Name : Dion D Rodrigues Assignment.no: 10

Roll.no : 53 Class : FYMCA B Subject : ML Lab Batch : B3

import pandas as pd

from mlxtend.frequent\_patterns import apriori, association\_rules

# Load dataset

df = pd.read\_csv('web\_log\_dataset\_generated.csv')

# Drop Session\_ID since it's not relevant for the algorithm

df\_apriori = df.drop('Session\_ID', axis=1)

# Convert the integer columns (0, 1) to boolean (True, False)

df\_apriori = df\_apriori.astype(bool)

# Apply the Apriori algorithm with a minimum support threshold of 0.3

frequent\_itemsets = apriori(df\_apriori, min\_support=0.3, use\_colnames=True)

# Generate association rules with a minimum confidence threshold of 0.7

rules = association\_rules(frequent\_itemsets, metric="confidence", min\_threshold=0.7)

# Adjust display options to show all rows

pd.set\_option('display.max\_rows', None) # Allow showing all rows

pd.set\_option('display.max\_columns', None) # Allow showing all columns

# Display the frequent itemsets and association rules

print("Frequent Itemsets:")

print(frequent\_itemsets)

print("\nAssociation Rules:")

print(rules)

