LA SBD2

Mata Praktikum   : Sistem Basis Data 2

Kelas   : 3IA02

Praktikum ke-   : 5

Tanggal   : 11/5/2023

Materi   : Relational Database
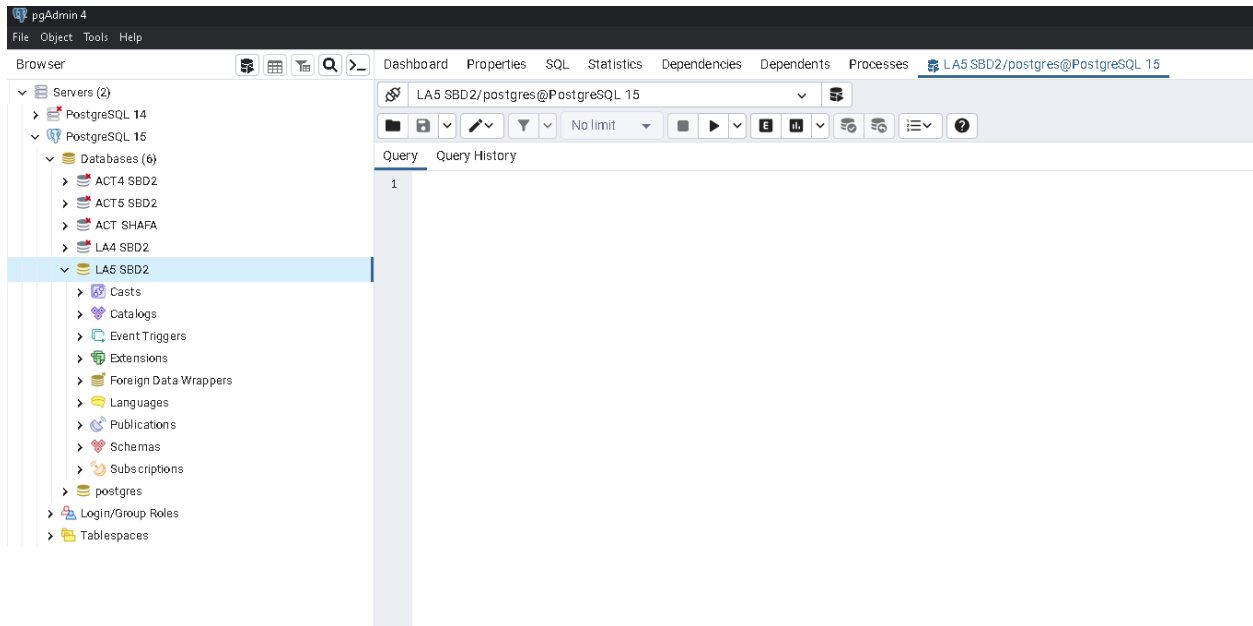
NPM   : 50420562

