Membuat database

Membuat table Nasabah, Akun dan Transaksi

```
postgres=# \c Basic-Banking-System
You are now connected to database "Basic-Banking-System" as user "postgres".
Basic-Banking-System=# -- Tabel Nasabah
Basic-Banking-System=# CREATE TABLE Nasabah (
Basic-Banking-System(#     ID_Nasabah INT PRIMARY KEY,
Basic-Banking-System(#     Nama_Nasabah VARCHAR(255),
Basic-Banking-System(#     Alamat_Nasabah VARCHAR(255),
Basic-Banking-System(#     Nomor_Telepon VARCHAR(15)
Basic-Banking-System(# );
CREATE TABLE
Basic-Banking-System=#
Basic-Banking-System=# -- Tabel Akun
Basic-Banking-System=# CREATE TABLE Akun (
Basic-Banking-System(#     ID_Akun INT PRIMARY KEY,
Basic-Banking-System(#     Jenis_Akun VARCHAR(50),
Basic-Banking-System(#     Saldo_Akun DECIMAL(10, 2),
Basic-Banking-System(#     Tanggal_Dibuka DATE,
Basic-Banking-System(#     ID_Nasabah INT,
Basic-Banking-System(#     FOREIGN KEY (ID_Nasabah) REFERENCES Nasabah(ID_Nasabah)
Basic-Banking-System(# );
CREATE TABLE
Basic-Banking-System=#
Basic-Banking-System=# -- Tabel Transaksi
Basic-Banking-System=# CREATE TABLE Transaksi (
Basic-Banking-System(#     ID_Transaksi INT PRIMARY KEY,
Basic-Banking-System(#     Jenis_Transaksi VARCHAR(50),
Basic-Banking-System(#     Jumlah_Transaksi DECIMAL(10, 2),
Basic-Banking-System(#     Tanggal_Transaksi DATE,
Basic-Banking-System(#     ID_Akun INT,
Basic-Banking-System(#     FOREIGN KEY (ID_Akun) REFERENCES Akun(ID_Akun)
Basic-Banking-System(# );
CREATE TABLE
Basic-Banking-System=#
```

```
Basic-Banking-System=# -- Insert data ke dalam tabel Nasabah dengan alamat yang berbeda
Basic-Banking-System=# INSERT INTO Nasabah (ID_Nasabah, Nama_Nasabah, Alamat_Nasabah, Nomor_Telepon)
Basic-Banking-System=# VALUES
Basic-Banking-System=#     (1, 'John Doe', 'Medan', '123-456-7890'),
Basic-Banking-System=#     (2, 'Jane Smith', 'Jakarta', '456-789-0123'),
Basic-Banking-System=#     (3, 'Alice Johnson', 'Surabaya', '789-012-3456'),
Basic-Banking-System=#     (4, 'Bob Brown', 'Padang', '987-654-3210'),
Basic-Banking-System=#     (5, 'Eve Wilson', 'Medan', '234-567-8901'),
Basic-Banking-System=#     (6, 'Charlie Davis', 'Jakarta', '432-109-8765'),
Basic-Banking-System=#     (7, 'Grace Miller', 'Surabaya', '876-543-2109'),
Basic-Banking-System=#     (8, 'Frank Moore', 'Padang', '543-210-9876'),
Basic-Banking-System=#     (9, 'Sophia Lee', 'Medan', '654-321-0987'),
Basic-Banking-System=#     (10, 'Oliver Anderson', 'Jakarta', '765-432-1098');
INSERT 0 10
Basic-Banking-System=# -- Memeriksa data dalam tabel Nasabah
Basic-Banking-System=# SELECT * FROM Nasabah;
 id_nasabah |  nama_nasabah   | alamat_nasabah | nomor_telepon
------------+-----------------+----------------+---------------
          1 | John Doe        | Medan          | 123-456-7890
          2 | Jane Smith      | Jakarta        | 456-789-0123
          3 | Alice Johnson   | Surabaya       | 789-012-3456
          4 | Bob Brown       | Padang         | 987-654-3210
          5 | Eve Wilson      | Medan          | 234-567-8901
          6 | Charlie Davis   | Jakarta        | 432-109-8765
          7 | Grace Miller    | Surabaya       | 876-543-2109
          8 | Frank Moore     | Padang         | 543-210-9876
          9 | Sophia Lee      | Medan          | 654-321-0987
         10 | Oliver Anderson | Jakarta        | 765-432-1098
(10 rows)
```

```
Basic-Banking-System=# -- Insert data ke dalam tabel Akun dengan dua jenis akun yang berbeda dan tanggal pembukaan yang berbeda
Basic-Banking-System=# INSERT INTO Akun (ID_Akun, Jenis_Akun, Saldo_Akun, Tanggal_Dibuka, ID_Nasabah)
Basic-Banking-System=# VALUES
Basic-Banking-System=#     (1, 'Tabungan', 1000.00, '2023-10-17', 1),
Basic-Banking-System=#     (2, 'Deposito', 5000.00, '2023-10-18', 2),
Basic-Banking-System=#     (3, 'Tabungan', 2000.00, '2023-10-19', 3),
Basic-Banking-System=#     (4, 'Deposito', 7000.00, '2023-10-20', 4),
Basic-Banking-System=#     (5, 'Tabungan', 3000.00, '2023-10-21', 5),
Basic-Banking-System=#     (6, 'Deposito', 6000.00, '2023-10-22', 6),
Basic-Banking-System=#     (7, 'Tabungan', 4000.00, '2023-10-23', 7),
Basic-Banking-System=#     (8, 'Deposito', 8000.00, '2023-10-24', 8),
Basic-Banking-System=#     (9, 'Tabungan', 5000.00, '2023-10-25', 9),
