**Project Report**

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# (Market basket analysis)

Loading and reading the transactions data

Graphical user interface, text, application, email

Description automatically generated

A picture containing text

Description automatically generated

Text

Description automatically generated

## Plot of the top 10 transactions



## Association rules using minimum support of 0.002, minimum confidence of 0.20, and maximum length of 3

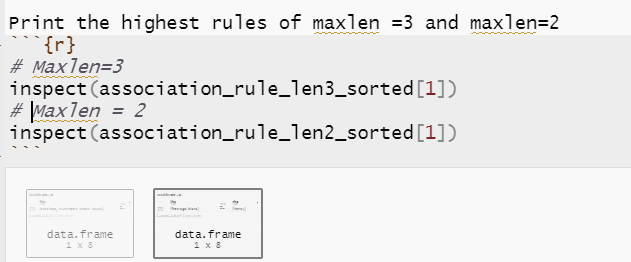
Graphical user interface, text, application

Description automatically generated

**A picture containing text

Description automatically generated**

## Compare this rule with the highest lift rule for maximum length of 2

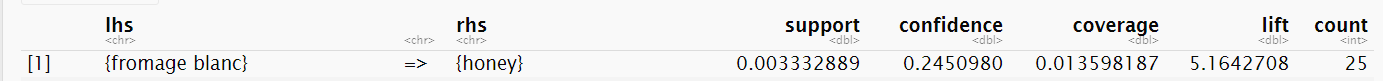


maxlen =3

Table

Description automatically generated with medium confidence

maxlen=2



I) Better lift: when maxlen=3

Greater support: when maxlen=3

ii) As an industry rule of thumb, the rule which its lift is greater than 1 will be worthy and here both of them are worthy, but I will go with the rule with maxlen=3 because it has the highest lift and that is means strong correlations between items and good association.