Lab Assignment – 5

CSE 338L - Applied Data science Lab

Date: 20-02-2024

**Note: Form a group of maximum 5 to complete the assignment. (This group is to be maintained for all the lab and class assignments till the end of the semester.)**

Submission deadline of softcopy: 26-02-2022.

Submission deadline of hardcopy: 27-02-2024.

Write Python program to implement K-Nearest Neighbors using inbuilt python Library. Also, write your own program to implement K-Nearest Neighbors without using the inbuilt function.

HINT:

Input: 1. Consider any labelled dataset, divide into 80:20 ratio for training and testing.

2. K value

Process:

For each test tuple, find the Euclidean distance between test tuple and all the training tuples.

Select the k tuples which are nearer to the test tuple.

Check the class label of each nearest training tuple.

Count the frequency of each label.

Select the label with more frequency

Assign the label to the test tuple.

Output: Test tuples with the generated labels.

Submission format:

Every student should submit the written assignment on a white notebook.

Question:

Program:

Sample dataset (it is not required to wite the entire dataset):

Input and Output:

Every student should submit the softcopy of the group assignment in google classroom.

Files to be submitted individually (not as Zip file) are:

Google Colab notebook (include all the group member Registration number and Name in the first cell)

Dataset (.xls)