Sheet#0

Objectives

This assignment aims to make students familiar with python programming and to begin the exploration process of a dataset.

Download and Read Data

In your python script use the "datasets.load" to load the iris dataset.

Visualization

1. Plot the histogram for each class.
2. Use scatter plot to plot every 2 attributes together.
3. Use 3D scatter plot to plot every 3 attributes together.
4. Show the correlation matrix between the attributes and comment on it.
5. Use boxplots to show the quartiles and the median of the sepal length, sepal width, petal length and petal width for each kind of flowers.

Notes

1. You should deliver a report which contains:
   ○ Explanation of the iris dataset attributes and details in a tabular form.
   ○ The visualization and with comments on them if available.
2. You should write your code in python and you may use scikit-learn, numpy, scipy or pyplot whenever needed.

3. It is preferred to use [Google Colab](https://colab.research.google.com) in this sheet and any coding assignment.
4. Any further effort (more visualizations, analysis … etc) will be appreciated.
5. Marks are put on effort and trials so copied assignments will be penalized, so not delivering the assignment would be much better.