Tools Installation and Introduction

A. Needed tools

During this hands-on meetings, you'll need to install as mentioned below on your computer.

1. Python 3.x,
2. Python libraries: (i) jupyter notebook, (ii) pandas, (iii) numpy, (iv) matplotlib, (v) scikit-learn,
3. Any library that may be needed later.

B. Tools installation

Note: If you already have all the tools mentioned in (**A**) above in your computer, you may skip steps below.

1. Python 3.x
   a. There are several ways to install python in your computer, but we recommend to install "Anaconda". Open : https://www.anaconda.com/distribution/, download python 3.x and choose the one according to your OS.
   b. Open "Anaconda Command Prompt" (or standard terminal in Ubuntu) and type: `conda env list`. This will show your conda environment. From fresh installation, you will only see "base" environment.
2. Install libraries
   a. Setting proxy first in Anaconda Command Prompt, type this below and press enter button (in case your internet connection needs a proxy setting):
   ```
   conda config --set proxy_servers.https
   https://your_username:your_password@cache.itb.ac.id:8080
   ```
   b. Create new environment, type and enter:
   ```
   conda create -n your_env_name python=3.6
   ```
   c. Install libraries:
   ```
   conda install pandas numpy matplotlib scikit-learn
   conda install jupyter notebook
   ```
   Note: you can always verify your installed libraries by: `conda list`
3. Open jupyter notebook
   a. First, activate our environment we just created first:
   ```
   conda activate your_env_name
   ```
   You will see your environment name shown in the front as follows, in this case the environment name is "datamining".
   ```
   (datamining) C:\Users\ardia>
   ```
   b. (**Optional**) You can choose your working folder, e.g., changing working folder to "C:\datamining_s1" (please adjust the command with your own used OS).
   ```
   (datamining) C:\Users\ardia>cd C:\datamining_s1

   (datamining) C:\datamining_s1>
   ```

c. Open jupyter notebook:
   `jupyter notebook`
   It will open your browser. Done~

Enjoy! ☺