



LISBON
SCHOOL OF
ECONOMICS &
MANAGEMENT

UNIVERSIDADE DE LISBOA

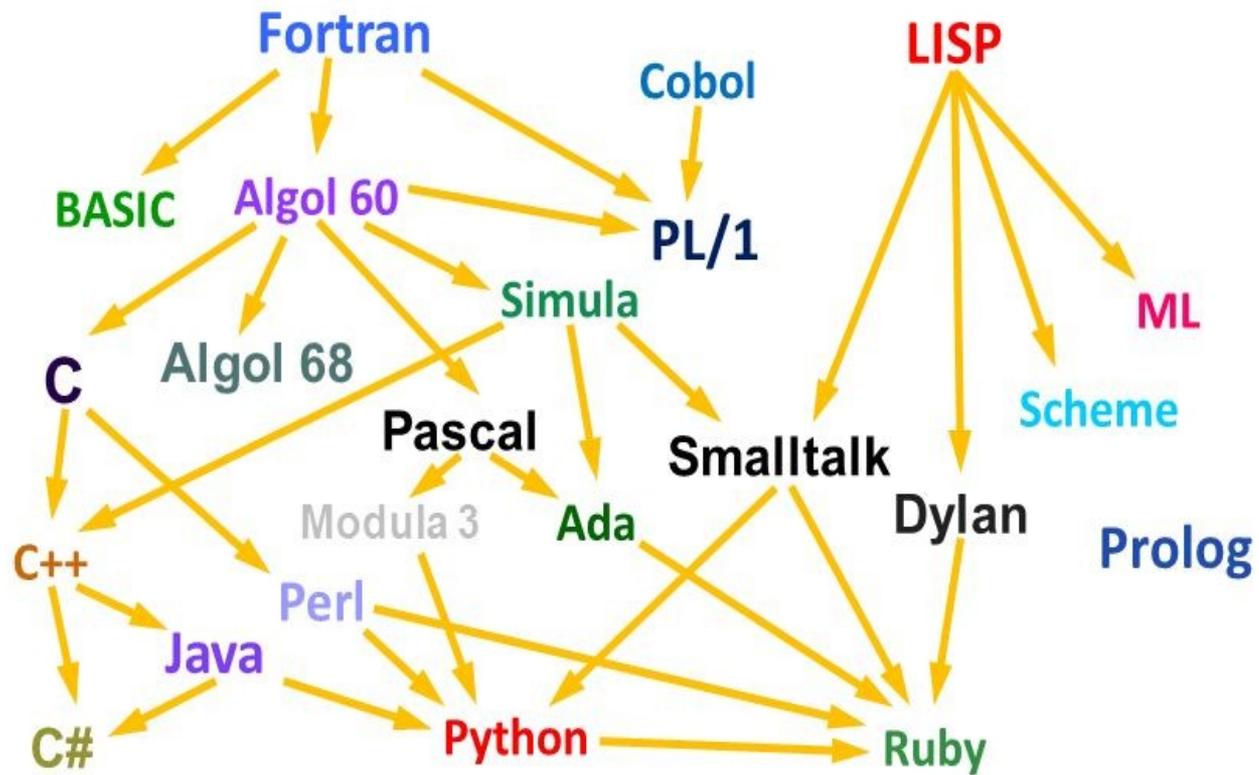


Context and Tools

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Learning Goals

- Understand Python in the context of other languages
- Learn Python History and License
- Know Python Programming Tools



Python



- Interpreted programming Language
- high-level
- Multi-paradigm
- general-purpose programming language.
- In 1989 Guido Van Rossum presented this language
- Name inspired in “Monty Python’s Flying Circus”, BBC



