Data Mining - TD
Association rules

Issam Falih

December 16, 2020

1. (True/Falase) In association rule mining the generation of the frequent itemsets is the computational intensive step.

2. The algorithm that we used to do association rule mining is the Apriori algorithm This algorithm is efficient because it relies on and exploits the Apriori property. What is the Apriori property?

   Consider the data set shown in Table 1.

Transaction ID	Items
T1	HotDogs, Buns, Ketchup
T2	HotDogs, Buns
T3	HotDogs, Coke, Chips
T4	Chips, Coke
T5	Chips, Ketchup
T6	HotDogs, Coke, Chips

   Table 1: Market basket transactions for section 3

3. Trace the results of using the Apriori algorithm on the grocery store example with support threshold s=33.34% and confidence threshold c=60%.

4. Show the candidate and frequent itemsets for each database scan. Enumerate all the final frequent itemsets.

5. Also indicate the association rules that are generated and highlight the strong ones, sort them by confidence.