**Assignment Problems: Day 15**

The following problems require access to the file named ‘Dataset\_Day15.csv’, provided with this assignment.

The data contains transaction details with 7501 rows. Each row is a grocery transaction from the market with the unique items list for each transaction.

Problems to solve –

1. Read the data and remove all null or empty values.
2. Transform the data using TransactionEncoder to perform Market Basket Analysis.
3. Use min\_support = 0.02 to find frequent itemsets.
4. Use the frequent itemsets to create association rules (take min\_threshold as 15%) and evaluate the rules for the following metrics
   1. Find top 5 antecedent -> consequent rules based on ‘leverage’, ‘lift’ each. Explain your findings.
   2. Find top 2 & bottom 2 antecedent -> consequent rules based on ‘zhang’s metric’. Explain your findings.