**Implementation code in R**

**# Load the libraries**

library(arules)

library(arulesViz)

library(datasets)

**# Load the data set**

data("Groceries")

# See first 10 observations

head(Groceries, n=10)

**#summarize whole data set**

summary(Groceries)

**# Show the top 20 ITEMS**

inspect(Groceries[1 : 20])

**# Create an item frequency plot for the top 10 items**

itemFrequencyPlot(Groceries, topN = 10, type = "absolute")

**# Get the rules**

rules = apriori(Groceries, parameter = list(supp = 0.001, conf = 0.8))

**# Show the top 5 rules, but only 2 digits**

inspect(rules[1:5])

**#We can get summary info. about the rules**

summary(rules)

**#sort the rules by confidence value he most likely rules. We can easily sort by confidence by executing the following code.**

rules = sort(rules, by = "confidence")

options(digits = 2)

inspect(rules)

**# As analyst you can remove redundant rules generated.**

inspect(rules[is.redundant(rules)])

rules = rules[!is.redundant(rules)]

inspect(rules[1 : 5])

**#Targeting Items limit the output for RHS**

rules = apriori(Groceries, parameter = list(supp = 0.001, conf = 0.8, maxlen = 4),

appearance = list(default = "lhs", rhs = "yogurt"))

inspect(rules)

**#plot the graphs for the rules**

plot(rules, method = "graph", engine = "interactive")

plot(rules, method = "paracoord")

plot(rules, method = "matrix", control = list(reorder = "none"))

arulesViz :: plotly\_arules(rules)