Perl Text-processing language

CONCEPTS

Start scripts with use strict; use warnings; (or use v5.36;) and declare every variable with my.

Sigils

Sigil	Holds	Element access
`$x`	scalar	$x
`@a`	array	$a[0]
`%h`	hash	$h{key}
`&f`	sub	f(...)
`\@a`	reference	$r→[0]

Context decides results: an array in scalar context gives its length, in list context its elements.

ONE-LINERS

`perl -e '`*`<code>`***`'`**
Run code given on the command line

`perl -ne '`*`<code>`***`'`**
Run code once per input line

`perl -pe '`*`<code>`***`'`**
Per line, then print $_

`perl -i[.bak] -pe '`*`<code>`***`' `***`<file>`**
Edit files in place

`perl -l`
Chomp input lines, add \n to print

`perl -a -F`*`<sep>`*
Split each line into @F

VARIABLES AND DATA

`my $x = `*`<value>`***`;`**
Declare a lexical scalar

`my @a = (`*`<1>`***`, `***`<2>`***`, `***`<3>`***`);`**
Declare an array

`my %h = (`*`<k>`***` ⇒ `***`<v>`***`);`**
Declare a hash

`$a[0] / $a[-1]`
First / last element

`scalar @a / $#a`
Element count / last index

`push @a, `*`<x>`***` / pop @a`**
Add / remove at the end

`$h{`*`<k>`***`}`**
Hash element

VARIABLES AND DATA (cont.)

`keys %h / values %h`
All keys / all values

STRINGS AND OPERATORS

`"Hi $name @{[ f() ]}"`
Interpolate variables and expressions

`==` `≠` `<` `>` `⟺`
Numeric compare

`eq ne lt gt cmp`
String compare

REGEX

`$s =~ /`*`<re>`***`/`**
Test for a match

`$s =~ s/`*`<re>`***`/`***`<new>`***`/g`**
Substitute all

`($a,$b) = $s =~ /(\d+)-(\d+)/`
Capture into variables

`$1 $2 $&`
Capture groups, whole match

`my @all = $s =~ /`*`<re>`***`/g`**
All matches in list context

`/i /x /m /s`
Ignore case, extended, multiline, dot-all

CONTROL FLOW AND SUBS

`if (`*`<c>`***`) {...} elsif (`***`<c>`***`) {...} else {...}`**
Conditional

`<stmt>` **`if `***`<c>`***`; / `***`<stmt>`*** **`unless `***`<c>`***`;**
Postfix conditional

`for my $x (@a) {...}`
Loop over a list

`sub `*`<name>`*** **`{ my ($a,$b) = @_; return ...; }`**
Define a sub

FILES AND I/O

`open(my $fh, '<', $f) or die "$!";`
Open for reading

`while (my $l = `*`<$fh>`***`) {...}`**
Read line by line