Basic-Banking-System=#     (10, 'Deposito', 9000.00, '2023-10-26', 10);
INSERT 0 10
Basic-Banking-System=# SELECT * FROM akun
Basic-Banking-System=# SELECT * FROM akun;
ERROR:  syntax error at or near "SELECT"
LINE 2: SELECT * FROM akun;
        ^
Basic-Banking-System=# SELECT * FROM Akun;
 id_akun | jenis_akun | saldo_akun | tanggal_dibuka | id_nasabah
---------+------------+------------+----------------+------------
       1 | Tabungan   |    1000.00 | 2023-10-17     |          1
       2 | Deposito   |    5000.00 | 2023-10-18     |          2
       3 | Tabungan   |    2000.00 | 2023-10-19     |          3
       4 | Deposito   |    7000.00 | 2023-10-20     |          4
       5 | Tabungan   |    3000.00 | 2023-10-21     |          5
       6 | Deposito   |    6000.00 | 2023-10-22     |          6
       7 | Tabungan   |    4000.00 | 2023-10-23     |          7
       8 | Deposito   |    8000.00 | 2023-10-24     |          8
       9 | Tabungan   |    5000.00 | 2023-10-25     |          9
      10 | Deposito   |    9000.00 | 2023-10-26     |         10
(10 rows)
```

```
Basic-Banking-System=# -- Insert data ke dalam tabel Transaksi dengan ID akun yang sama
Basic-Banking-System=# INSERT INTO Transaksi (ID_Transaksi, Jenis_Transaksi, Jumlah_Transaksi, Tanggal_Transaksi, ID_Akun)
Basic-Banking-System=# VALUES
Basic-Banking-System=#      (1, 'Debit', 500.00, '2023-10-17', 1),
Basic-Banking-System=#      (2, 'Kredit', 200.00, '2023-10-18', 1),
Basic-Banking-System=#      (3, 'Debit', 1000.00, '2023-10-19', 1),
Basic-Banking-System=#      (4, 'Kredit', 300.00, '2023-10-20', 2),
Basic-Banking-System=#      (5, 'Debit', 700.00, '2023-10-21', 2),
Basic-Banking-System=#      (6, 'Kredit', 400.00, '2023-10-22', 2),
Basic-Banking-System=#      (7, 'Debit', 1500.00, '2023-10-23', 3),
Basic-Banking-System=#      (8, 'Kredit', 800.00, '2023-10-24', 3),
Basic-Banking-System=#      (9, 'Debit', 300.00, '2023-10-25', 3),
Basic-Banking-System=#      (10, 'Kredit', 200.00, '2023-10-26', 4),
Basic-Banking-System=#      (11, 'Debit', 600.00, '2023-10-27', 4),
Basic-Banking-System=#      (12, 'Kredit', 300.00, '2023-10-28', 4),
Basic-Banking-System=#      (13, 'Debit', 1000.00, '2023-10-29', 5),
Basic-Banking-System=#      (14, 'Kredit', 700.00, '2023-10-30', 5),
Basic-Banking-System=#      (15, 'Debit', 400.00, '2023-10-31', 5),
Basic-Banking-System=#      (16, 'Kredit', 600.00, '2023-11-01', 6),
Basic-Banking-System=#      (17, 'Debit', 900.00, '2023-11-02', 6),
Basic-Banking-System=#      (18, 'Kredit', 300.00, '2023-11-03', 6),
Basic-Banking-System=#      (19, 'Debit', 1500.00, '2023-11-04', 7),
Basic-Banking-System=#      (20, 'Kredit', 800.00, '2023-11-05', 7);
INSERT 0 20
Basic-Banking-System=# SELECT * FROM Transaksi;
 id_transaksi | jenis_transaksi | jumlah_transaksi | tanggal_transaksi | id_akun
--------------+-----------------+------------------+-------------------+---------
            1 | Debit           |           500.00 | 2023-10-17        |       1
            2 | Kredit          |           200.00 | 2023-10-18        |       1
            3 | Debit           |          1000.00 | 2023-10-19        |       1
            4 | Kredit          |           300.00 | 2023-10-20        |       2
            5 | Debit           |           700.00 | 2023-10-21        |       2
            6 | Kredit          |           400.00 | 2023-10-22        |       2
            7 | Debit           |          1500.00 | 2023-10-23        |       3
            8 | Kredit          |           800.00 | 2023-10-24        |       3
            9 | Debit           |           300.00 | 2023-10-25        |       3
           10 | Kredit          |           200.00 | 2023-10-26        |       4
           11 | Debit           |           600.00 | 2023-10-27        |       4
           12 | Kredit          |           300.00 | 2023-10-28        |       4
           13 | Debit           |          1000.00 | 2023-10-29        |       5
           14 | Kredit          |           700.00 | 2023-10-30        |       5
           15 | Debit           |           400.00 | 2023-10-31        |       5
           16 | Kredit          |           600.00 | 2023-11-01        |       6
