2nd work to be done

PCA under Matlab

1) Take the example PCAtoComplete.m under matlab (PCA program operating on the matrix notes.xls). This program uses the toolbox "data analysis". The function used is princomp. On the two graphs allowing the projection of the individuals and variables, display the names of the individuals and the names of the variables.
2 °) For both types of projections, vary your graphs on several combinations, of axes (Axe1, Axe2), (Axe1, Axe3), (Axe2, Axe3).
3) Show the projections of individuals on a 3-dimensional graph (Axes 1,2 and 3)
4 °) Change the matrix of data taking this time dealing the voiture.xls matrix. Interpret your results.

Kmeans

5 °) Unroll the Clustering Kmeans algorithm on the global matrix with the following parameters:
- Initialization: uniform
- Number of groups: 2
- Number of replications: 1

Is your algorithm stable from one execution to another? If "no" in what condition would it be?
6 °) What is the best grouping?
7 °) Unroll your algorithm on the results of a PCA with at least 94% of information.
What is your observation?