

Assignment 1

Machine Learning (CS564)

Date:- 23-March-2024

Deadline:-03-April-2024

Instructions:

1. Coding must be done using Python, and you are not supposed to use already available clustering algorithm libraries.
2. All the assignments should be completed and uploaded before the deadline.
3. Markings will be based on the correctness and soundness of the outputs. Marks will be deducted in case of plagiarism.
4. Proper indentation and appropriate comments are mandatory.
5. You should zip all the required files and name the zip file as roll_no.zip, eg. 1501cs11.zip.
6. Upload your assignment (the zip file) in the moodle platform

Assignment:

Cluster the provided dataset “iris.csv” of iris flower using K-Means and K-medoid clustering algorithms. Plot the clusters and count the number of points belonging to each cluster. Each cluster must be plotted using different colours. The clustering has to be done using all the attributes. You can take any attribute to consider any axes.

For i) K-means and ii) K-medoid: Number of clusters = 3

Find out the Sum square Error (SSE)