

# Perl Search/Replace

remove all lines from a file:

```
perl -p -i.bak -e 's#^\*X-something.*\n###g' $filename (remove *X-  
something.*\n)
```

```
perl -p -n -i.bak -e 's/^\*X-pol.*\n$/g' $filename
```

```
perl -p -n -i.bak -e 's/\r\n/\n/' $filename
```

```
awk '{print $3}' $filename
```

## Regular Expressions

**.** matches an arbitrary character, but not a newline unless it is a single-line match (see `m//s`).

**(...)** groups a series of pattern elements to a single element.

**^** matches the beginning of the target. In multiline mode (see `m//m`) also matches after every newline character.

**\$** matches the end of the line. In multiline mode also matches before every newline character.

**[ ... ]** denotes a class of characters to match. **[^ ... ]** negates the class.

**( ... | ... | ... )** matches one of the alternatives.

**(?# TEXT)** Comment.

**(?: REGEXP)** Like (REGEXP) but does not make back-references.

**(?=REGEXP)** Zero width positive look-ahead assertion.

**(?! REGEXP)** Zero width negative look-ahead assertion.

**(? MODIFIER)** Embedded pattern-match modifier. MODIFIER can be one or more of `i`, `m`, `s`, or `x`.

Quantified subpatterns match as many times as possible. When followed with a `?` they match the minimum number of times.

**Example:** `Url =~ /^http\:.{2}w{1,3}\.([a-c]{1}.+)\.(\w{2,3})\./`

These are the quantifiers:

**+** matches the preceding pattern element one or more times.

**?** matches zero or one times.

**\*** matches zero or more times.

**{N,M}** denotes the minimum N and maximum M match count. **{N}** means exactly N times; **{N,}** means at least N times.

**\w** matches alphanumeric, including `_`, **\W** matches non-alphanumeric.

<p><b>\s</b> matches whitespace, <b>\S</b> matches non-whitespace.</p> <p><b>\d</b> matches numeric, <b>\D</b> matches non-numeric.</p> <p><b>\A</b> matches the beginning of the string, <b>\Z</b> matches the end.</p> <p><b>\b</b> matches word boundaries, <b>\B</b> matches non-boundaries.</p> <p><b>\G</b> matches where the previous <code>m//g</code> search left off.</p> <p><b>\n, \r, \f, \t</b> etc. have their usual meaning.</p> <p><code>\n</code> neue Zeile (newline) <code>\r</code> Return</p> <p><code>\f</code> neue Seite (form feed) <code>\t</code> horizontaler Tabulator</p>	
---	--

<b>\l</b>	nächster Buchstabe klein
<b>\u</b>	nächster Buchstabe groß
<b>\L</b>	Buchstaben bis <code>\E</code> klein
<b>\U</b>	Buchstaben bis <code>\E</code> groß
<b>\E</b>	(beendet <code>\L</code> , <code>\Q</code> und <code>\</code>

**\1 ... \9** refer to matched subexpressions, grouped with `()`, inside the match.

**\10** and up can also be used if the pattern matches that many subexpressions.

Each character matches itself, unless it is one of the special characters `+ ? . * ^ $ ( ) [ ] { } | \`.

The special meaning of these characters can be escaped using a `\`.