1. Analytical problem: **Data Mining: Concepts and Techniques,3rd ed** Exercise [Ch.06]: 6.3
2. Dataset Repository: [Frequent Itemset Mining Dataset Repository](http://fimi.uantwerpen.be/data/)
   1. Experiment on each of the following:
      1. Retail
3. Implementation of Frequent Pattern Mining Algorithms
   1. Part - 1: Exploratory Data Analysis
      1. Print summary of each dataset
         1. Total Number of Transactions
         2. Avg. Transaction Length
   2. Part - 2: Apriori Algorithm
      1. Implement in Python3 / Java
      2. Pseudocode: **Data Mining: Concepts and Techniques, 3rd ed.** Jiawei Han, Micheline Kamber, and Jian Pei (Apriori - 6.2.1, FP-growth - 6.2.4) [See Next Page]
      3. Take input of **min\_sup** and **dataset\_name** from command line argument
      4. Print **L-1** to **L-k** itemsets and this output should be written to **result\_{dataset\_name}.txt** file
      5. Print **Total Elapsed Time** (in second)
4. Code Structure
   1. **Data loader method:** takes the name of the dataset as input and returns in a suitable format for applying apriori
   2. **Main algorithm and supporting methods:** According to pseudocode

