

CONSOLATA FAUSTIN MBILINYI

220242406098

DATA MINING & ANALYTICS

COU 08104

QUIZ

TID	Items
1	Bread, Milk, Chips, Mustard
2	Beer, Bread, Diaper, Eggs
3	Beer, Coke, Diaper, Milk
4	Beer, Bread, Diaper, Milk, Chips
5	Coke, Bread, Diaper, Milk
6	Beer, Bread, Diaper, Milk, Mustard
7	Coke, Bread, Diaper, Milk

Qn. Generate frequent item set given min_support = 40%

Answer.

Total transaction = 7

Min support = $40/100 \times 7 = 2.8 \sim$

Items

item	count
Beer	4
Bread	6
Coke	3
Diaper	6
Eggs	1 X
Milk	4
Chips	2 X
Mustard	2 X

L1 = {(Beer), (Diaper), (Bread), (Milk), (Coke) }

Pairs

Itemset	count
Bread, Milk	5
Bread, Diaper	5
Milk, Diaper	5
Beer, Diaper	4
Beer, Bread	3
Beer, Milk	3
Coke, Milk	3
Coke, Bread	2 X
Coke, Diaper	3

L2= {(Bread, Diaper), (Bread, Milk), (Milk, Diaper), (Beer, Diaper), (Beer, Bread), (Beer, Milk), (Coke, Milk), (Coke, Diaper)}

Triplets

itemset	count
Bread, Milk, Diaper	4
Beer, Bread, Diaper	3
Beer, Milk, Diaper	3
Coke, Milk, Diaper	3
Beer, Bread, Milk	2 X

The frequent itemset are

L3= {(Bread, Milk, Diaper), (Beer, Bread, Diaper), (Beer, Milk, Diaper), (Coke, Milk, Diaper), (Beer, Bread, Milk)}