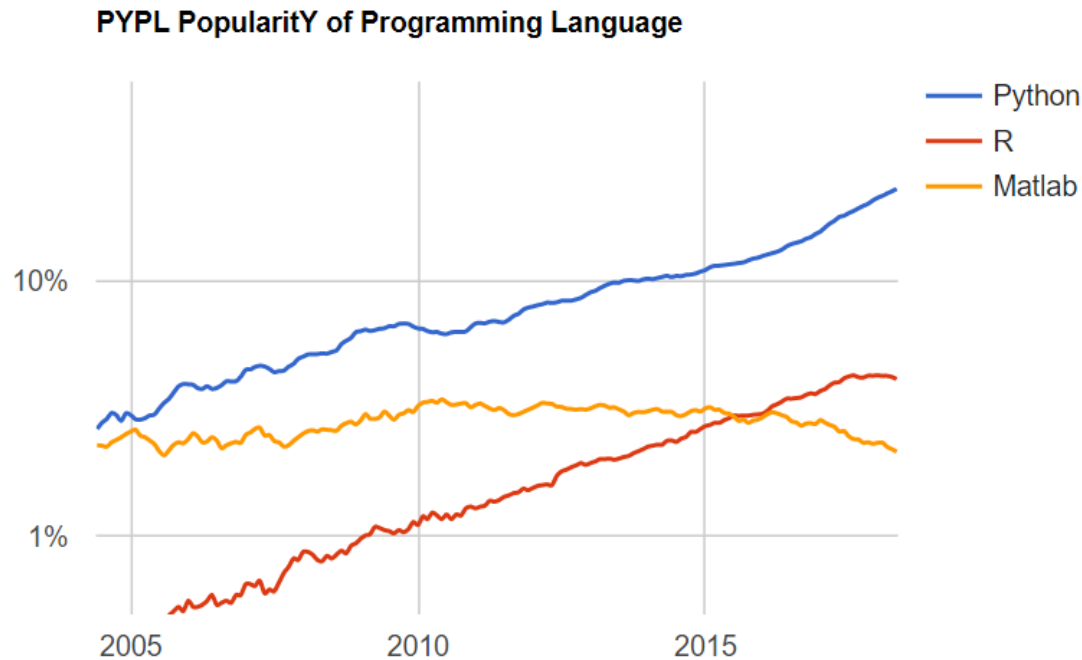


Python



Python is a general purpose and high level programming language. It is not a compiled language. It favors structured programming based on scripts, functional programming and object oriented programming.

Workshops: "methodology"

During these workshops, you can decide to either:

1. Run and use Python from your current OS
2. Run and use Python from a Linux Virtual Machine

Ideally, it is a good opportunity to use a **Linux Virtual Machine**



But, we are going to get started with a Python distribution.

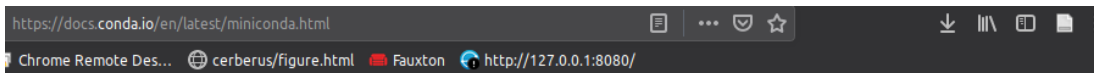
The two pythons

```
ilyass@tx1:~$ python2
Python 2.7.16 (default, Apr  9 2019, 04:50:39)
[GCC 8.3.0] on linux2
Type "help", "copyright", "credits" or "license" for more
>>> 2 + 2
4
>>> exit()
ilyass@tx1:~$ python3
Python 3.6.8 (default, Apr  9 2019, 04:59:38)
[GCC 8.3.0] on linux
Type "help", "copyright", "credits" or "license" for more
>>> 2 + 2
4
>>> exit()
```

Python2 is still supported until 2020. Python3 has been around since 2008. We will be using Python3.

Anaconda / Miniconda

Anaconda provides easy access to a large amount of scientific packages for the R or Python languages. Miniconda is a lightweight version of Anaconda, only the essential packages



Miniconda

Miniconda is a free minimal installer for conda. It is a small, bootstrap version of Anaconda that includes only conda, Python packages they depend on, and a small number of other useful packages, including pip, zlib and a few others. Use the `conda install command` to install 720+ additional conda packages from the Anaconda repository.

