

③ Aim:- To find all frequent item sets using Apriori algorithm, FP growth tree using weka tool.

Algorithm

Apriori algorithm:-

- * initialize
- * iteration
- * check iteration & select with $\geq \text{min support}$
- * go through all combinations
- * continue until all combination finished

FP growth :-

- * continue same step of iteration of apriori approach
- * load dataset and draw FP growth tree.

Dataset

@ attribute transactions

@ attribute items, nominal.

$T_1, (M, O, N, K, E, Y)$

$T_2, (O, O, N, K, E, Y)$

$T_3, (M, A, K, E)$

$T_4, (M, U, C, K, Y)$

$T_5, (O, O, K, I, E)$

output: Approx

minimum support: 0.85 (4 instances)

minimum metric $\langle \text{confidence} \rangle: 0.9$

number of cycles performed 3.

Generated sets of large Herm sets: $(41):6, (42):6, (43):1$

Bestoules found:-

1. $g = \text{true} \wedge u \Rightarrow k = \text{true} \wedge u < \text{conf} : (1) \text{ lift } (1) \text{ lev } (0) [0] \text{ conv } (0)$
2. $D = \text{false} \wedge u \Rightarrow k = \text{true} \wedge u <$
3. $A = \text{false} \wedge u \Rightarrow k = \text{true} \wedge u <$
4. $V = \text{false} \wedge u \Rightarrow k = \text{true} \wedge u <$
5. $E = \text{false} \wedge u \Rightarrow E = \text{true} \wedge u <$
6. $V = \text{false} \wedge u \Rightarrow V = \text{false} \wedge u < \text{conf} : (1) \text{ lift } (1.25) \text{ lev } (0.16) [0] \text{ conv } (0)$
7. $E = \text{true} \wedge u \Rightarrow U = \text{false} \wedge u <$
8. $E = \text{true} \wedge U = \text{false} \wedge u \Rightarrow R = \text{true} \wedge \text{conf}(U) \text{ lift}(U) \text{ lev}(0) [0] \text{ conv } (0)$
9. $R = \text{true} \wedge U = \text{false} \wedge u \Rightarrow E = \text{true} \wedge u < \text{conf} : (1) > \text{lift}(1.25) \text{ lev}(0.16) \text{ conv } (0)$
10. $k = \text{true} \wedge g = \text{true} \wedge u \Rightarrow U = \text{false} \wedge u <$