USRP Bootcamp Day 2

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[1]EPFL

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Preliminary schedule:

9:30 - 10:30 Introduction to python (+notebooks)

10:30 - 11:00 AstroCoffee

11:00 - 12:30 Introduction to numpy + broadcasting exercise (if time permits otherwise switch to afternoon)

12:30 - 14:00 Lunch

14:00 - 14:30 Discussion (quick word on IDEs: text, IDLE, atom, pycharm. . .)

14:30 - 15:00 Break

15:00 - 17:00 Estimate pi (+ more exercises around object oriented programming if time permits)

Introduction to python:

Command line and scripts

- Python in command line:

```
remy$ python
Python 3.7.1 (default, Dec 14 2018, 13:28:58)
[Clang 4.0.1 (tags/RELEASE_401/final)] :: Anaconda, Inc. on darwin
Type "help", "copyright", "credits" or "license" for more information.
>>> print('Hello minions!')
Hello minions!
>>>
```
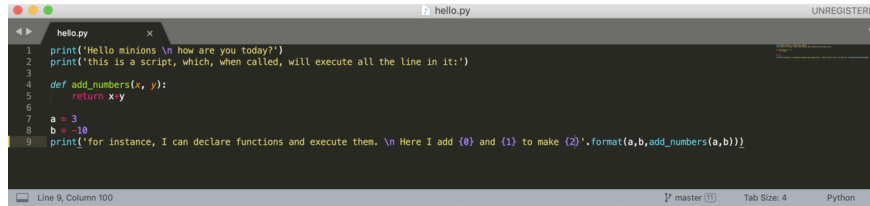
- Scripts:

   Script in a file

Figure 1: This is a caption

Executing a script (Fig. 1) from terminal

```
remy$ python hello.py
Hello minions
how are you today?
this is a script, which, when called, will execute all the line in it:
for instance, I can declare functions and execute them.
Here I add 3 and -10 to make -7
```

Executing script from python's terminal:

```
remy$ python
Python 3.7.1 (default, Dec 14 2018, 13:28:58)
[Clang 4.0.1 (tags/RELEASE_401/final)] :: Anaconda, Inc. on darwin
Type "help", "copyright", "credits" or "license" for more information.
>>> import hello
Hello minions
how are you today?
this is a script, which, when called, will execute all the line in it:
for instance, I can declare functions and execute them.
Here I add 3 and -10 to make -7
```

-Jupyter notebook:

Your turn:

```
remy$ cd your_path_to/usrp_sciprog/day2/
remy$ jupyter notebook
```