```
# Load the libraries
library(arules)
library(arulesViz)
library(datasets)

# Load the data set
data(Groceries)
# Create an item frequency plot for the top 20 items
itemFrequencyPlot(Groceries,topN=20,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
options(digits=2)
inspect(rules[1:5])

set of 410 rules

rule length distribution (lhs + rhs): sizes
 3   4   5   6
29 229 140  12

summary of quality measures:
       support     conf.          lift
 Min.   :0.00102     Min.   :0.80    Min.   : 3.1
 1st Qu.:0.00102     1st Qu.:0.83    1st Qu.: 3.3
 Median :0.00122     Median :0.85    Median : 3.6
 Mean   :0.00125     Mean   :0.87    Mean   : 4.0
```

```
 3rd Qu.:0.00132     3rd Qu.:0.91    3rd Qu.: 4.3
 Max.   :0.00315     Max.   :1.00    Max.   :11.2

mining info:
     data      n     support   confidence
 Groceries     9835   0.001     0.8

rules<-sort(rules, by="confidence", decreasing=TRUE)
subset.matrix <- is.subset(rules, rules)
subset.matrix[lower.tri(subset.matrix, diag=T)] <- NA
redundant <- colSums(subset.matrix, na.rm=T) >= 1
rules.pruned <- rules[!redundant]
rules<-rules.pruned
rules<-apriori(data=Groceries, parameter=list(supp=0.001,conf = 0.08),
               appearance = list(default="lhs",rhs="whole milk"),
               control = list(verbose=F))
rules<-sort(rules, decreasing=TRUE,by="confidence")
inspect(rules[1:5])
```