**COP 4722 – Survey of Database Systems**

**Assignment 5**

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 Assignment#: 5  
  
 Due: Wed, Apr 3, 2019  
  
 I hereby certify that this work is my own and none of  
 it is the work of any other person.  
  
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\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Sample data set \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Customer ItemBought

======== ==========  
Daniel      Cereal  
Daniel      Cheese  
Daniel      Juice  
Julie      Cereal  
Julie      Cheese  
Mark        Cereal  
Mark        Eggs  
Mark        Juice  
Mark        Shampoo  
Paulin      Cereal  
Paulin    Cheese  
Ricardo    Cereal  
Ricardo    Cheese  
Sophia      Cereal  
Sophia      Cheese  
Sophia      Shampoo

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Case \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Minimum support value: 0.15

Result of L-1 itemset:

Cereal 6

Cheese 5

Juice 2

Eggs 1

Shampoo 2

Result of L-2 itemset:

Cereal Cheese 5

Cereal ==> Cheese Confidence = 0.83, Interest = 0.00

Support: LHSuRHS = 0.83, LHS = 1.00, RHS = 0.83

Cheese ==> Cereal Confidence = 1.00, Interest = 0.00

Support: LHSuRHS = 0.83, LHS = 0.83, RHS = 1.00

Cereal Juice 2

Cereal ==> Juice Confidence = 0.33, Interest = 0.00

Support: LHSuRHS = 0.33, LHS = 1.00, RHS = 0.33

Juice ==> Cereal Confidence = 1.00, Interest = 0.00

Support: LHSuRHS = 0.33, LHS = 0.33, RHS = 1.00

Cereal Eggs 1

Cereal ==> Eggs Confidence = 0.17, Interest = 0.00

Support: LHSuRHS = 0.17, LHS = 1.00, RHS = 0.17

Eggs ==> Cereal Confidence = 1.00, Interest = 0.00

Support: LHSuRHS = 0.17, LHS = 0.17, RHS = 1.00

Cereal Shampoo 2

Cereal ==> Shampoo Confidence = 0.33, Interest = 0.00

Support: LHSuRHS = 0.33, LHS = 1.00, RHS = 0.33

Shampoo ==> Cereal Confidence = 1.00, Interest = 0.00

Support: LHSuRHS = 0.33, LHS = 0.33, RHS = 1.00

Cheese Juice 1

Cheese ==> Juice Confidence = 0.20, Interest = 0.13

Support: LHSuRHS = 0.17, LHS = 0.83, RHS = 0.33

Juice ==> Cheese Confidence = 0.50, Interest = 0.33

Support: LHSuRHS = 0.17, LHS = 0.33, RHS = 0.83

Cheese Shampoo 1

Cheese ==> Shampoo Confidence = 0.20, Interest = 0.13

Support: LHSuRHS = 0.17, LHS = 0.83, RHS = 0.33

Shampoo ==> Cheese Confidence = 0.50, Interest = 0.33

Support: LHSuRHS = 0.17, LHS = 0.33, RHS = 0.83

Juice Eggs 1

Juice ==> Eggs Confidence = 0.50, Interest = 0.33

Support: LHSuRHS = 0.17, LHS = 0.33, RHS = 0.17

Eggs ==> Juice Confidence = 1.00, Interest = 0.67

Support: LHSuRHS = 0.17, LHS = 0.17, RHS = 0.33

Juice Shampoo 1

Juice ==> Shampoo Confidence = 0.50, Interest = 0.17

Support: LHSuRHS = 0.17, LHS = 0.33, RHS = 0.33

Shampoo ==> Juice Confidence = 0.50, Interest = 0.17

Support: LHSuRHS = 0.17, LHS = 0.33, RHS = 0.33

Eggs Shampoo 1

Eggs ==> Shampoo Confidence = 1.00, Interest = 0.67

Support: LHSuRHS = 0.17, LHS = 0.17, RHS = 0.33

Shampoo ==> Eggs Confidence = 0.50, Interest = 0.33

Support: LHSuRHS = 0.17, LHS = 0.33, RHS = 0.17

Result of L-3 itemset:

Cereal Cheese Juice 1

Cereal Cheese Shampoo 1

Cereal Eggs Juice 1

Cereal Eggs Shampoo 1

Cereal Juice Shampoo 1

Eggs Juice Shampoo 1

Result of L-4 itemset:

Cereal Eggs Juice Shampoo 1

Result of L-5 itemset:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*