

MLDL Sample Program List

(A.Y. 2022-23)

MCA-II Sem-III

1. Write a program to cluster a set of points using K-means. Consider, K=4, clusters. Consider Euclidean distance as the distance measure. Randomly initialize a cluster mean as one of the data points. Iterate for 10 iterations. After iterations are over, print the final cluster means for each of the clusters.

Data set **iris data set**

2. The table below gives the amount of Crabby Cakes made by Bakers for each year he's worked.
Graph the data on a scatter plot, find the line of best fit, and write the equation for the line you draw.

| Years worked | 1 | 2 | 3 | 4 | 5 | 6 |
|--------------|-------|-------|--------|--------|--------|--------|
| Cakes made | 6,500 | 7,805 | 10,835 | 11,230 | 15,870 | 16,387 |

Correlation Coefficient (r): _____

Type of Correlation: _____

Using the linear regression equation predict how many Crabby cakes he will make after working 10 years.

3. Write a program for multiple regression for predicting stock_index_price (dependent Variable) using two independent variables (interest_rate and unemployment_rate).
Refer Stock_data file
Predict Stock index price for interest rate = 3 and unemployment rate is 5.7
4. Write a multiple regression program for predicting CO2 emission level when Volume 1300 of Car is and Engine weight is 3300Kg. Refer Car data file.
5. Write a logistic regression program for predicting customer will subscribe for term deposit Refer Bank data set 1
6. Write a logistic regression program for predicting customer will subscribe for term deposit Refer Bank data set 2
7. Write a program for K means clustering model based on countries Longitude and Latitude data set 1

8. Write a program for K means clustering model based on countries Longitude and Latitude data set 2
9. Write a program to classify iris data set using Random forest method
10. Write a program to classify the social network Advertise data1 using Bay's classification method.
11. Write a program to classify the social network Advertise data2 using Bay's classification method
12. Demonstrate the SVM model using the social network Advertise data1
13. Demonstrate the SVM model using the social network Advertise data2