UNIVERSITY OF MADRAS

M.Sc. DEGREE PROGRAMME IN COMPUTER SCIENCE SYLLABUS WITH EFFECT FROM 2023-2024

Title of the Paper	Data Mining and Warehousing Practical				
Core–VII - Practical	I Year & II Semester	Credit: 4	436C2C		

Objectives:

- To enable the students to learn the concepts of Data Mining algorithms namely classification, clustering, regression....
- To understand & write programs using the Data Mining algorithms
- To apply statistical interpretations for the solutions
- Able to use visualization techniques for interpretations

Outcomes:

1.	Able to write programs using python for Association rules, Clustering	K1, K2			
	techniques				
2.	To implement datamining techniques like classification, prediction				
3.	Able to use different visualization techniques using python				
4.	To apply different datamining algorithms to solve real world applications				
K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create					

LISTOF PROGRAMS

- 1. Implement Apriori algorithm to extract association rule of datamining.
- 2. Implement k-means clustering technique.
- 3. Implement any one Hierarchal Clustering.
- 4. Implement Classification algorithm.
- 5. Implement Decision Tree.
- 6. Linear Regression.
- 7. Data Visualization.

Text Books

- 1. Margaret H. Dunham, "Data Mining: Introductory and Advanced Topics", Pearson education, 2003.
- 2. C.S.R. Prabhu, "Data Warehousing Concepts, Techniques, Products and Applications", PHI, Second Edition

Reference Books

- 1. ArunK.Pujari, "DataMiningTechniques", UniversitiesPress(India)Pvt. Ltd., 2003.
- 2. AlexBerson, Stephen J. Smith, "Data Warehousing, Data Mining and OLAP", TMCH, 2001.

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Related Online Contents

- 1. https://www.javatpoint.com/data-warehouse
- 2. https://nptel.ac.in/noc/courses/noc20/SEM1/noc20-cs12/
- 3. https://www.btechguru.com/training--it--database-management-systems--file-structures--introduction-to-data-warehousing-and-olap-2-video-lecture--12054--26--151.html

Mapping with Programme Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	M	S	S	S	M	M	S	S
CO2	S	S	S	S	S	S	S	M	S	M
CO3	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	M	S	S

^{*}S-Strong; M-Medium; L-Low