Installation of Python and Jupyter-notebook for MacOSX

Create a virtual environment and install the supported python version (3.9.x)

1) Check the python version

python —version

OR

python -V

requires Python >= 3.9.X, If not update the python

2) Install Brew and update

ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"

And

brew install readline xz

And

brew update && brew doctor

3) Install pyenv and pyenv-virtualenv

brew install pyenv pyenv-virtualenv

And

if which pyenv-virtualenv-init > /dev/null; then eval "$(pyenv virtualenv-init -)"; fi

4) install supported python version (we are installing python 3.9.0, you can install any 3.9.x)

pyenv install 3.9.0

5) Check pyenv version

pyenv versions
* system (set by /Users/your_name/.pyenv/version)
3.9.0

6) create virtual environment

pyenv virtualenv 3.9.0 myenv-3.9.0

And

export PYENV_VIRTUALENV_DISABLE_PROMPT=1

7) Activate virtual environment

```
pyenv activate myenv-3.9.0
```

8) install pip

```
sudo easy_install pip3
sudo pip3 install --upgrade pip
```

9) Install Jupyterlab

```
pip3 install jupyterlab
```

10) Install notebook

```
pip3 install notebook
```

11) Install packages

```
pip3 install numpy pandas scikit-learn
```

12) Run the notebook

```
jupyter notebook
```

Installation of Python and Jupyter-notebook for Linux

Create a virtual environment and Install the packages

1) Check the python version

python —version

OR

python -V

requires Python >= 3.X.X, If not update the python

2) Creation of virtual environments is done by executing the command venv

python3 -m venv /path_to_new_virtual_environment/new_env_name

3) Activate the virtual environment

source /path_to_new_virtual_environment/new_env_name/bin/activate

4) install pip (on Debian based systems)

sudo apt update
sudo apt install python3-pip
pip3 --version

5) Install Jupyterlab

pip3 install jupyterlab

6) Install notebook

pip3 install notebook

7) Install packages

pip3 install numpy pandas scikit-learn

8) Run the notebook

jupyter notebook

9) Deactivate the virtual environment

deactivate

# Installation of Python and Jupyter-notebook for Windows

1) Go to https://www.python.org/downloads/ and download the latest Python version by pressing the yellow button. The download should start automatically.
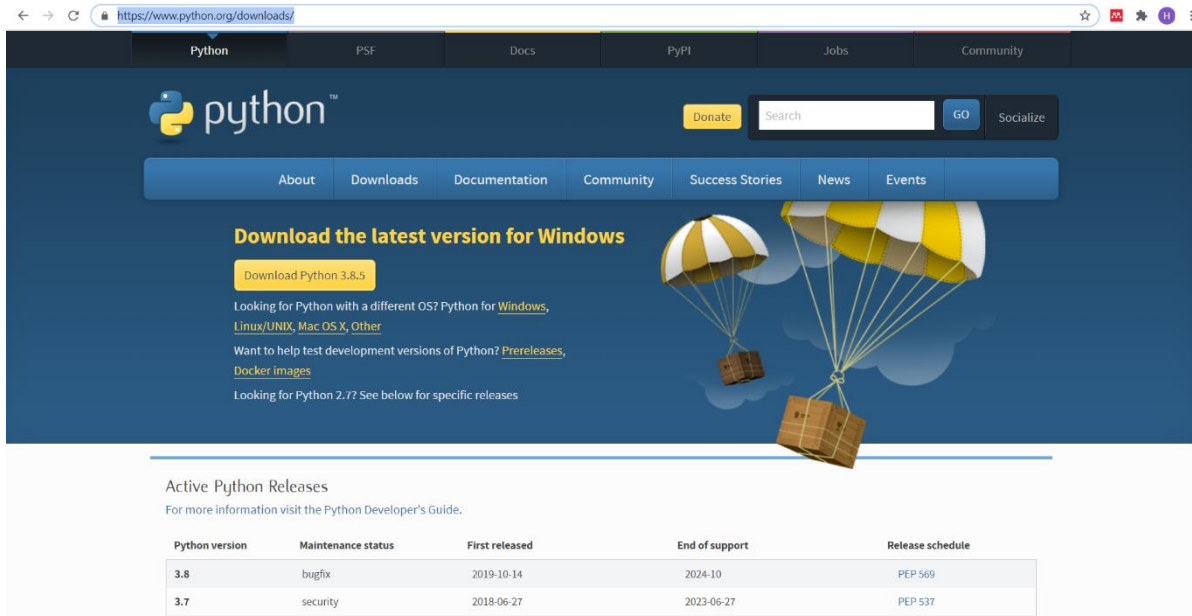
2) After downloading the installation file run it and the following window will appear.

