I. Explanation of Notebooks
1. **File cc_fi_preparing_df.ipynb**

Contains the required preliminary treatment of the initial dataset .
This file should be implemented before any others as it results two dataframes saved in the computer memory. It requires the dataset saved locally in the computer. The remaining notebooks require these files during their execution.

2. **File cc_fi_1.ipynb**

This file explores the treated dataframes created by file `cc_fi_preparing_df.ipynb'
and proceeds to techniques of unsupervised Machine Learning (clustering algorithms and principal component analysis).
The implementation of this file requires the outputs of file `cc_fi_preparing_df.ipynb'.
This file should be implemented after file cc_fi_preparing_df.ipynb as the related results are required by the following notebooks.

3. **File cc_fi_3_0.ipynb**
This file reproduces the Approach 1 explained in file README.

This file should be implemented after file cc_fi_preparing_df.ipynb. 4. **File cc_fi_3_1.ipynb**

This file reproduces the Approach 2 explained in file README.
It should be executed after file cc_fi_1.ipynb since it requiers the results of the unsupervised Machine Learning (clustering).

4. **File cc_fi_3_1.ipynb**

This file reproduces the Approach 3 explained in file README.
It should be executed after file cc_fi_1.ipynb since it requiers the results of the unsupervised Machine Learning (PCA).

5. **File cc_fi_initializing_variables.ipynb**

It contains variables to be initialized before implementations.

6. **File cc_fi_preparing_df.ipynb**

It contains definitions of various employed functions.

II. Directions for Implementations

For all approaches file cc_fi_initializing_variables.ipynb should be filled.

For experimenting Approach 1:
1. Execute file cc_fi_preparing_df.ipynb.

2. Execute file **c**c_fi_3_0.ipyn**b.** For experimenting Approach 2:

1. Execute file cc_fi_preparing_df.ipynb if it is not previously implemented. 2. Execute file cc_fi_1.ipynb (if it is not previously implemented)
2. Execute file cc_fi_3_1.ipynb

For experimenting Approach 3:

1. Execute file cc_fi_preparing_df.ipynb if it is not previously implemented. 2. Execute file cc_fi_1.ipynb (if it is not previously implemented)
2. Execute file cc_fi_3_2.ipynb

The version of the employed jupyter notebook is 6.5.4