**AI\_Phase3**

***MARKET BASKET INSIGHTS***

***LOADING AND PREPROCESSING THE DATASET***

Mohammed kani A

au711021106003

Import pandas as pd

# Load your dataset into a DataFrame (replace ‘your\_dataset.csv’ with your dataset file)

Df = pd.read\_csv(‘your\_dataset.csv’)

# Explore and preprocess the data as needed

# For example, you may want to remove duplicates and handle missing values:

Df = df.drop\_duplicates()

Df = df.dropna()

# Create a list of lists representing transactions (each transaction is a list of items)

Transactions = []

For index, row in df.iterrows():

Transaction = row[‘Items’].split(‘,’) # Assuming ‘Items’ is a column with comma-separated item names

Transactions.append(transaction)

# You can also convert the list of lists into a one-hot encoded DataFrame

Oht = pd.get\_dummies(pd.Series(transactions).apply(pd.Series).stack()).sum(level=0)

# Now you have a one-hot encoded DataFrame ready for market basket analysis

# You can proceed to use the Apriori algorithm as shown in the previous code example to find frequent item sets and association rules.