Before selecting Install Now, tag the ADD Python 3.8 to PATH. Then select Install now and Python will be installed on your computer.
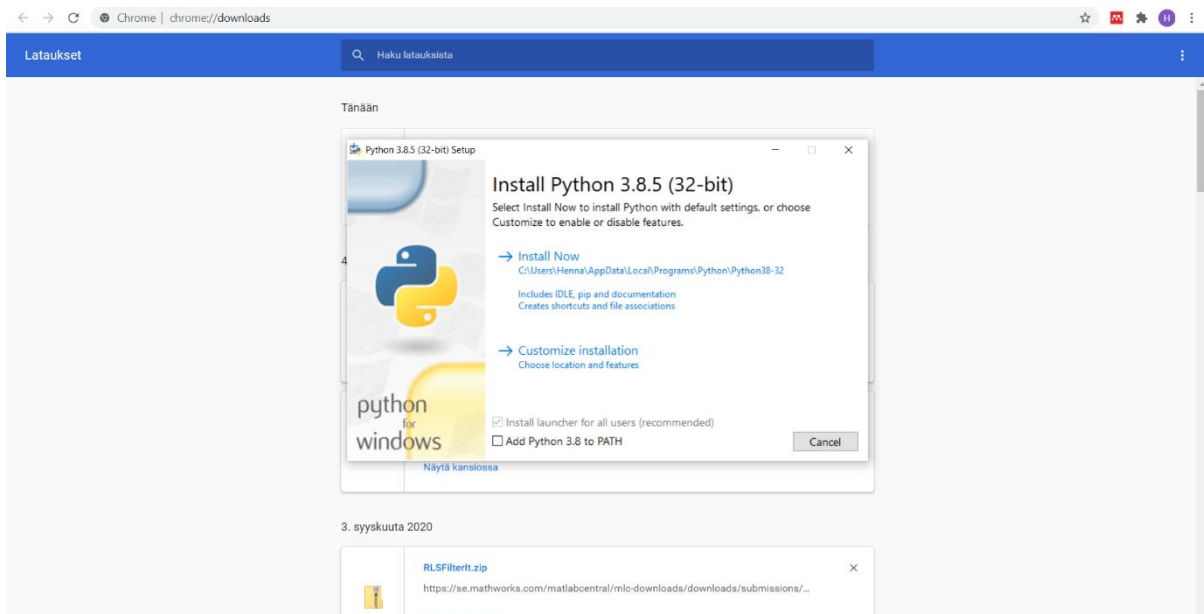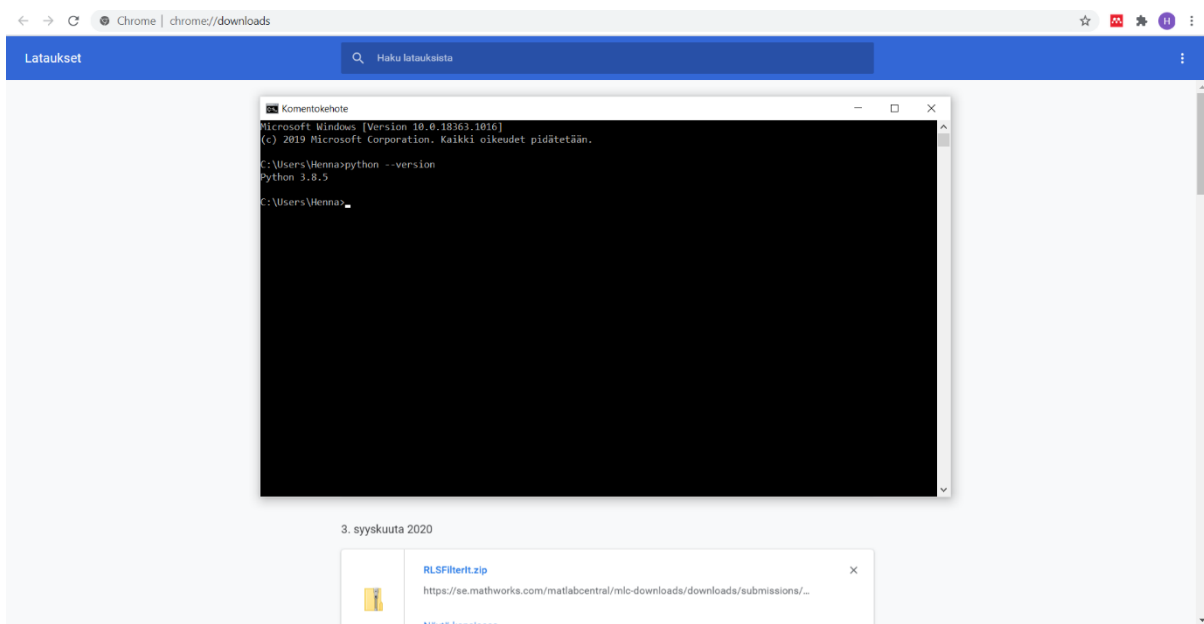
3) Check that Python is installed successfully on your computer by opening the command prompt by typing cmd in the search box.

