## Basics

### versions

perl 4 1991

perl 5 1994

updates

Raku (formerly known as perl 6)

CPAN

### extensions

.pl

.sh

### features

procedural

OOP

text processing

third party modules

not as fast as C

working with text/file data

sys admin

web development

network

GUI

#! shebang

tells the shell, which interpreter to use

which is “perl”

### comments

# single line comment

=begin multi line comment

(POD)

=end

=cut

## commands & functions

### print

does not add new line automatically

### say

adds new line automatically

### chop

### chomp

## Data Types

### Scalars

$ symbol

string

number

integers

floating point numerals

octal → add a 0 at the start (0254)

binary → add a 0b at the start (0b111)

hex → add a 0b at the start (0xb111)

### Arrays

@ symbol

list of scalars (numeric index)

### Hashes

% symbol

key:value pairs

## Operators

### arithmetic

+

-

\*

/

%

\*\* exponent

2\*\*3 ( 2 raised to 3)

++

--

### assignment

=

+= a+=b

a = a + b

-=

\*=

/=

### bitwise

& and

| or

~ negate

^ Ex-or

<< left shift

>> right shift

### logical

and

&&

or

||

not

relational (comparative, equality)

<

<=

>

>=

==

!=

string operators

lt

gt

le

ge

eq

ne

cmp

## strings

text data

scalar literal constant

"" double quotes

interpolated strings

' ' single quotes

non-interpolated

### escape sequence

\n new line

\t tab

\b backspace

\\ backslash

\' '

\" "

\v vertical tab

index

| l | u | k | e |
| --- | --- | --- | --- |
| 0 | 1 | 2 | 3 |
| -4 | -3 | -2 | -1 |

modification

s/word/replace/

/r return a copy

/i case insensitive

/g replace all occurrences

### string function

index

rindex

lc

uc

length

reverse

substr

## stdin

STDIN

<>

<STDIN>

## list & array

(val1, val2, val3)

indexing

flatten

(so no 2D)

range

splice

## flow control

### false

0

0.0

"" empty string

'0'

( ) empty list

undef

### if else

if

elsif

else

unless

### while

while

do while

until

### for

for

foreach

last

next