

Date: 2023/11/04
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 Assignment: Slide 26,27: Exercise

Exercise 1: Please use the Apriori algorithm for finding the frequent itemsets in D. (The min support count =2)

Itemset {1}	count	support
I1	6	66.67%
I2	7	77.78%
I3	6	66.67%
I4	2	22.22%
I5	2	22.22%

Itemset {2}	count	support
I1,I2	4	44.44%
I1,I3	4	44.44%
I1,I4	1	
I1,I5	2	22.22%
I2,I3	4	44.44%
I2,I4	2	22.22%
I2,I5	2	22.22%
I3,I4	0	
I3,I5	1	
I4,I5	0	
Itemset {3}	support	
I1,I2,I3	2	22.22%
I1,I2,I5	2	22.22%

Exercise 2:

1. Please calculate the confidence for each rule.

	Relation	Confidence
	{I1,I2}→I5	50%
*	{I1,I5}→I2	100%
*	{I2,I5}→I1	100%
	I1→{I2,I5}	33%
	I2→{I1,I5}	29%
*	I5→{I1,I2}	100%

2. If the minimum confidence threshold is 70%, which are strong rules?
 Those 3 * are the strong rules.