dep deep	/de+p/g	dep, deep
?	Question Mark To indicate that a character is optional, we put a `?` question mark after a character	color colour	/colou?r/g	color, colour
		a an	/an?/g	a, an
{n}	Curly Braces To express a certain number of occurrences of a character, at the end we write curly braces `{n}` along with how many times we want it to occur.	ber beer beeer beeeer	/be{2}r/g	beer
		Release 10/9/2021	/[0-9]{4}/g	2021
{n, }	Curly Braces To express at least a certain number of occurrences of a character, we write the end of the character at least how many times we want it to occur, with a comma `,` at the end, and inside curly braces `{n,}`.	ber beer beeer beeeer	/be{3,}r/g	beeer, beeeer
		Release 10/9/2021	/[0-9]{2,}/g	10, 2021
{x, y}	Curly Braces To express the occurrence of a character in a certain number range, we write curly braces `{x,y}` with the interval we want to go to the end.	ber beer beeer beeeer	/be{1,3}r/g	ber, beer, beeer
		Release 10/9/2021	/[0-9]{1,4}/g	10, 9, 2021

Grouping

()	Parentheses We can group an expression and use these groups to reference or enforce some rules. To group an expression, we enclose in parentheses `()`.	ha-ha,haa-haa	/(haa)/g	haa haa
\1	Referencing a Group The first group is used by writing `\1` to avoid rewriting. Here `1` denotes the order of the grouping	ha-ha,haa-haa	/(ha)-\1,(haa)-\2/g	ha-ha,haa-haa
(?:)	Non-capturing Group You can group an expression and ensure that it is not captured by references.	ha-ha,haa-haa	/(?:ha)-ha,(haa)-\1/g	ha-ha,haa-haa
	Pipe Character	cat Cat rat	/(C c)at rat/g	cat, Cat, rat

It allows to specify that an expression can be in different expressions. Thus, all possible statements are written separated by the pipe sign ` `. This differs from charset `[abc]`. Charsets operate at the character level. Alternatives are at the expression level.	
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Characters

Escape Character There are special characters that we use when writing regex. `{ } [] ^ + * . \$ ^ ?`. Before we can select these characters themselves, we need to use an escape character `\\`.	(*) Asterisk. / (\ * \ .) / g *, .
Caret Sign. Selecting by Line Start To find a pattern at the beginning of a line, prefix this expression with the `^` sign.	Basic Omelette Recipe 1. 3 eggs, beaten 2. 1 tsp sunflower oil 3. 1 tsp butter / ^ [0 - 9] / gm 1, 2, 3
Dollar sign. Selecting by End of Line To find a pattern at the end of the line, postfix this expression with the `\$` sign.	https://domain.com/ what-is-html. html https://otherdomain.com/ html-elements https://website.com/html 5-features. html / html \$ / gm html, html
Word Character The expression `\\w` is used to find letters, numbers and underscore characters.	abcABC123 _.:!? / \\ w / g a, b, c, A, B, C, 1, 2, 3, _
Except Word Character The expression `\\W` is used to find characters other than letters, numbers and underscores.	abcABC123 _.:!? / \\ W / g ., ., :, !, ?
Number Character `\\d` is used to find only number characters.	abcABC123 _.:!? / \\ d / g 1, 2, 3
Except Number Character `\\D` is used to find non-numeric characters.	abcABC123 _.:!? / \\ D / g a, b, c, A, B, C, ., ., :, !, ?
Space Character `\\s` is used to find only space characters.	abcABC123 _ / \\ s / g .
Except Space Character `\\S` is used to find non-space characters.	abcABC123 _ / \\ S / g a, b, c, A, B, C, ., ., :, !, ?

Lookarounds

(?=) Positive Lookahead To select a pattern that has a specific	Date: 4 Aug 3PM / \\ d + (? = PM) / g 3
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	pattern after them, we write the positive look-ahead expression `(?=)` after our target expression.		
(?!)	Negative Lookahead To select a pattern that doesn't have a specific pattern after them, we write the negative look-ahead expression `(?!)` after our target expression.	Date: 4 Aug 3PM	<code>/\d+(?!PM)/g</code> 4
(?<=)	Positive Lookbehind To select a pattern that has a specific pattern before them, we write the positive look-ahead expression `(?<=)` before our target expression.	Product Code: 1064 Price: \$ 5	<code>/(?<=\\$)\d+/g</code> 5
(?!<)	Negative Lookbehind To select a pattern that doesn't have a specific pattern before them, we write the positive look-ahead expression `(?!<)` before our target expression.	Product Code: 1064 Price: \$5	<code>/(?!<\\$)\d+/g</code> 1064

Flags

//g	Global Flag The `global` flag causes the expression to select all matches. If not used it will only select the first match	domain.com test.com site.com	<code>/\w+\.com\$/g</code>	domain.com, test.com, site.com
		domain.com test.com site.com	<code>/\w+\.com\$/</code>	domain.com
//m	Multiline Flag Regex sees all text as one line. But we use the `multiline` flag to handle each line separately. In this way, the expressions we write to identify patterns at the end of lines work separately for each line.	domain.com test.com site.com	<code>/\w+\.com\$/gm</code>	domain.com, test.com, site.com
		domain.com test.com site.com	<code>/\w+\.com\$/g</code>	site.com
		domain.com test.com site.com	<code>/\w+\.com\$/m</code>	domain.com
//i	Case-insensitive Flag In order to remove the case-sensitivity of the expression we have written, we must activate the `case-insensitive` flag.	DOMAIN.COM TEST.COM SITE.COM	<code>/\w+\.com\$/gmi</code>	DOMAIN.COM, TEST.COM, SITE.COM
		DOMAIN.COM TEST.COM SITE.COM	<code>/\w+\.com\$/gm</code>	Nothing

Matching

	Greedy Matching Regex does a greedy match by default. This means that the matchmaking will be as long as possible.	ber beer beeer beeeeer	<code>/. *r/</code>	ber.beer. beeer.beeeeeer (All text)
?	Lazy Matching Lazy matchmaking, unlike greedy matching, stops at the first matching.	ber beer beeer beeeeer	<code>/. *?r/</code>	ber, .beer, . beeer, . beeeeer