

# Lab Assignment 1: Implementation of Apriori Algorithm

Date: 05-02-2025

Duration: 2 hours

## Objective:

Implement the Apriori algorithm to identify frequent itemsets and generate association rules for a given dataset: [Online Retail.xlsx](#).

## Task Overview:

### 1. Task 1: Understanding the Dataset

- Load the dataset.
- Explore the dataset to understand its structure.

### 2. Task 2: Implementing the Apriori Algorithm

- Write a function to implement the Apriori algorithm.
- Identify frequent itemsets using the algorithm.

### 3. Task 3: Generating Association Rules

- Generate and interpret association rules from the frequent itemsets.

### 4. Task 4: Visualisation and Analysis

- Visualise the results.
- Provide a brief analysis of the findings.

Note: Comment your code to explain the logic behind each step.