Machine Learning Lab, B.Tech 5th Semester

Instructions

1. You are required to submit your assignment responses by 12 PM today through the Google Form that has been emailed to you.
2. There will be evaluation for this assignment.
3. Plagiarism checking will be performed on all the submissions for this assignment. If plagiarism is detected, your assignment will not be evaluated.

Evaluation Assignment 2

Total Marks: 10

1. A. Implement the K-means clustering algorithm (without using any in-built library function) on the IRIS dataset (without considering the label-column). Report the sum-square-error (SSE), silhouette coefficient, and the number of iterations required for convergence (for different K values).

   B. Implement another version of K-means clustering algorithm (without using any in-built library function) on the IRIS dataset, where a labelled sample is available from each class and initial cluster centres are chosen from these labelled samples only. Report the sum-square-error (SSE), silhouette coefficient, and the number of iterations required for convergence (for different K values).

   C. Report comparative analysis of performance measures of both the algorithms for different K values.