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1. Berdasarkan transaksi sebagaimana pada Tabel 1, yang termasuk item set dari transaksi tersebut adalah

Semua Item Set

1-Item Set

{Broccoli}, {Green Peppers}, {Corn}, {Asparagus}, {Tomatoes}, {Beans}

2-Item Set

{Broccoli, Green Peppers}, {Broccoli, Corn}, {Broccoli, Asparagus}, {Broccoli, Tomatoes}, {Broccoli, Beans}, {Green Peppers, Corn}, {Green Peppers, Asparagus}, {Green Peppers, Tomatoes}, {Green Peppers, Beans}, {Corn, Asparagus}, {Corn, Tomatoes}, {Corn, Beans}, {Asparagus, Tomatoes}, {Asparagus, Beans}, {Tomatoes, Beans}

3-Item Set

{Broccoli, Green Peppers, Corn}, {Broccoli, Green Peppers, Asparagus}, {Broccoli, Green Peppers, Tomatoes}, {Broccoli, Green Peppers, Beans}, {Broccoli, Corn, Asparagus}, {Broccoli, Corn, Tomatoes}, {Broccoli, Corn, Beans}, {Broccoli, Asparagus, Tomatoes}, {Broccoli, Asparagus, Beans}, {Green Peppers, Corn, Asparagus}, {Green Peppers, Corn, Tomatoes}, {Green Peppers, Corn, Beans}, {Green Peppers, Asparagus, Tomatoes}, {Green Peppers, Asparagus, Beans}, {Green Peppers, Tomatoes, Beans}, {Corn, Asparagus, Tomatoes}, {Corn, Asparagus, Beans}, {Asparagus, Tomatoes, Beans}, {Tomatoes, Beans, Broccoli}, {Corn, Tomatoes, Beans}

4-Item Set

{Broccoli, Green Peppers, Corn, Asparagus}, {Broccoli, Green Peppers, Corn, Tomatoes}, {Broccoli, Green Peppers, Corn, Beans}, {Broccoli, Green Peppers, Asparagus, Tomatoes}, {Broccoli, Green Peppers, Asparagus, Beans}, {Broccoli, Green Peppers, Tomatoes, Beans}, {Broccoli, Corn, Asparagus, Tomatoes}, {Broccoli, Corn, Asparagus, Beans}, {Broccoli, Corn, Tomatoes, Beans}, {Broccoli, Asparagus, Tomatoes, Beans}, {Green Peppers, Corn, Asparagus, Tomatoes}, {Green Peppers, Corn, Asparagus, Beans}, {Green Peppers, Corn, Tomatoes, Beans}, {Green Peppers, Asparagus, Tomatoes, Beans}, {Corn, Asparagus, Tomatoes, Beans}

5-Item Set

{Broccoli, Green Peppers, Corn, Asparagus, Tomatoes}, {Broccoli, Green Peppers, Corn, Asparagus, Beans}, {Broccoli, Green Peppers, Asparagus, Tomatoes, Beans}, {Broccoli, Green Peppers, Corn, Tomatoes, Beans}, {Broccoli, Corn, Asparagus, Tomatoes, Beans}, {Green Peppers, Corn, Asparagus, Tomatoes, Beans}

6-Item Set

{Broccoli, Green Peppers, Corn, Asparagus, Tomatoes, Beans}

Item Set yang Terdapat Pada Tabel

1-Item Set

{Broccoli}, {Green Peppers}, {Corn}, {Asparagus}

2-Item Set

{Broccoli, Green Peppers}, {Broccoli, Corn}, {Broccoli, Asparagus}, {Broccoli, Tomatoes}, {Broccoli, Beans}, {Green Peppers, Corn}, {Green Peppers, Asparagus}, {Green Peppers, Beans}, {Corn, Asparagus}, {Corn, Tomatoes}, {Corn, Beans}, {Asparagus, Tomatoes}, {Asparagus, Beans}

3-Item Set

{Broccoli, Green Peppers, Corn}, {Broccoli, Green Peppers, Asparagus}, {Broccoli, Green Peppers, Beans}, {Broccoli, Corn, Asparagus}, {Broccoli, Corn, Tomatoes}, {Broccoli, Corn, Beans}, {Broccoli, Asparagus, Tomatoes}, {Broccoli, Asparagus, Beans}, {Green Peppers, Corn, Asparagus}, {Green Peppers, Corn, Beans}, {Corn, Asparagus, Tomatoes}, {Corn, Asparagus, Beans}.

