Tutorial pandas

Pandas contains high-performance, easy-to-use data structures and data analysis tools for the *python* programming language.

We could have written a whole tutorial about pandas but the world wide web is full of resources to learn python.

We will take advantage of it and learn to use the *jupyter notebook*. The Jupiter is a web-based application that allows you to interactively use python in your web browser following instructions. You will soon understand more precisely what we mean.

First download the *pandas-cookbook-ebc.zip* tutorials from our *github* repository at this address and then unzip it:

https://github.com/xapple/python_ebc_2016/tree/master/day_03/lectures

It is now time to start the jupyter notebook. Start it from any terminal using:

jupyter notebook

NOTE: If you do not have *jupyter notebook*:
install *python* via anaconda for Windows:

https://docs.continuum.io/anaconda/install
for *Linux* and *OS X type*:

pip install jupyter ipykernel

Once it is running, you should see a file explorer appearing in your favorite browser. Go to the folder you just downloaded by using the interactive file explorer:

pandas-cookbook-master/cookbook/

and double click on:

1.A quick tour of IPython Notebook.ipynb

Welcome in the *jupiter notebook*!

Learn about the *jupyter notebook* and *pandas* by completing the *quick tour*. Do not hesitate to modify cells and try your own stuff. The notebook behaves just like python does!

Once you are done it is time to learn about pandas. Proceed with "2.TheDataFrame" as well as chapters 1 to 4 related to pandas! Take your time to understand the commands you are running. If you are done, try to use Pandas with your own data!

The notebook is a great learning tool and there are plenty of notebooks ready online. Have a look there:

 $\underline{https://github.com/ipython/ipython/wiki/A-gallery-of-interesting-IPython-Notebooks}$