Transaction ID	Items Purchased
1	Milk, Bread, Butter
2	Milk, Eggs
3	Bread, Butter, Jam
4	Milk, Eggs, Butter
5	Bread, Butter, Jam, Milk

Minimum support = 40% (0.4)
Minimum confidence = 60% (0.6)

candidate itemsets

Item	Count
Milk	4
Bread	3
Butter	4
Eggs	2
Jam	2

Calculate the support for each item

Total transactions = 5

Milk: 45=0.8\frac{4}{5} = 0.854=0.8

Bread: 35=0.6\frac{3}{5} = 0.653=0.6

Item	Count	Support
Milk	4	0.8
Bread	3	0.6
Butter	4	0.8
Eggs	2	0.4
Jam	2	0.4

Keep all items with **support ≥ 0.4**

- Milk, Bread, Butter, Eggs, Jam (all items are kept).

2-itemsets

Itemset	Count	Support
Milk, Bread	2	0.4
Milk, Butter	3	0.6
Milk, Eggs	2	0.4
Milk, Jam	1	0.2
Bread, Butter	3	0.6
Bread, Eggs	0	0.0
Bread, Jam	2	0.4
Butter, Eggs	1	0.2
Butter, Jam	2	0.4

Keep pairs with **support ≥ 0.4**

- **Milk, Bread**
- **Milk, Butter**
- **Milk, Eggs**
- **Bread, Butter**
- **Bread, Jam**
- **Butter, Jam**

3-itemsets

Itemset	Count	Support
Milk, Bread, Butter	2	0.4
Milk, Bread, Eggs	0	0.0
Milk, Butter, Eggs	1	0.2
Milk, Bread, Jam	0	0.0
Bread, Butter, Jam	2	0.4

Keep triplets with **support ≥ 0.4**

- **Milk, Bread, Butter**
- **Bread, Butter, Jam**

Frequent Itemsets

1-itemsets: Milk, Bread, Butter, Eggs, Jam

2-itemsets: Milk, Bread; Milk, Butter; Bread, Butter; Bread, Jam; Butter, Jam

3-itemsets: Milk, Bread, Butter; Bread, Butter, Jam