DEPARTMENT OF COMPUTER ENGINEERING
BE/Sem-VIII/Jan-Apr 2023   Course Code: CSL8023
Subject : APPLIED DATASCIENCE LAB
Experiment List

Select a case study and formulate the problem statement for a real world Application . Implement experiments listed below on the selected case study.
[_Suggested Case Studies:_
Customer Segmentation, Fraud Detection, House Price prediction, Product Recommendation, Stock price prediction , Weather prediction etc.,**]**

No	Title	CO
1	Explore the descriptive statistics on the given dataset.	CO1, CO2
2	Apply data cleaning techniques (e.g. Data Imputation).	CO1,CO2
3	Explore data visualization techniques.	CO1,CO2
4	Implement and explore performance evaluation metrics for Data Models (Supervised)	CO1,CO3
5	Implement and explore performance evaluation metrics for Data Models (Unsupervised Learning)	CO1,CO3
6	Implement time series forecasting.	CO1,CO3
7	Outlier detection using distance based/density based method.	CO1,CO3
8	Use SMOTE technique to generate synthetic data.(to solve the problem of class imbalance)	CO1,CO2
9	Inferential statistics -Hypothesis Testing, Z test, T-Test , Anova	CO1, CO2
10	Demonstration of Selected Case study	CO1,CO2, CO3
	Assignments	
1	Assignment on visualizing high dimensional data:-Parallel chart, Deviation chart, Andrews Curves.	CO1,CO2
2	Assignment on data science analysis and visualization tools-SPSS,Tableau, Knime,Google Analytics, BigML…etc	CO1, CO3