[Lab] K-means

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Lab due: Before the end of today session

Evaluation: Code and explanation about the code (in groups of 2 or 3 people (preferably 3)) **Remark**:

- Only groups of two or three people accepted (preferably three).
- Before you leave today lab session, you need to show the lab task results to the professor.
- No late lab will be accepted. There is no make-up lab session.
- No plagiarism. If plagiarism happens, both the "lender" and the "borrower" will have a zero.
- Code yourself from scratch. No lab/homework will be considered if any ML library is used.
- Do thoroughly all the demanded tasks.
- Study the theory for the questions.

1 Lab tasks (Due before the end of today session)

- 1. Download from the course site the 2D data stored in data_kmeans.txt file.
- 2. Cluster them using the K-means algorithm using the formulas seen in class.
- 3. Test your model with some new data(i.e., generate some test data yourself, and show the test results).
- 4. Plot both training and test results in a 2D graph.

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