



Python Hands-On

A very hurried crash course

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Where I'm from



- Young start-up in Torino (first launched in April 2017)
- The product is a FinTech app that helps you
 - **save** automatically
 - **track** your transactions
 - be **more aware** of your personal finances
 - (soon) **invest** what you save!

Oval & Python



- Our technology is based on a simple equation:

$$\text{00} + \text{python}^{\text{TM}} = \text{Heart}$$

- The app on the background relies on more or less complex **services, all written in Python**
- **ML** part is **also in Python**

ML at Oval



- We've got **BIG DATA** (variety, velocity, volume)
- By now we use ML to:
 - **classify your transactions** into categories (is it simple? What is Luca SRL? What if user 1 doesn't agree with 2?)
 - **detect your recurring transaction** (mortgage, bills, rent...)
 - suggest you **smart way of saving** (work in progress)

Why Python



Started by **Guido Von Rossum** (back in 1990)

- Very high-level
- Both procedural and Object-Oriented programming
- Simple and clean
- Cross-Platform
- Very versatile with very dynamic community!

About you



Little poll:

What's your experience with Python?

How to run python I



From the shell:

- Type `python` and write commands. It should appear the **python shell**, characterised by the entry points `>>>` (see image on left)

```
stefanocalde — Python — 80x24
Last login: Mon Sep 17 09:19:32 on ttys005
[MacBook-Pro-di-Stefano-2:~ stefanocalde$
[MacBook-Pro-di-Stefano-2:~ stefanocalde$ python3
Python 3.5.2 (v3.5.2:4def2a2901a5, Jun 26 2016, 10:47:25)
[GCC 4.2.1 (Apple Inc. build 5666) (dot 3)] on darwin
Type "help", "copyright", "credits" or "license" for more information.
>>> █
```

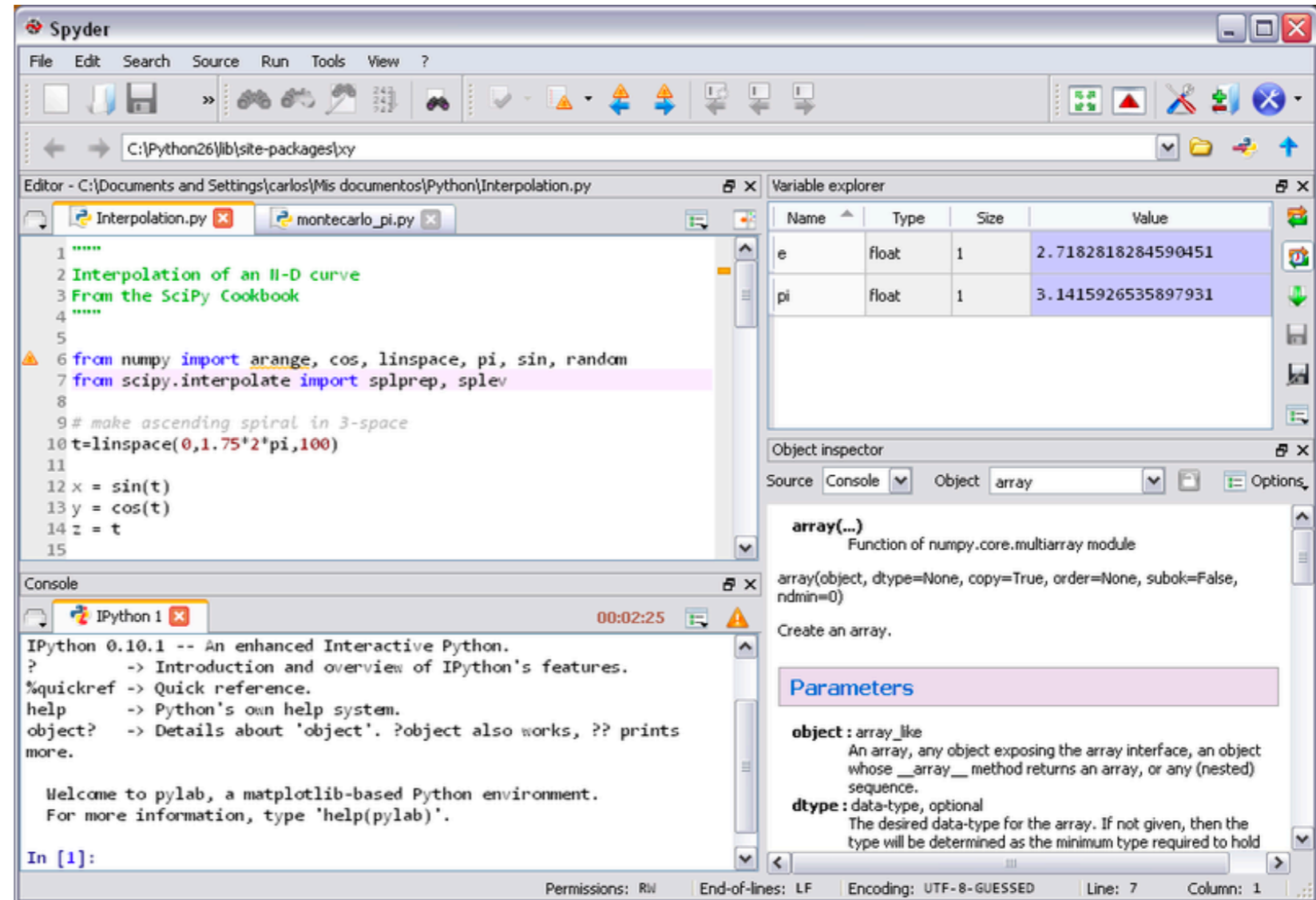
- Save your code in a `.py` file and run it by typing
`python file_name.py`
(where `file_name` is the name of your file)

```
stefanocalde — -bash — 80x24
Last login: Mon Sep 17 09:20:20 on ttys005
MacBook-Pro-di-Stefano-2:~ stefanocalde$ python my_script.py █
```

How to run python II



- Using an IDE (Spyder, PyCharm, Atom...)



- With **Jupyter Notebooks!**