

## भारतीय सूचना प्रौद्योगिकी संस्थान गुवाहाटी INDIAN INSTITUTE OF INFORMATION TECHNOLOGY GUWAHATI

## Data Analytics Lab, M.Tech 3rd Semester

## **Instructions**

- 1. Upload all your codes to Github.
- 2. You will be called randomly to explain the code based on which marks/grade will be assigned.

## **Assignment -6**

- 1. Download any two datasets of your choice, read it and perform the following tasks
  - (a) Visualise the data.
  - (b) 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, visulaise the clusters and note the difference
    - i. Maximum number of iterations
    - ii. Cluster centroid remains unchanged
    - iii. Highest quality of cluster is reached.
  - (c) 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.