Nama   : Ibrahim Bramullah

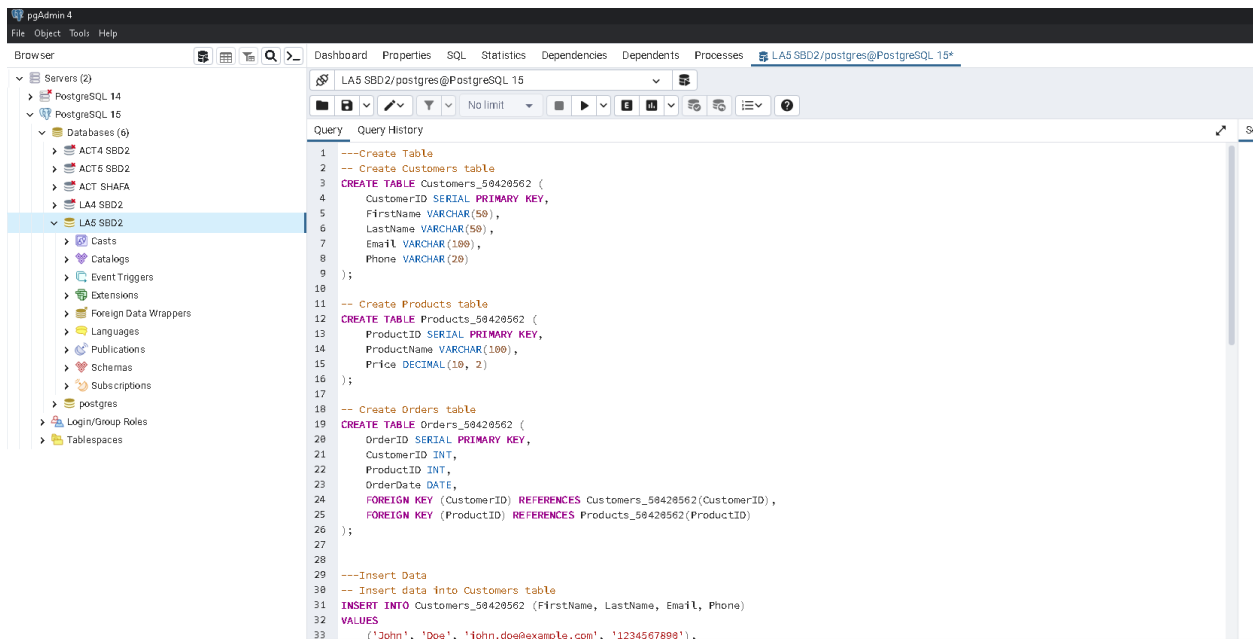Ketua Asisten   : Naufal Maulana

Paraf Asisten   :

Nama Asisten   :

Jumlah Lembar   : 5 Lembar

Create DataBase

Create Table


```
1   ---Create Table
2   -- Create Customers table
3   CREATE TABLE Customers_50420562 (
4       CustomerID SERIAL PRIMARY KEY,
5       FirstName VARCHAR(50),
6       LastName VARCHAR(50),
7       Email VARCHAR(100),
8       Phone VARCHAR(20)
9   );
10
11  -- Create Products table
12  CREATE TABLE Products_50420562 (
13      ProductID SERIAL PRIMARY KEY,
14      ProductName VARCHAR(100),
15      Price DECIMAL(10, 2)
16  );
17
18  -- Create Orders table
19  CREATE TABLE Orders_50420562 (
20      OrderID SERIAL PRIMARY KEY,
21      CustomerID INT,
22      ProductID INT,
23      OrderDate DATE,
24      FOREIGN KEY (CustomerID) REFERENCES Customers_50420562(CustomerID),
25      FOREIGN KEY (ProductID) REFERENCES Products_50420562(ProductID)
26  );
27
28
29  ---Insert Data
30  -- Insert data into Customers table
31  INSERT INTO Customers_50420562 (FirstName, LastName, Email, Phone)
32  VALUES
33      ('John', 'Doe', 'john.doe@example.com', '1234567898'),
```

Database Output

```
57
58
59  --- RIGHT JOIN
60  SELECT *
61  FROM Orders_50420562
62  RIGHT JOIN Customers_50420562 ON Orders_50420562.CustomerID = Customers_50420562.CustomerID;
63
```

Data Output   Messages   Notifications

	orderId integer	customerId integer	productId integer	orderdate date	customerId integer	firstname character varying (50)	lastname character varying (50)	email character varying (100)	phone character varying (20)
1	1	1	1	2023-01-15	1	John	Doe	john.doe@example.com	1234567890
2	2	2	2	2023-02-10	2	Jane	Smith	jane.smith@example.com	0987654321
3	3	3	3	2023-03-20	3	David	Johnson	david.johnson@example.com	5678901234
4	4	4	4	2023-04-05	4	Emily	Williams	emily.williams@example.com	4321098765
5	5	5	5	2023-05-03	5	Ibrahim	Bramullah	ibrahimbramullah2@gmail.com	0812345678910

```
63
64  --- LEFT JOIN
65  SELECT *
66  FROM Customers_50420562
67  LEFT JOIN Orders_50420562 ON Customers_50420562.CustomerID = Orders_50420562.CustomerID;
68
69  --- INNER JOIN
```

Data Output   Messages   Notifications

	customerId integer	firstname character varying (50)	lastname character varying (50)	email character varying (100)	phone character varying (20)	orderId integer	customerId integer	productId integer	orderdate date
1	1	John	Doe	john.doe@example.com	1234567890	1	1	1	2023-01-15
2	2	Jane	Smith	jane.smith@example.com	0987654321	2	2	2	2023-02-10
3	3	David	Johnson	david.johnson@example.com	5678901234	3	3	3	2023-03-20
4	4	Emily	Williams	emily.williams@example.com	4321098765	4	4	4	2023-04-05
5	5	Ibrahim	Bramullah	ibrahimbramullah2@gmail.com	0812345678910	5	5	5	2023-05-03

```
68
69  --- INNER JOIN
70  SELECT *
71  FROM Customers_50420562
72  INNER JOIN Orders_50420562 ON Customers_50420562.CustomerID = Orders_50420562.CustomerID;
73
```

