

भारतीय सूचना प्रौद्योगिकी संस्थान गुवाहाटी INDIAN INSTITUTE OF INFORMATION TECHNOLOGY GUWAHATI

Machine Learning Lab, M.Tech 2nd Semester

Instructions

- 1. After completion, you can share the files in mail to Mr. Indrajit Kalita (Or if you use Google Colab, you can share there also.
- 2. Deadline to submit is 28th March 2022.

Assignment -7

- 1. Consider any dataset that has more than two class labels. You can create your own or download any publicly available dataset.
 - (a) Perform K-Means Clustering selecting the best value of k and taking Euclidean distance as similarity measure. Check your algorithm with the following three conditions
 - i. Maximum number of iterations
 - ii. Cluster centroid remains unchanged
 - iii. Highest quality of cluster is reached.
 - (b) Repeat the Q.2 taking Manhattan distance as similarity measure and note the difference between the clusters as compared to that found in Q. 2.