

Regular Expression Quick Reference v1.00

Online RegEx Resources: <http://gmckinney.info/links/resources.html>

Literal Characters

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|-------------------|--|
| <code>\f</code> | Form feed |
| <code>\n</code> | Newline (Use <code>\p</code> in UltraEdit for platform independent line end) |
| <code>\r</code> | Carriage return |
| <code>\t</code> | Tab |
| <code>\v</code> | Vertical tab |
| <code>\a</code> | Alarm (beep) |
| <code>\e</code> | Escape |
| <code>\xxx</code> | The ASCII character specified by the octal number xxx |
| <code>\xnn</code> | The ASCII character specified by the hexadecimal number nn |
| <code>\cX</code> | The control character ^X. For example, <code>\cI</code> is equivalent to <code>\t</code> and <code>\cJ</code> is equivalent to <code>\n</code> |

Character Classes

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|--------------------------|--|-------|-------|-------|-------|--------|-------|
| <code>[...]</code> | Any one character between the brackets. | | | | | | |
| <code>[^...]</code> | Any one character not between the brackets. | | | | | | |
| <code>.</code> | Any character except newline. Equivalent to <code>[^\n]</code> | | | | | | |
| <code>\w</code> | Any word character. Equivalent to <code>[a-zA-Z0-9_]</code> and <code>[[:alnum:]]</code> | | | | | | |
| <code>\W</code> | Any non-word character. Equivalent to <code>[^a-zA-Z0-9_]</code> and <code>[[:^alnum:]]</code> | | | | | | |
| <code>\s</code> | Any whitespace character. Equivalent to <code>[\t\n\r\f\v]</code> and <code>[[:space:]]</code> | | | | | | |
| <code>\S</code> | Any non-whitespace. Equivalent to <code>[^\t\n\r\f\v]</code> and <code>[[:^space:]]</code> Note: <code>\w != \S</code> | | | | | | |
| <code>\d</code> | Any digit. Equivalent to <code>[0-9]</code> and <code>[[:digit:]]</code> | | | | | | |
| <code>\D</code> | Any character other than a digit. Equivalent to <code>[^0-9]</code> and <code>[[:^digit:]]</code> | | | | | | |
| <code>[\b]</code> | A literal backspace (special case) | | | | | | |
| <code>[[:class:]]</code> | alnum | alpha | ascii | blank | cntrl | digit | graph |
| | lower | print | punct | space | upper | xdigit | |

Replacement

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| <code>\</code> | Turn off the special meaning of the following character. |
| <code>\n</code> | Restore the text matched by the nth pattern previously saved by <code>\(</code> and <code>\)</code> . n is a number from 1 to 9, with 1 starting on the left. |
| <code>&</code> | Reuse the text matched by the search pattern as part of the replacement pattern. |
| <code>~</code> | Reuse the previous replacement pattern in the current replacement pattern. Must be the only character in the replacement pattern. (ex and vi). |
| <code>%</code> | Reuse the previous replacement pattern in the current replacement pattern. Must be the only character in the replacement pattern. (ed). |
| <code>\u</code> | Convert first character of replacement pattern to uppercase. |
| <code>\U</code> | Convert entire replacement pattern to uppercase. |
| <code>\l</code> | Convert first character of replacement pattern to lowercase. |
| <code>\L</code> | Convert entire replacement pattern to lowercase. |

Repetition

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| <code>{n,m}</code> | Match the previous item at least n times but no more than m times. |
| <code>{n,}</code> | Match the previous item n or more times. |
| <code>{n}</code> | Match exactly n occurrences of the previous item. |
| <code>?</code> | Match zero or one occurrences of the previous item. Equivalent to <code>{0,1}</code> |
| <code>+</code> | Match one or more occurrences of the previous item. Equivalent to <code>{1,}</code> |
| <code>*</code> | Match zero or more occurrences of the previous item. Equivalent to <code>{0,}</code> |
| <code>{ }?</code> | Non-greedy match - will not include the next match's characters. |
| <code>??</code> | Non-greedy match. |
| <code>+?</code> | Non-greedy match. |
| <code>*?</code> | Non-greedy match. E.g. <code>^(.*?)\s*\$</code> the grouped expression will not include trailing spaces. |

Options

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| <code>g</code> | Perform a global match. That is, find all matches rather than stopping after the first match. |
| <code>i</code> | Do case-insensitive pattern matching. |
| <code>m</code> | Treat string as multiple lines (^ and \$ match internal \n). |
| <code>s</code> | Treat string as single line (^ and \$ ignore \n, but . matches \n). |
| <code>x</code> | Extend your pattern's legibility with whitespace and comments. |

Extended Regular Expression

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| <code>(?#...)</code> | Comment, "..." is ignored. |
| <code>(?:...)</code> | Matches but doesn't return "..." |
| <code>(?=...)</code> | Matches if expression would match "..." next |
| <code>(?!...)</code> | Matches if expression wouldn't match "..." next |
| <code>(?imsx)</code> | Change matching rules (see options) midway through an expression. |

Grouping

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| <code>(...)</code> | Grouping. Group several items into a single unit that can be used with <code>*</code> , <code>+</code> , <code>?</code> , <code> </code> , and so on, and remember the characters that match this group for use with later references. |
| <code> </code> | Alternation. Match either the subexpressions to the left or the subexpression to the right. |
| <code>\n</code> | Match the same characters that were matched when group number n was first matched. Groups are subexpressions within (possibly nested) parentheses. |

Anchors

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| <code>^</code> | Match the beginning of the string, and, in multiline searches, the beginning of a line. |
| <code>\$</code> | Match the end of the string, and, in multiline searches, the end of a line. |
| <code>\b</code> | Match a word boundary. That is, match the position between a <code>\w</code> character and a <code>\W</code> character. (Note, however, that <code>[b]</code> matches backspace.) |
| <code>\B</code> | Match a position that is not a word boundary. |