

Homework 9

- List all the frequent itemsets that have been found (with their support)?

Size	Support	Item 1	Item 2	Item 3
1	0.948	sum(Quantity)_book		
1	0.945	sum(Quantity)_paper		
1	0.924	sum(Quantity)_liquidpaper		
1	0.810	sum(Quantity)_ink		
2	0.897	sum(Quantity)_book	sum(Quantity)_paper	
2	0.883	sum(Quantity)_book	sum(Quantity)_liquidpaper	
2	0.872	sum(Quantity)_paper	sum(Quantity)_liquidpaper	
3	0.834	sum(Quantity)_book	sum(Quantity)_paper	sum(Quantity)_liquidpaper

- What is the maximal frequent itemset found? Give its support? List all the strong association rules that can be generated from it.

Maximal frequent itemset is {book}, support = 0.948.

No.	Premises	Conclusion	Support	Confidence
1	sum(Quantity)_liquidpaper	sum(Quantity)_book, sum(Quantity)_paper	0.834	0.903
2	sum(Quantity)_paper	sum(Quantity)_liquidpaper	0.872	0.923
3	sum(Quantity)_book, sum(Quantity)_paper	sum(Quantity)_liquidpaper	0.834	0.931
4	sum(Quantity)_book	sum(Quantity)_liquidpaper	0.883	0.931
5	sum(Quantity)_liquidpaper	sum(Quantity)_paper	0.872	0.944
6	sum(Quantity)_book, sum(Quantity)_liquidpaper	sum(Quantity)_paper	0.834	0.945
7	sum(Quantity)_book	sum(Quantity)_paper	0.897	0.945
8	sum(Quantity)_paper	sum(Quantity)_book	0.897	0.949
9	sum(Quantity)_liquidpaper	sum(Quantity)_book	0.883	0.955
10	sum(Quantity)_paper, sum(Quantity)_liquidpaper	sum(Quantity)_book	0.834	0.957

- According to the rule {liquidpaper} => {book,paper}, explain its meaning.

กฎที่แสดงว่าเมื่อมีการซื้อ liquidpaper แล้วจะซื้อ book และ paper

- What items are expected to be bought by customers who buy liquidpaper?

{book}, {paper} หรือ {book, paper}