# PTP Cheat Sheet

## SYNOPSIS

Install with:

```
sudo apt-get install perl cpanminus perl-doc build-essential
# or
sudo yum install perl Perl-App-cpanminus perl-doc gcc make

sudo cpanm App::PTP -n -L /usr/local --man-pages --install-args \
  'DESTINSTALLBIN=/usr/local/bin'
```

Run with:

```
ptp file1 file2 ... [--grep re] [--substitute re subst] ... [-o out]
```

## INPUT FILES

Input files can appear anywhere on the command line and are processed in the order in which they are given.

`filename` (anywhere in the command line, not starting with a `-`)

`-` (reads from stdin)

`-- filename ...` (for any filename)

## PIPELINE COMMANDS

Pipeline commands are applied, in order, to all the input files.

**--g** *regex* (**--grep**), **-s** *regex string* (**--substitute**)

**--p** *code* (**-perl**): read and write `$_` to modify the file

**-n** *code*: read from `$_`, write the return values

**-f** *code* (**--filter**): return *true* to keep the line

**-e** *code* (**--execute**): execute once per input file

**-l** *path* (**--load**): execute the given file, once per input file

**-M** *module*: load the given module

**--sort**, **--ns** (**--numeric-sort**), **--ls** (**--locale-sort**), **--cs** *code* (**--custom-sort**)

**-u** (**--unique**), **--gu** (**--global-unique**)

**--head** [*n*], **--tail** [*n*], **--reverse** (**--tac**), **--shuffle**

**--eat**: discard the content of the file

**--ml** *code* (**--mark-line**): set the marker for the line with the return value

**--clear-markers**, **--set-all-markers**

**--delete-marked**, **--delete-before**, **--delete-after**, **--delete-at-offset** *offset*

**--insert-before** *string*, **--insert-after** *string*, **--insert-at-offset** *offset string*: insert interpolated text next to marked lines (offset *0* is just after)

**--cut** *N*,*N*,...: select fields according to **-F** and concatenate them with **-P**

**--paste** *file*: paste with **-P** line by line with the current content

**--pivot**: turn the file into a single line with **-P**

**--anti-pivot**: split all lines according to **-F**

**--transpose**: transpose lines and columns using **-F** and **-P**

**--nl** (**--number-lines**), **--pfn** (**--prefix-file-name**)

**--fn** (**--file-name**), **--lc**, **--line-count**: replace the content of the file

**-m** (**--merge**): merge all the files in a single one

**--tee** *filename*: duplicate the output

**--shell** *command*: sends the content as input to the command

**--xargs** *command*: execute the command (which can contain `{}`) for each line.

**--push**, **--pop**: push and pop the entire content of the current file.

## PROGRAM BEHAVIOR

Global option for the program execution.

**-o** *output_file* (**--output**), **-a** *output_file* (**--append**), **-i** (**--in-place**): by default output to standard output

**-R**, **--recursive**, **--input-filter** *code*: expand directories, optionally filter input files

**--input-encoding** *encoding*, **--output-encoding** *encoding*: default is UTF-8

**--input-separator** *separator*, **--output-separator** *separator*: default is `\n`

**--eol** (**--preserve-input-separator**), **--fix-final-separator**

**-0**: set **--input-separator** to `NUL` and **--output-separator** to the empty string

**--00**: set **--output-separator** to `NUL`, useful with `xargs -0`

**-h** (**--help**), **--cheat**, **--helpshort**, **--version**: remember to have **perldoc** installed

**-d** (**--debug**), **--abort**

**--preserve-perl-env**: keep environment across files

**--safe** [*n*]: default is *0*, strictest is *2*

## PIPELINE MODES

Options for the pipeline commands coming after them. Most modes have a reverse mode to return to the default.

**-I** (**--case-insensitive**), **-S** (**--case-sensitive**): mode for any *regex* argument, **-S** is the default

**-Q** (**--quote-regexp**), **-E** (**--end-quote-regexp**): disable interpolation in any *regex*, *string*, *filename* or *command* argument, **-E** is the default

**-V** (**--inverse-match**), **-N** (**--normal-match**): inverse behavior of **--grep** and **--filter**

**-L** (**--local-match**), **-G** (**--global-match**): apply **--substitute** once per line or as much as possible (this is the default)

**-C** *code* (**--comparator**): for **--sort**, default is `$a cmp $b`

**-F** *regex* (**--input-field-spec**): how to split fields, default is **\s*,\*s|\t**

**-P** *string* (**--output-field-spec**): how to paste fields, default is a tab

**--default**, **--bytes**, **--csv**, **--tsv**, **--none**: set the **-F** and **-P** flags

**--sq** *string* (**--single-quote-replacement**), **--dq** *string* (**--double-quote-replacement**), **--ds** *string* (**--dollar-sigil-replacement**): replace the given character or string by `'`, `"`, or `$` in all *code* arguments

**--re** *engine*, **--regex-engine**: use the specified regex engine (e.g. *RE2*, *PCRE*, *TRE*, *GNU*, etc.) if installed

**-X** (**--fatal-error**), **--ignore-error**: die on error in **--perl**, **-n** and **--filter**

## PERL ENVIRONMENT

Variables and functions available to *code* arguments as well as *regex*, *string*, *filename*, and *command* ones (unless **-Q** has been passed).

**Dumper**, **fileparse**, **basename**, **dirname**, **copy**, **move**, **make_path**, **remove_tree**, **canonpath**, **any**, **all**, **none**, **min**, **max**, **sum**, **pi**, **acos**, **expand**, **unexpand**, **$tabstop**, **wrap**, **fill**, **$columns**, ...

**$_**: current line content (*RW*)

**$f**, **$F**: current file name, current absolute file name (*RO*)

**$n**: current line number (same as standard **$.**) (*RO*)

**$N**: number of lines in the current file (*RO*)

**$m**: marker of the current line (*RW*)

**@m**: markers for all the lines, current line is at index 0 (*RW*)

**$I**: 1-based index of the file being processed (*RW*)

**ss** *start*[, *len*[, *$var*]]: like `substr` but returns `''` instead of `undef`.

**pf** *format*[, *args...*]: like `$_ = sprintf format, arg...`

**spf** *format*[, *args...*]: like `sprintf`

## AUTHOR AND LICENCE

See more in the full documentation at *https://metacpan.org/pod/ptp*.