

Python

intro

History

- successor to the ABC programming language (CWI, Netherlands)
- Guido van Rossum (took name from Monty Python)
- In February 1991, Van Rossum published the code (labeled version 0.9.0)
- Python 1.0 - January 1994
- Python 3.0 - December 3, 2008
- 2.7 -> 3.0 no backward compatibility

Installation

- 2.7 on Mac pre-installed
- Anaconda
 - <https://www.continuum.io/downloads>
 - <https://docs.continuum.io/anaconda/pkg-docs>

Environment

- PyCharm
- PyDev
- Spider
- IEP
- notebook

Features

- Indentation
- Dynamic typing
- ...

Commands & operators

- if, elif, else
- switch ?
- for, while
- **, // ...
- and, or, not
- pass

Lists & functional

- Tuples
- List slicing [a:b:c]
- Zip, filter, map, (functools)reduce
- Comprehension
- Generators
- Decorators

Classes

- `__init__`
- Magic methods
 - `__add__` (+)
 - `__sub__` (-)
 - `__mul__` (*)
 - `__truediv__` (/)
 - ...
- Properties