

Python Information

`#!/usr/bin/env python3` - first line of file
`var` - variable
`var[n]` - n^{th} element of dict, list, ...
`var[n:m]` - slice of list, ...

`r'string'` = raw string
`'string'` and `"string"` = `string` with
backslash escapes replaced

Arithmetic operators:

`+` `-` `*` `/` `%` `**` (exponentiation)

Relational operators:

`==` `!=` `<` `>` `<=` `>=`

Logical operators:

`not` `and` `or` `in` (membership of dict/list)

Bitwise operators:

`~` (NOT) `&` (AND) `|` (OR) `^` (XOR)

String operations:

`+` (concatenation) `*` (repetition) `%` (sprintf)

`while condition:`

`statements`

`for $var in (list):`

`statements`

`break` - exit the loop

`continue` - go to next iteration

`if condition1:`

`statements1`

`elif condition2:`

`statements2`

`else:`

`statements3`

`def name (arguments):`

`statements`

`abs(expr)`

returns absolute value of `expr`

`chr(expr)`

returns char represented by `expr`

`dict(value)`

convert value to dict

`float(string)`

convert `string` to floating point

`int(string)`

convert `string` to integer

`len(list)`

number of items in list

`map(function, list)`

apply `function` to each element of `list`

`range([start], stop[, step])`

list of integers between specified values

`round(float)`

convert floating point value to integer

`sorted(list)`

list in sorted order

`string.lower()`, `string.upper()`,

`string` converted to lower/upper case

`string.join(list)`,

`string` formed by concatenating `list` with
`string` as a separator

`sys.argv`

array of program arguments

program name is first element

`sys.exit(value)`

exit with status `value`

`sys.stdin`

standard input

`re.findall(regex, string)`

all matches of `regex` in `string`,

`re.split(regex, string)`
split *string* where *regex* occurs

`re.sub(regex, repl, string)`
string with all occurrences
of *regex* replaced with *repl*

`dict.keys()` `dict.values()`
list of keys/values of dict

`list.count(value)`
how many times *value* occurs in *list*

`list.append(value)`
list with *value* appended

`file = open(filename)`
read from *filename*

`file.read()`
read entire file as 1 string

`file.readline()`
read one line from file

`file.readlines()`
read entire file as list of string

`for line in file:`
loop to process file line by line