PROBLEM SET 1 - TAKE AT HOME (35 Points)

You are tasked to implement the development of a time series forecasting model. The baseline its implementation is described here and the code is located here. You need to submit the following tasks in a single notebook.

PS1.A (5 points)

Replicate the implementation on a single notebook and ensure that the notebook is automatically executed from top to bottom without any error or user intervention.

PS1.B (10 points)

Describe the task of the problem and add comments to everty line of code in the notebook. The comments should be clear and concise and should explain the purpose of the code.

PS1.C (10 points)

Replace the MLP with a 1-dimensional CNN network and explain your new model parametization.

PS1.D (10 points)

Compare the two models and explain any difference in performance.