

1. Membuat data dummy

a) Perintah sql yang dijalankan, tabel dengan nama *supermarket*

```
Run SQL query/queries on database data_mining:
1 CREATE TABLE supermarket (
2   no_transaksi VARCHAR(10),
3   tanggal_transaksi DATE,
4   nama_barang VARCHAR(50),
5   jumlah INT
6 );
7
8
9 INSERT INTO supermarket (no_transaksi, tanggal_transaksi, nama_barang, jumlah) VALUES
10 ('blnj001', '2023-07-01', 'Mie Sedap', 3),
11 ('blnj001', '2023-07-01', 'Teh Botol Sosro', 2),
12 ('blnj001', '2023-07-01', 'Sabun Mandi Lifebuoy', 1),
13 ('blnj001', '2023-07-01', 'Pepsodent Toothpaste', 2),
14 ('blnj001', '2023-07-01', 'Kecap ABC', 1),
15 ('blnj002', '2023-07-01', 'Indomie Goreng', 5),
16 ('blnj002', '2023-07-01', 'Aqua Mineral Water', 3),
17 ('blnj002', '2023-07-01', 'Rinso Detergent', 1),
18 ('blnj002', '2023-07-01', 'Clear Shampoo', 2),
19 ('blnj002', '2023-07-01', 'Makaroni Masakan', 1),
20 ('blnj003', '2023-07-01', 'Pocari Sweat', 2),
21 ('blnj003', '2023-07-01', 'Teh Pucuk Harum', 3),
22 ('blnj003', '2023-07-01', 'Lux Soap', 2),
23 ('blnj003', '2023-07-01', 'Colgate Toothpaste', 1),
24 ('blnj003', '2023-07-01', 'Saus Tomat ABC', 1),
25 ('blnj004', '2023-07-02', 'Mie Goreng', 4),
26 ('blnj004', '2023-07-02', 'Coca-Cola', 2),
27 ('blnj004', '2023-07-02', 'Rexona Deodorant', 1),
28 ('blnj004', '2023-07-02', 'Pepsodent Toothpaste', 2),
29 ('blnj004', '2023-07-02', 'Sambal ABC', 1),
30 ('blnj005', '2023-07-03', 'Chitato Chips', 3),
31 ('blnj005', '2023-07-03', 'Teh Kotak', 2),
32 ('blnj005', '2023-07-03', 'Lifebuoy Soap', 1),
33 ('blnj005', '2023-07-03', 'Close-Up Toothpaste', 2),
34 ('blnj005', '2023-07-03', 'Kecap Bango', 1);
```

b) Tabel supermarket

no_transaksi	tanggal_transaksi	nama_barang	jumlah
blnj001	2023-07-01	Mie Sedap	3
blnj001	2023-07-01	Teh Botol Sosro	2
blnj001	2023-07-01	Sabun Mandi Lifebuoy	1
blnj001	2023-07-01	Pepsodent Toothpaste	2
blnj001	2023-07-01	Kecap ABC	1
blnj002	2023-07-01	Indomie Goreng	5
blnj002	2023-07-01	Aqua Mineral Water	3
blnj002	2023-07-01	Rinso Detergent	1
blnj002	2023-07-01	Clear Shampoo	2
blnj002	2023-07-01	Makaroni Masakan	1
blnj003	2023-07-01	Pocari Sweat	2
blnj003	2023-07-01	Teh Pucuk Harum	3
blnj003	2023-07-01	Lux Soap	2
blnj003	2023-07-01	Colgate Toothpaste	1
blnj003	2023-07-01	Saus Tomat ABC	1
blnj004	2023-07-02	Mie Goreng	4
blnj004	2023-07-02	Coca-Cola	2
blnj004	2023-07-02	Rexona Deodorant	1
blnj004	2023-07-02	Pepsodent Toothpaste	2
blnj004	2023-07-02	Sambal ABC	1
blnj005	2023-07-03	Chitato Chips	3
blnj005	2023-07-03	Teh Kotak	2
blnj005	2023-07-03	Lifebuoy Soap	1
blnj005	2023-07-03	Close-Up Toothpaste	2
blnj005	2023-07-03	Kecap Bango	1

