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 *condition*$_1$:
    statements$_1$
elif *condition*$_2$:
    statements$_2$
else:
    statements$_3$

def *name* (*arguments*):
    statements

abs(emphexpr)
    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*,

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re.split(regex, string)
    split string where regex occurs
re.sub(regex, repl, string)
    string with all occurences
    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
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