Type below command in the command prompt

python --version

If the installation went right, you will see the installed version of Python appearing below your command.

4) Next, install Jupyter-notebook with pip, which is installed automatically with Python. If you want, you can check that similarly by typing

pip --version

in the command prompt; the existing version should appear below the command.
Then type the below command,

pip install notebook

The installation should start and pip will also install all other needed packages for the Jupyter notebook. This may take a while depending on the number of packages to be installed.

5) You can install other needed packages as well by using the following commands:

- Scikit-learn: "pip install scikit-learn" (installs Numpy too)
- Pandas: "pip install pandas"
- Matplotlib: "pip install matplotlib"

6) After the installation open jupyter notebook with this command.

jupyter notebook

The view should look similar as in the figure below. Navigate to a folder where you have saved the downloaded project files and open it.
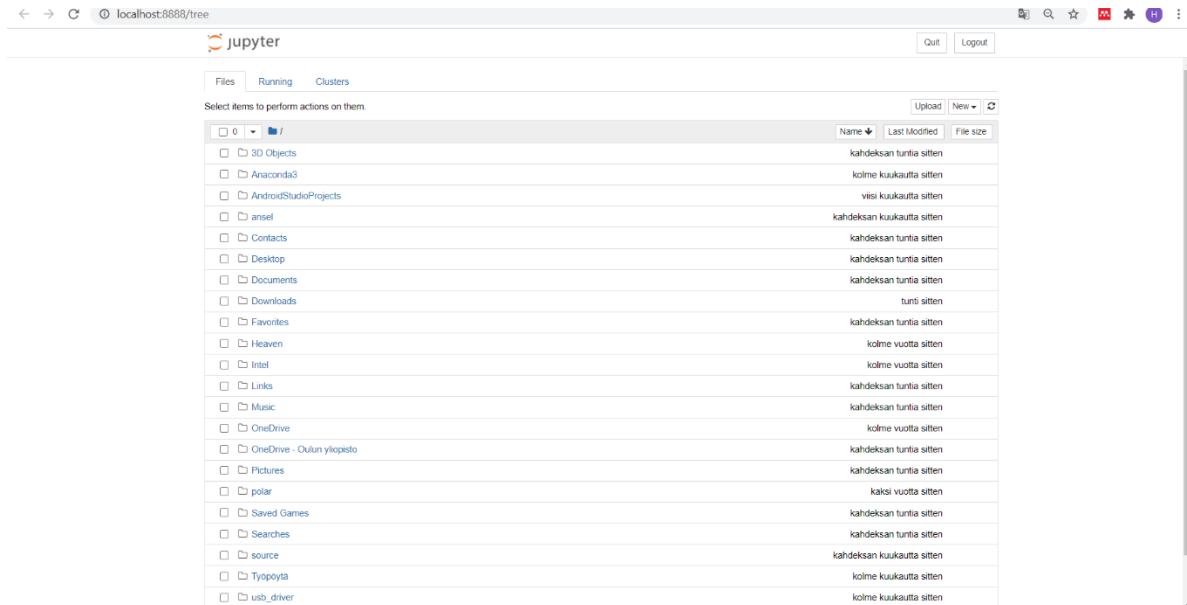
When you stop using Jupyter notebook, close the connection by pressing CTRL+C twice in the command prompt.

For more info about the usage of Jupyter Notebook, see https://jupyter.readthedocs.io/en/latest/running.html#running.