Pass 1 (Size-1 itemsets)

Item	Transactions	Support	Status
apples	2, 5, 7, 8, 10	5/10 = 0.5	Frequent
bananas	1, 3, 7	3/10 = 0.3	Frequent
carrots	1, 3, 4, 7, 8, 9	6/10 = 0.6	Frequent
donuts	2, 3, 6, 9, 10	5/10 = 0.5	Frequent
eggs	4, 5, 8, 9	4/10 = 0.4	Frequent
figs	1, 3, 9, 10	4/10 = 0.4	Frequent

L_1: {apples}, {bananas}, {carrots}, {donuts}, {eggs}, {figs}

Pass 2 (Size-2 itemsets)
C_2: 15 candidate pairs from L_1

Itemset	Transactions	Support	Status
{bananas, carrots}	1, 3, 7	3/10 = 0.3	Frequent
{carrots, eggs}	4, 8, 9	3/10 = 0.3	Frequent
{carrots, figs}	1, 3, 9	3/10 = 0.3	Frequent
{donuts, figs}	3, 9, 10	3/10 = 0.3	Frequent

L_2: {bananas, carrots}, {carrots, eggs}, {carrots, figs}, {donuts, figs}

Pass 3 (Size-3 itemsets)
Candidate generation check: All 2-subsets must be in L_2
No valid candidates can be formed (all potential 3-itemsets fail the subset check)
C_3: ∅
L_3: ∅

Part B: Maximal Frequent Sets

Maximal Frequent Sets:
- {bananas, carrots}
- {carrots, eggs}
- {carrots, figs}
- {donuts, figs}

Part C: Association Rule

Rule: bananas → carrots
Support = 3/10 = 0.3
Confidence = 3/3 = 1.0