

APRIORI ALGORITHM:

DATASET: supermarket

OUTPUT:

The image displays two screenshots of the Weka Explorer interface, showing the output of the Apriori algorithm. The interface includes tabs for Preprocess, Classify, Cluster, Associate, Select attributes, and Visualize. The 'Associate' tab is selected, and the 'Apriori' algorithm is chosen. The output window shows the following information:

Run information

- Scheme: weka.associations.Apriori -N 10 -T 0 -C 0.9 -D 0.05 -U 1.0 -M 0.1 -S -1.0 -c -1
- Relation: supermarket
- Instances: 4627
- Attributes: 217
- (List of attributes omitted)

Apriori

Minimum support: 0.15 (694 instances)
Minimum metric <confidence>: 0.9
Number of cycles performed: 17

Generated sets of large itemsets:

- Size of set of large itemsets L(1): 44
- Size of set of large itemsets L(2): 380
- Size of set of large itemsets L(3): 910
- Size of set of large itemsets L(4): 633
- Size of set of large itemsets L(5): 105
- Size of set of large itemsets L(6): 1

Best rules found:

1. biscuits=frozen foods= fruit= total=high 788 ==> bread and cake= 723 <conf:(0.92)> lift:(1.27) lev:(0.03) [155] conv:(3.35)
2. baking needs= biscuits= fruit= total=high 760 ==> bread and cake= 696 <conf:(0.92)> lift:(1.27) lev:(0.03) [149] conv:(3.28)
3. baking needs= frozen foods= fruit= total=high 770 ==> bread and cake= 705 <conf:(0.92)> lift:(1.27) lev:(0.03) [150] conv:(3.27)
4. biscuits= fruit= vegetables= total=high 815 ==> bread and cake= 746 <conf:(0.92)> lift:(1.27) lev:(0.03) [159] conv:(3.26)

The bottom screenshot shows the same output but with more rules listed, up to 10:

1. biscuits=frozen foods= fruit= total=high 788 ==> bread and cake= 723 <conf:(0.92)> lift:(1.27) lev:(0.03) [155] conv:(3.35)
2. baking needs= biscuits= fruit= total=high 760 ==> bread and cake= 696 <conf:(0.92)> lift:(1.27) lev:(0.03) [149] conv:(3.28)
3. baking needs= frozen foods= fruit= total=high 770 ==> bread and cake= 705 <conf:(0.92)> lift:(1.27) lev:(0.03) [150] conv:(3.27)
4. biscuits= fruit= vegetables= total=high 815 ==> bread and cake= 746 <conf:(0.92)> lift:(1.27) lev:(0.03) [159] conv:(3.26)
5. party snack foods= fruit= total=high 854 ==> bread and cake= 779 <conf:(0.91)> lift:(1.27) lev:(0.04) [164] conv:(3.15)
6. biscuits= frozen foods= vegetables= total=high 797 ==> bread and cake= 725 <conf:(0.91)> lift:(1.26) lev:(0.03) [151] conv:(3.06)
7. baking needs= biscuits= vegetables= total=high 772 ==> bread and cake= 701 <conf:(0.91)> lift:(1.26) lev:(0.03) [145] conv:(3.01)
8. biscuits= fruit= total=high 954 ==> bread and cake= 846 <conf:(0.91)> lift:(1.26) lev:(0.04) [179] conv:(3)
9. frozen foods= fruit= vegetables= total=high 834 ==> bread and cake= 797 <conf:(0.91)> lift:(1.26) lev:(0.03) [156] conv:(3)
10. frozen foods= fruit= total=high 969 ==> bread and cake= 877 <conf:(0.91)> lift:(1.26) lev:(0.04) [179] conv:(2.92)