[See if Miniconda is right for you.](#)

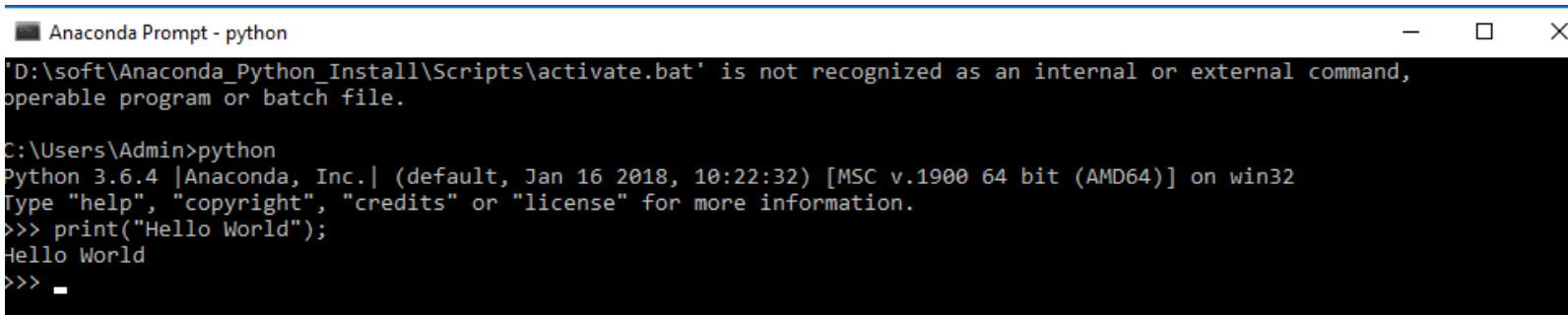
Windows installers

Windows			
Python version	Name	Size	SHA256 hash
Python 3.7	Miniconda3 Windows 64-bit	51.5 MiB	f18060cc8bb50ae75e4d602b7ce35197c8e31e81288d069b758594f1bb46ab45
	Miniconda3 Windows 32-bit	54.0 MiB	7c30778941d2bba03531ba269a78a108b01fa366530290376e7c3b467f3c66ba
Python 2.7	Miniconda2 Windows 64-bit	50.9 MiB	8647c54058f11842c37854ede7f4d20bc1fbdad8b88d9d34d76fda1630e64846
	Miniconda2 Windows 32-bit	48.7 MiB	0d106228d6a4610b599df965dd6d9bb659329a17e3d693e3274b20291a7c6f94

Download Miniconda Python 3 for your OS and install it.

Prompt shell

Start your Anaconda Prompt, then load Python.

A screenshot of an Anaconda Prompt window titled "Anaconda Prompt - python". The window has a black background with white text. At the top, there is a message: "'D:\soft\Anaconda_Python_Install\Scripts\activate.bat' is not recognized as an internal or external command, operable program or batch file." Below this, the command prompt shows the user typing 'python' at the 'C:\Users\Admin>' prompt. The output shows 'Python 3.6.4 |Anaconda, Inc.| (default, Jan 16 2018, 10:22:32) [MSC v.1900 64 bit (AMD64)] on win32' followed by instructions to type 'help', 'copyright', 'credits' or 'license' for more information. Then, the user types '>>> print("Hello World");' and the output is 'Hello World'. The prompt '>>>' is followed by a cursor. The window has standard Windows window controls (minimize, maximize, close) in the top right corner.

```
Anaconda Prompt - python
'D:\soft\Anaconda_Python_Install\Scripts\activate.bat' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\Admin>python
Python 3.6.4 |Anaconda, Inc.| (default, Jan 16 2018, 10:22:32) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> print("Hello World");
Hello World
>>> _
```