4-Item Set

{Broccoli, Green Peppers, Corn, Asparagus}, {Broccoli, Green Peppers, Corn, Beans}, {Broccoli, Corn, Asparagus, Tomatoes}, {Broccoli, Corn, Asparagus, Beans}

2. Dengan *minimum support count* (minsup) = 3, maka semua 1-item set yang kerap muncul (*frequent*) adalah

{Broccoli}, {Green Peppers}, {Corn}, {Asparagus}

3. Jika *minimum support count* (minsup) = 3, maka semua 2-item set yang kerap muncul (*frequent*) adalah

{ Broccoli, Green Peppers }, {Broccoli, Corn}, { Broccoli, Asparagus}, { Corn, Asparagus}

Items	Banyak Transaksi
Broccoli, Green Peppers	3
Broccoli, Corn	4

Broccoli, Asparagus	3
Broccoli, Tomatoes	1
Broccoli, Beans	2
Green Peppers, Corn	2
Green Peppers, Asparagus	1
Green Peppers, Beans	1
Corn, Asparagus	3
Corn, Tomatoes	1
Corn, Beans	2
Asparagus, Tomatoes	1
Asparagus, Beans	1

4. Jika *minimum support count* (minsup) = 3, maka semua 3-item set yang kerap muncul (*frequent*) adalah

{Broccoli, Corn, Asparagus}

Items	Banyak Transaksi
Broccoli, Green Peppers, Corn	2
Broccoli, Green Peppers, Asparagus	1
Broccoli, Green Peppers, Beans	1
Broccoli, Corn, Asparagus	3
Broccoli, Corn, Tomatoes	1
Broccoli, Corn, Beans	1
Broccoli, Asparagus, Tomatoes	1
Broccoli, Asparagus, Beans	1
Green Peppers, Corn, Asparagus	1
Green Peppers, Corn, Beans	1
Corn, Asparagus, Tomatoes	1
Corn, Asparagus, Beans	1

5. Jika *minimum support count* (minsup) = 3, maka semua 4-item set yang kerap muncul (*frequent*) adalah

Tidak Ada Yang Memenuhi (Kosong)

Items	Banyak Transaksi
Broccoli, Green Peppers, Corn, Asparagus	1
Broccoli, Green Peppers, Corn, Beans	1
Broccoli, Corn, Asparagus, Tomatoes	1
Broccoli, Corn, Asparagus, Beans	1

6. Aturan asosiasi dari Tabel 1 yang dapat dipertimbangkan dengan *minimum support count* (minsup) = 3 adalah

1-Item Set

	Support	Confidence
Broccoli	$(5/5) \times 100\% = 100\%$	$(5/5) \times 100\% = 100\%$
Green Peppers	$(3/5) \times 100\% = 60\%$	$(3/5) \times 100\% = 60\%$
Corn	$(4/5) \times 100\% = 80\%$	$(4/5) \times 100\% = 80\%$
Asparagus	$(3/5) \times 100\% = 60\%$	$(3/5) \times 100\% = 60\%$

2-Item Set

	Support	Confidence
If buy Broccoli, then buy Green Peppers	$(3/5) \times 100\% = 60\%$	$(3/5) \times 100\% = 60\%$
If buy Green Peppers, then buy Broccoli	$(3/5) \times 100\% = 60\%$	$(3/3) \times 100\% = 100\%$
If buy Broccoli, then buy Corn	$(4/5) \times 100\% = 80\%$	$(4/5) \times 100\% = 80\%$
If buy Corn, then buy Broccoli	$(4/5) \times 100\% = 80\%$	$(4/4) \times 100\% = 100\%$
If buy Broccoli, then buy Asparagus	$(3/5) \times 100\% = 60\%$	$(3/5) \times 100\% = 60\%$
If buy Asparagus, then buy Broccoli	$(3/5) \times 100\% = 60\%$	$(3/3) \times 100\% = 100\%$
If buy Corn, then buy Asparagus	$(3/5) \times 100\% = 60\%$	$(3/4) \times 100\% = 75\%$
If buy Asparagus, then buy Corn	$(3/5) \times 100\% = 60\%$	$(3/3) \times 100\% = 100\%$

3-Item Set

	Support	Confidence
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If buy Broccoli, then buy Corn, then buy Asparagus	$(3/5) \times 100\% = 60\%$	$(3/5) \times 100\% = 60\%$
If buy Corn, then buy Asparagus, then Broccoli	$(3/5) \times 100\% = 60\%$	$(3/4) \times 100\% = 75\%$
If buy Asparagus, then Broccoli, then buy Corn	$(3/5) \times 100\% = 60\%$	$(3/3) \times 100\% = 100\%$

7. Berdasarkan Tabel 1, jika support aturan asosiasi $X \rightarrow Y$ adalah $s = [(jumlah\ transaksi\ yang\ mengandung\ \{X,Y\}) / (total\ transaksi)]$, maka support untuk aturan asosiasi (Broccoli) \rightarrow {Corn, Asparagus} adalah

$$3/5 \times 100\% = 60\%$$

8. Berdasarkan Tabel 1, jika confidence aturan asosiasi $X \rightarrow Y$ adalah $s = [(jumlah\ transaksi\ yang\ mengandung\ \{X,Y\}) / (jumlah\ transaksi\ X)]$, maka confidence untuk aturan asosiasi (Broccoli) \rightarrow {Corn, Asparagus} adalah

$$3/5 \times 100\% = 60\%$$

9. Berdasarkan Tabel 1, support untuk aturan asosiasi $\{Broccoli, Corn\} \rightarrow \{Asparagus\}$ adalah

$$3/5 \times 100\% = 60\%$$

10. Berdasarkan Tabel 1, confidence untuk aturan asosiasi $\{Broccoli, Corn\} \rightarrow \{Asparagus\}$ adalah

$$3/4 \times 100\% = 75\%$$