Date : 17 July 2023

| Lab Code | Lab Name | Sem |
|---|---|---|
| CSL503 Sem-V Rev.2019 | **DATA WAREHOUSING AND MINING** | V |

LAB OUTCOME

1. Design data warehouse and perform various OLAP operations.
2. Implement data mining algorithms like classification.
3. Implement clustering algorithms on a given set of data sample.
4. Implement Association rule mining & web mining algorithm

**LIST OF EXPERIMENTS**

| **Expt No** | **Title of Experiments** | **Course Outcome** |
|---|---|---|
| 1 | Select a dataset and perform exploratory data analysis using Python( data preprocessing, transformation,discretization and visualisation ) | LO2 |
| 2 | One case study on building Data warehouse/Data Mart<br>• Write Detailed Problem statement and design dimensional modelling (creation of star and snowflake schema) | LO1 |
| 3 | Implementation of all dimension table and fact table based on experiment 1 case study | LO1 |
| 4 | Implementation of OLAP operations: Slice, Dice, Rollup, Drilldown and Pivot based on experiment 1 | LO1 |
| 5 | Implementation of Bayesian algorithm | LO2 |
| 6 | Perform data Pre-processing task and Demonstrate performing Classification,Clustering, Association algorithm on data sets using data mining tool (WEKA/R tool) | LO2, LO3 |
| 7 | Implementation of Clustering algorithm (K-means/K-medoids) | LO3 |
| 8 | Implementation of any one Hierarchical Clustering method | LO3 |
| 9 | Implementation of Association Rule Mining algorithm (Apriori) | LO4 |
| 10 | Implementation of Page rank/HITS algorithm | LO4 |

**List of Written Assignments:**

11. What is metadata? Explain data warehouse Metadata with Example .
12. Write short Notes on
    a. Multilevel Association rules and Multidimensional association rules
    b. Web Usage Mining

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SUBJECT INCHARGE