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