

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

min sup = 2

Step 1: C_1 (Initial Candidates - Single Items)

| Item | Support Count |
|--------|---------------|
| Milk | 4 |
| Bread | 3 |
| Butter | 4 |
| Eggs | 2 |
| Jam | 2 |

Frequent Itemset (F_1): Items with Support ≥ 2

| Item | Support Count |
|--------|---------------|
| Milk | 4 |
| Bread | 3 |
| Butter | 4 |
| Eggs | 2 |
| Jam | 2 |

Updated Step 2: C_2 (Candidate Pairs)

| Itemset | Support Count |
|-----------------|---------------|
| {Milk, Bread} | 2 |
| {Milk, Butter} | 3 |
| {Milk, Eggs} | 2 |
| {Milk, Jam} | 1 |
| {Bread, Butter} | 3 |
| {Bread, Eggs} | 0 |
| {Bread, Jam} | 2 |
| {Butter, Eggs} | 1 |
| {Butter, Jam} | 2 |

Frequent Itemset (F_2): Pairs with Support ≥ 2

| Itemset | Support Count |
|-----------------|---------------|
| {Milk, Bread} | 2 |
| {Milk, Butter} | 3 |
| {Milk, Eggs} | 2 |
| {Bread, Butter} | 3 |
| {Bread, Jam} | 2 |
| {Butter, Jam} | 2 |

Step 3: C_3 (Candidate Triplets)

The C_3 table remains the same because {Butter, Eggs} was already excluded in the frequent pair generation step.

| Itemset | Support Count |
|-----------------------|---------------|
| {Milk, Bread, Butter} | 2 |
| {Milk, Bread, Eggs} | 0 |
| {Milk, Bread, Jam} | 1 |
| {Milk, Butter, Eggs} | 1 |
| {Milk, Butter, Jam} | 1 |
| {Bread, Butter, Jam} | 2 |

Frequent Itemset (F_3): Triplets with Support ≥ 2

| Itemset | Support Count |
|-----------------------|---------------|
| {Milk, Bread, Butter} | 2 |
| {Bread, Butter, Jam} | 2 |