# Installation of Python

## Installation via Anaconda

- Download miniconda for Python 3 (64 bits)

- Advice: use a Unix based environment (Linux, MacOS, ou WSL for Windows 10)

- From the Terminal (download file in `~/Downloads` for example)

    - `bash ~/Downloads/Miniconda3-latest-...-x86_64.sh`

- Follow the installation instructions (type `yes` several times)

- If after restarting the terminal the command `conda` is not working, follow this procedure:

    - `cd ~/miniconda3/bin`

    - `conda init`

    - Restart the terminal

- It is then recommended to create an environment to install all the required packages for the class (environment named **app5** for example)

    - Update conda: `conda update conda`

    - `conda create --name` **app5** `python=3`

    - `conda activate` **app5**

    - `conda config --env --add channels conda-forge`

- After activating the environment, you can install the packages, via:

    - `conda install numpy scipy pandas matplotlib jupyterlab scikit-learn seaborn`

    - To update all installed packages: `conda update --all`

    - It takes a few hundred MB to install Miniconda and some environments, if the `miniconda3` folder becomes too large, you can clean the installation files via: `conda clean --all`

## Launching JupyterLab

- JupyterLab can be launched via the `jupyter lab` command in the Terminal with the **app5** environment enabled

- A local server starts and your default web browser opens with the application

- The folder from which the command is launched sets the root folder in the JupyterLab file manager

- You can read the official documentation or there are several tutorials accessible on the web.