           17 | Debit           |           900.00 | 2023-11-02        |       6
           18 | Kredit          |           300.00 | 2023-11-03        |       6
           19 | Debit           |          1500.00 | 2023-11-04        |       7
           20 | Kredit          |           800.00 | 2023-11-05        |       7
(20 rows)
```

Operasi Create, Read , Update dan Delete

```
Basic-Banking-System=# -- Insert data baru ke dalam tabel Nasabah
Basic-Banking-System=# INSERT INTO Nasabah (ID_Nasabah, Nama_Nasabah, Alamat_Nasabah, Nomor_Telepon)
Basic-Banking-System=# VALUES
Basic-Banking-System=#      (11, 'Sarah Johnson', 'Semarang', '555-555-5555');
INSERT 0 1
Basic-Banking-System=# -- Membaca data dari tabel Nasabah
Basic-Banking-System=# SELECT * FROM Nasabah;
 id_nasabah |   nama_nasabah   | alamat_nasabah | nomor_telepon
------------+------------------+----------------+---------------
          1 | John Doe         | Medan          | 123-456-7890
          2 | Jane Smith       | Jakarta        | 456-789-0123
          3 | Alice Johnson    | Surabaya       | 789-012-3456
          4 | Bob Brown        | Padang         | 987-654-3210
          5 | Eve Wilson       | Medan          | 234-567-8901
          6 | Charlie Davis    | Jakarta        | 432-109-8765
          7 | Grace Miller     | Surabaya       | 876-543-2109
          8 | Frank Moore      | Padang         | 543-210-9876
          9 | Sophia Lee       | Medan          | 654-321-0987
         10 | Oliver Anderson  | Jakarta        | 765-432-1098
         11 | Sarah Johnson    | Semarang       | 555-555-5555
(11 rows)
```

```
Basic-Banking-System=# -- Mengubah alamat nasabah dengan ID_Nasabah 11
Basic-Banking-System=# UPDATE Nasabah
Basic-Banking-System-# SET Alamat_Nasabah = 'Yogyakarta'
Basic-Banking-System-# WHERE ID_Nasabah = 11;
UPDATE 1
Basic-Banking-System=# SELECT * FROM Nasabah;
 id_nasabah |   nama_nasabah  | alamat_nasabah | nomor_telepon
------------+-----------------+----------------+---------------
          1 | John Doe        | Medan          | 123-456-7890
          2 | Jane Smith      | Jakarta        | 456-789-0123
          3 | Alice Johnson   | Surabaya       | 789-012-3456
          4 | Bob Brown       | Padang         | 987-654-3210
          5 | Eve Wilson      | Medan          | 234-567-8901
          6 | Charlie Davis   | Jakarta        | 432-109-8765
          7 | Grace Miller    | Surabaya       | 876-543-2109
          8 | Frank Moore     | Padang         | 543-210-9876
          9 | Sophia Lee      | Medan          | 654-321-0987
         10 | Oliver Anderson | Jakarta        | 765-432-1098
         11 | Sarah Johnson   | Yogyakarta     | 555-555-5555
(11 rows)
```

```
Basic-Banking-System=# -- Menghapus data transaksi dengan ID_Transaksi antara 15 dan 20
Basic-Banking-System=# DELETE FROM Transaksi
Basic-Banking-System-# WHERE ID_Transaksi BETWEEN 15 AND 20;
DELETE 6
Basic-Banking-System=# SELECT * FROM Transaksi;
 id_transaksi | jenis_transaksi | jumlah_transaksi | tanggal_transaksi | id_akun
--------------+-----------------+------------------+-------------------+---------
            1 | Debit           |           500.00 | 2023-10-17        |       1
            2 | Kredit          |           200.00 | 2023-10-18        |       1
            3 | Debit           |          1000.00 | 2023-10-19        |       1
            4 | Kredit          |           300.00 | 2023-10-20        |       2
            5 | Debit           |           700.00 | 2023-10-21        |       2
            6 | Kredit          |           400.00 | 2023-10-22        |       2
            7 | Debit           |          1500.00 | 2023-10-23        |       3
            8 | Kredit          |           800.00 | 2023-10-24        |       3
            9 | Debit           |           300.00 | 2023-10-25        |       3
           10 | Kredit          |           200.00 | 2023-10-26        |       4
           11 | Debit           |           600.00 | 2023-10-27        |       4
           12 | Kredit          |           300.00 | 2023-10-28        |       4
           13 | Debit           |          1000.00 | 2023-10-29        |       5
           14 | Kredit          |           700.00 | 2023-10-30        |       5
(14 rows)
```