In this project you will implement the K-means unsupervised learning algorithm.
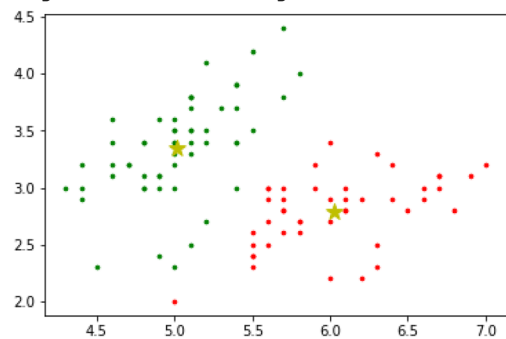
- Use the simplified Iris dataset to test your code.
- Column 1: sepal length. Column 2: sepal width.
- 50 Setosa samples and 50 Versicolor samples.

Show the cluster assignment of each sample and the two centroids in a plot.

Print the number of iterations until the algorithm converges.

You may use the function `plot_clusters` in the *cluster_plot_example.ipynb*.

Algorithm converges after 5 iterations

Submit your *iPython* code.

Discussing this project with other students is highly recommended but you have to submit your own solution.