2. Membuat tabel untuk proses apriori

1. Perintah sql yang dijalankan, membuat tabel dengan nama *supermarket_apriori*

```
1 CREATE TABLE supermarket_apriori (  
2     no_transaksi VARCHAR(10),  
3     tanggal_transaksi DATE,  
4     daftar_barang VARCHAR(500),  
5     total_jumlah INT  
6 );  
7  
8 INSERT INTO supermarket_apriori (no_transaksi, tanggal_transaksi, daftar_barang, total_jumlah)  
9 SELECT no_transaksi, tanggal_transaksi, GROUP_CONCAT(nama_barang SEPARATOR ', ') AS daftar_barang, SUM(jumlah) AS total_jumlah  
10 FROM supermarket  
11 GROUP BY no_transaksi, tanggal_transaksi;
```

2. Tabel supermarket_apriori

no_transaksi	tanggal_transaksi	daftar_barang	total_jumlah
blnj001	2023-07-01	Mie Sedap, Teh Botol Sosro, Sabun Mandi Lifebuoy, ...	9
blnj002	2023-07-01	Makaroni Masakan, Clear Shampoo, Rinso Detergent, ...	12
blnj003	2023-07-01	Pocari Sweat, Teh Pucuk Harum, Lux Soap, Colgate T...	9
blnj004	2023-07-02	Sambal ABC, Pepsodent Toothpaste, Rexona Deodorant...	10
blnj005	2023-07-03	Chitato Chips, Teh Kotak, Lifebuoy Soap, Close-Up ...	9
blnj006	2023-07-03	Kecap Cap Orang Tua, Dove Shampoo, Downy Fabric So...	12
blnj007	2023-07-04	Rexona Deodorant, Fanta, Cheetos, Kecap ABC, Pepso...	16
blnj008	2023-07-04	Indomie Goreng, Teh Pucuk Harum, Pocari Sweat, Mak...	13
blnj009	2023-07-04	Chitato Chips, Coca-Cola, Mie Goreng, Saus Tomat A...	13
blnj010	2023-07-04	Downy Fabric Softener, Pristine Drinking Water, Sa...	15
blnj011	2023-07-05	Rexona Deodorant, Fanta, Cheetos, Pepsodent Toothp...	19
blnj012	2023-07-05	Saus Tomat ABC, Colgate Toothpaste, Lux Soap, Indo...	19
blnj013	2023-07-06	Sari Roti, Kecap Bango, Close-Up Toothpaste, Lifeb...	18
blnj014	2023-07-06	Fanta, Cheetos, Pepsodent Toothpaste, Sabun Mandi ...	20
blnj015	2023-07-06	Indomie Goreng, Lux Soap, Colgate Toothpaste, Saus...	21
blnj016	2023-07-06	Pristine Drinking Water, Sari Roti, Kecap Bango, C...	19
blnj017	2023-07-06	Fanta, Cheetos, Pepsodent Toothpaste, Sabun Mandi ...	16
blnj018	2023-07-07	Colgate Toothpaste, Lux Soap, Indomie Goreng, Teh ...	20

3. Data OLAP

- a) Perintah sql dijalankan, membuat tabel dengan nama *olap*

```
1 CREATE TABLE olap (  
2     tanggal_transaksi DATE,  
3     jumlah_transaksi INT,  
4     jumlah_barang INT  
5 );  
6  
7 INSERT INTO olap (tanggal_transaksi, jumlah_transaksi, jumlah_barang)  
8 SELECT tanggal_transaksi, COUNT(*) AS jumlah_transaksi, SUM(LENGTH(daftar_barang) - LENGTH(REPLACE(daftar_barang, ',', '')) + 1) AS jumlah_barang  
9 FROM supermarket_apriori  
10 GROUP BY tanggal_transaksi;
```

- b) Hasil data OLAP

tanggal_transaksi	jumlah_transaksi	jumlah_barang
2023-07-01	3	15
2023-07-02	1	5
2023-07-03	2	10
2023-07-04	4	27
2023-07-05	2	18
2023-07-06	5	46
2023-07-07	1	10

Menampilkan jumlah transaksi pada tanggal tertentu.