

## **Data Mining: Project 3**

### **Groceries**

**Tasks:** Association Rules Mining

**Assigned:** October 5<sup>th</sup>,2017

**Due:** October 26<sup>th</sup>,2017

**Points:** 60

For this project we will use Groceries data set from arules library. It contains 1 month (30 days) of real-world point-of-sale transaction data from a typical local grocery outlet. The data set contains 9,835 transactions and the items are aggregated to 169 categories.

Write a report covering in detail all steps of the project. **The results have to be reproducible using your report.** Carefully describe every assumption and every step in your report. Also mention any program/code that you are using for your analysis.

#### **1. Modeling [20 points]**

- 1.1 Create association rules using a minimum support and a minimum confidence of your choice. [10 points]
- 1.2 Create tables/visualization of the rules obtained from 2.1 and provide a short explanation for each table and figure. [10 points]

#### **2. Evaluation [30 points]**

- 2.1 Provide the 10 most interesting rules [10 points]
- 2.2 Explain how the rules in 3.1 are interesting. [20 points]

#### **3. Deployment [10 points]**

- 3.1 How useful are your results to the stakeholders? [10 points]