

**Exercise 1.** Given the lecture notes in PDF format ([here](#)), you are requested to produce the corresponding Python notebook and submit a working version of it (i.e., submit the `.ipynb` file).

[*Hints*]: Do not try to reproduce every single snippet of code, as not everything is supposed to work autonomously. Rather make an educated selection and re-composition of the working examples. Do not forget to highlight the main topics and include comments and text to support the presentation.

## Instructions

[*Deadline*]: Submissions via SIGAA close Sunday June 04, 2017 at 23:59:59 (Fortaleza Time).

[*Delays*]: Delayed submissions via email to [rafa.olv.lima@gmail.com](mailto:rafa.olv.lima@gmail.com). Delays will be penalised.

[*Solutions*]: You can write your solutions in either Portuguese or English language. Solutions must be submitted as PDF or Plain Text files (that includes `.ipynb` and `.py` file formats); Other formats (`.doc`, `.docx`, `.rtf` etc.) will not be considered. The L<sup>A</sup>T<sub>E</sub>X template available at the course website is recommended, though not obligatory.

[*About code*]: If the code is short (i.e., at most 3-page long, overall), it is okay to paste it to your solution sheet. Otherwise, it is more appropriate to either package it (`zip`) together with your solution sheet, or provide a link in your submission for us to download it (Note: If you opt for the link, it is your responsibility/risk to make sure that the link is fully functioning also after deadline.)

[*Others*]: Collaborations and solutions inspired by other people's work will be tolerated only within the limits explained in the website. Plagiarism will not be tolerated and will be reported to the UFC.