Machine Learning Lab, B.Tech 5th Semester

Instructions

1. This is only for practice. Complete it by 12:00 PM today. Your completion will be reviewed by the Teaching Assistants.

Practice Assignment 6

1. Consider any dataset. You can create your own or download any publicly available dataset.

   (a) Perform K-Means Clustering by selecting the optimal value of k and using Euclidean distance as the similarity measure. Evaluate the algorithm under the following three conditions, and observe the differences in the resulting clusters.

      i. Maximum number of iterations
      ii. Cluster centroid remains unchanged
      iii. Highest quality of cluster is reached.

   (b) Repeat the above question with K-medoids algorithm. Note the difference between the final clusters.

   Note: You are not allowed to use inbuilt function of any machine learning model.