## Basics

### installations

python.org

anaconda.org

### file extensions

.py regular file

.ipynb python notebook

jupyter

spyder

### IDE & editors

vscode

visual studio

pycharm

IDLE

jupyter

spyder

### keywords

True False

### REPL

Read Eval Print Loop

everything is an object

type

### Data Types

regular:

int

float

str

complex

7 + 8j

### bool

True

False

### comments

# single line comments

docstring used as multiline comment

## Functions

### general

print

type

### sequence

len

## Operators

### arithmetic

+

-

\*

/

% remainder

// floor division

\*\* power of

= assignment

## str

strings (text)

utf-8

ascii

double quotes or single quotes

indexed

IndexError (out of range)

negative indexing

slicing

upper range not included

steps are possible

no IndexError

| b | e | r | r | y |
| --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 |
| -5 | -4 | -3 | -2 | -1 |

immutable

### str functions

upper, lower, capitalize, title

index, count, rindex

isalnum, isalpha, isdigit

replace,

### escape sequences

\n new line

\b backspace

\t tab

\\ \

\" "

obsolete:

\r return

\v vertical tab