Dr. Eick

**COSC 3337**

**Group L and M Group Homework Credit Task**

**APRIORI and Association Rule Mining**

a) Assume the APRIORI algorithm identified the following 8 4-item sets that satisfy a user given support threshold: **abcd, abce, abde, acde, acdf, acdg, bcde, and bcdf;** what initial candidate 5-itemsets are created by the APRIORI algorithm; which of those survive subset pruning?

b) What is the APRIORI property and where does the APRIORI algorithm use it when creating frequent itemsets?

c) Assume the following frequent itemsets have been identified by APRIORI: {A,B},{A,C},{B,C}, {A,B,C}. How will those four frequent item set be used to create candidate association rules? How is it determined if a candidate association rule satisfies the confidence threshold?

d) What is the confidence and lift of the association rule r

(r) IF Milk then Coke

Based on the transaction set below. Interpret the found lift value.



Group L answers questions a and b and group M answers question c and d!