Data Output   Messages   Notifications

	customerId integer	firstname character varying (50)	lastname character varying (50)	email character varying (100)	phone character varying (20)	orderId integer	customerId integer	productId integer	orderdate date
1	1	John	Doe	john.doe@example.com	1234567890	1	1	1	2023-01-15
2	2	Jane	Smith	jane.smith@example.com	0987654321	2	2	2	2023-02-10
3	3	David	Johnson	david.johnson@example.com	5678901234	3	3	3	2023-03-20
4	4	Emily	Williams	emily.williams@example.com	4321098765	4	4	4	2023-04-05
5	5	Ibrahim	Bramullah	ibrahimbramullah2@gmail.com	0812345678910	5	5	5	2023-05-03

```
74   --- OUTER JOIN
75   SELECT *
76   FROM Customers_50420562
77   FULL OUTER JOIN Orders_50420562 ON Customers_50420562.CustomerID = Orders_50420562.CustomerID;
78
79
```

Data Output   Messages   Notifications

	customerId integer	firstname character varying (50)	lastname character varying (50)	email character varying (100)	phone character varying (20)	orderId integer	customerId integer	productId integer	orderdate date
1	1	John	Doe	john.doe@example.com	1234567890	1	1	1	2023-01-15
2	2	Jane	Smith	jane.smith@example.com	0987654321	2	2	2	2023-02-10
3	3	David	Johnson	david.johnson@example.com	5678901234	3	3	3	2023-03-20
4	4	Emily	Williams	emily.williams@example.com	4321098765	4	4	4	2023-04-05
5	5	Ibrahim	Bramullah	ibrahimbramullah2@gmail.com	0812345678910	5	5	5	2023-05-03

SQL CODE:

```sql
---Create Table
-- Create Customers table
CREATE TABLE Customers_50420562 (
    CustomerID SERIAL PRIMARY KEY,
    FirstName VARCHAR(50),
    LastName VARCHAR(50),
    Email VARCHAR(100),
    Phone VARCHAR(20)
);

-- Create Products table
CREATE TABLE Products_50420562 (
    ProductID SERIAL PRIMARY KEY,
    ProductName VARCHAR(100),
    Price DECIMAL(10, 2)
);

-- Create Orders table
CREATE TABLE Orders_50420562 (
    OrderID SERIAL PRIMARY KEY,
    CustomerID INT,
    ProductID INT,
    OrderDate DATE,
    FOREIGN KEY (CustomerID) REFERENCES Customers_50420562(CustomerID),
    FOREIGN KEY (ProductID) REFERENCES Products_50420562(ProductID)
);


---Insert Data
-- Insert data into Customers table
INSERT INTO Customers_50420562 (FirstName, LastName, Email, Phone)
VALUES
    ('John', 'Doe', 'john.doe@example.com', '1234567890'),
    ('Jane', 'Smith', 'jane.smith@example.com', '0987654321'),
    ('David', 'Johnson', 'david.johnson@example.com', '5678901234'),
    ('Emily', 'Williams', 'emily.williams@example.com', '4321098765'),
    ('Ibrahim', 'Bramullah', 'ibrahimbramullah2@gmail.com', '0812345678910');

-- Insert data into Products table
INSERT INTO Products_50420562 (ProductName, Price)
VALUES
    ('Product A', 50000),
```

```sql
    ('Product B', 75000),
    ('Product C', 90000),
    ('Product D', 60000),
    ('Product E', 35000);

-- Insert data into Orders table
INSERT INTO Orders_50420562 (CustomerID, ProductID, OrderDate)
VALUES
    (1, 1, '2023-01-15'),
    (2, 2, '2023-02-10'),
    (3, 3, '2023-03-20'),
    (4, 4, '2023-04-05'),
    (5, 5, '2023-05-03');




--- RIGHT JOIN
SELECT *
FROM Orders_50420562
RIGHT JOIN Customers_50420562 ON Orders_50420562.CustomerID =
Customers_50420562.CustomerID;

--- LEFT JOIN
SELECT *
FROM Customers_50420562
LEFT JOIN Orders_50420562 ON Customers_50420562.CustomerID =
Orders_50420562.CustomerID;

--- INNER JOIN
SELECT *
FROM Customers_50420562
INNER JOIN Orders_50420562 ON Customers_50420562.CustomerID =
Orders_50420562.CustomerID;

--- OUTER JOIN
SELECT *
FROM Customers_50420562
FULL OUTER JOIN Orders_50420562 ON Customers_50420562.CustomerID =
Orders_50420562.CustomerID;
```