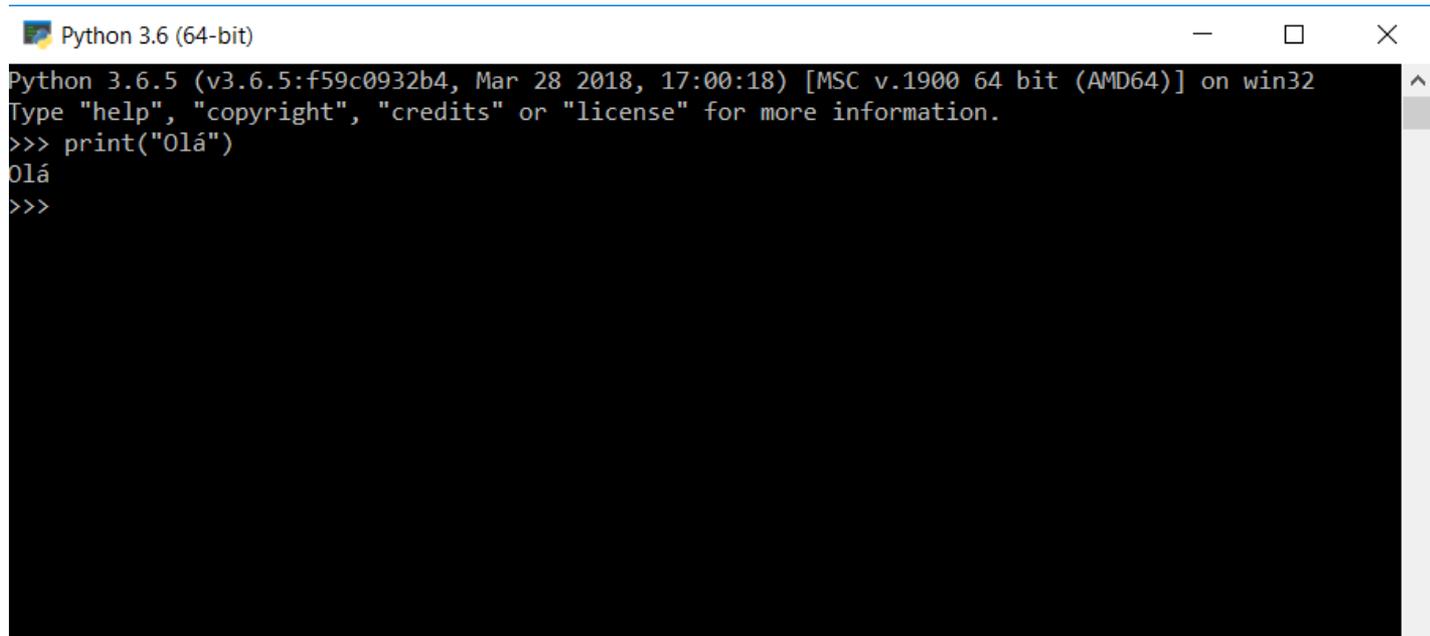
Python

- Installing Python
- License: Python Software Foundation License (PSFL) compatible with GNU-GPL
- Download and installing...

<https://www.python.org/>

Python

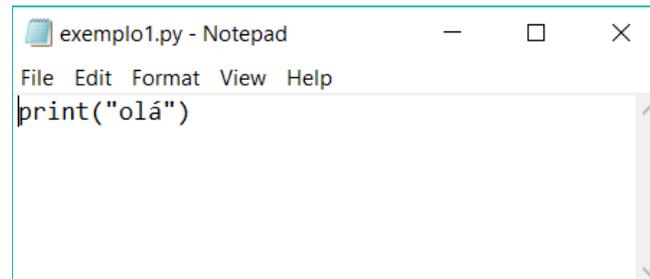
- Interactive Mode



```
Python 3.6 (64-bit)
Python 3.6.5 (v3.6.5:f59c0932b4, Mar 28 2018, 17:00:18) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> print("Olá")
Olá
>>>
```

Python

- Script Mode
- We create a file (for example using notepad++)

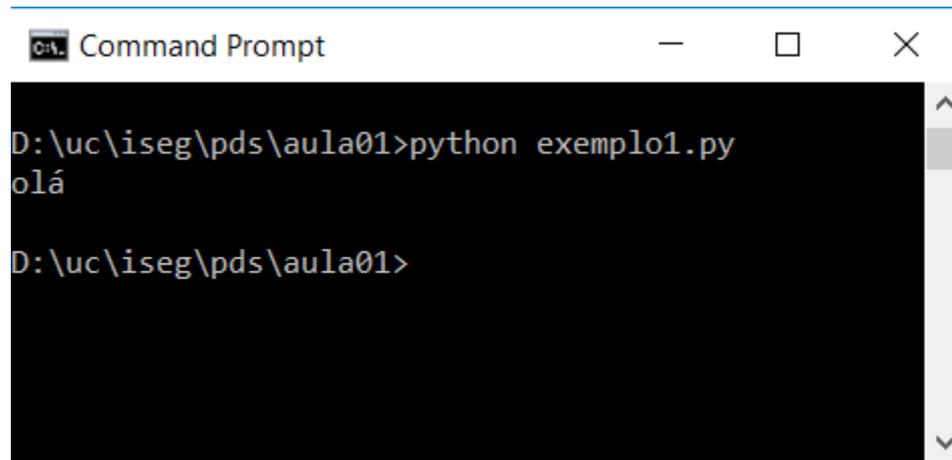


```
exemplo1.py - Notepad
File Edit Format View Help
print("olá")
```

- We save the file with:
exemplo1.py

Python

- Then we call the file:



```
Command Prompt
D:\uc\iseg\pds\aula01>python exemplo1.py
olá
D:\uc\iseg\pds\aula01>
```

Anaconda

- Open Source Distribution (under BSD license)
- It is easier to install and manage all the packages
- It is easier to perform *data science* in Python / R and *machine learning*
- *Operating systems:* Linux, Windows, Mac OS X.
- <https://www.anaconda.com/>



Jupyter

- Interactive programming environment
- Open Source software (BSD license)
- open-standards,
- Supports several programming languages
- Origin from Ipython
- <https://jupyter.org/>



Alternatives

- It is possible to use some tools in the *Cloud* :



– <https://notebooks.azure.com/>



<https://colab.research.google.com/>



- <https://www.python.org/about/gettingstarted/>
- <https://docs.python.org/2/faq/>

Hello World!

- `print("Hello World!")`