

LAPORAN AKHIR PRAKTIKUM

Mata Praktikum : SBD2
Kelas : 3IA19
Praktikum : 2
Tanggal : 10-23-2023
Materi : Pengenalan Query Pada POSTGRESQL
NPM : 50421859
Nama : Muhamad Ariel D.P
Ketua Asisten : -
Nama Asisten : Annisya Amanda Safira
Paraf Asisten :
Jumlah Lembar : 7



**LABORATORIUM INFORMATIKA
UNIVERSITAS GUNADARMA
2023**

LISTING

LAPORAN AKHIR

1. jelaskan perbedaan penggunaan dari fungsi drop dan delete?

Jawab:

Dalam PostgreSQL, ada perbedaan antara fungsi DROP dan DELETE, tetapi ini tidak terkait dengan manipulasi data. Sebaliknya, keduanya digunakan dalam konteks yang berbeda:

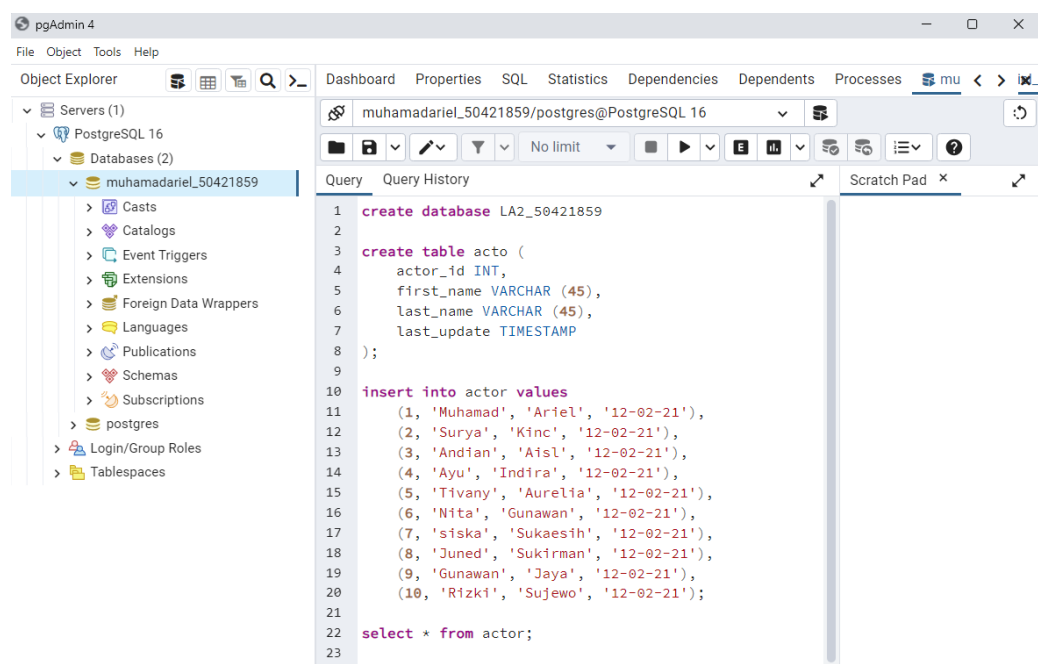
- Fungsi DROP dalam PostgreSQL:
- Digunakan untuk menghapus objek database, seperti tabel, indeks, basis data, skema, dan lain sebagainya.
- DROP digunakan untuk menghapus seluruh objek dari database, sehingga tidak mempengaruhi baris data dalam tabel.

Fungsi DELETE dalam PostgreSQL:

- Digunakan untuk menghapus baris data dari sebuah tabel dalam database.
- DELETE digunakan untuk menghapus data dari tabel, tetapi tidak menghapus tabel itu sendiri.

2. Buat sebuah program seperti didalam video dan tambahkan 10 data, sertakan screenshoot dari codingan dan outputnya?

Jawab:



The screenshot shows the pgAdmin 4 interface. On the left, the 'Object Explorer' pane shows a tree structure with 'Servers (1)' containing 'PostgreSQL 16', which has 'Databases (2)' including 'muhamadriel_50421859'. The main pane displays a SQL query in the 'Query' tab. The query is as follows:

```
1 create database LA2_50421859
2
3 create table acto (
4     actor_id INT,
5     first_name VARCHAR (45),
6     last_name VARCHAR (45),
7     last_update TIMESTAMP
8 );
9
10 insert into actor values
11     (1, 'Muhamad', 'Ariel', '12-02-21'),
12     (2, 'Surya', 'Kinc', '12-02-21'),
13     (3, 'Andian', 'Aisl', '12-02-21'),
14     (4, 'Ayu', 'Indira', '12-02-21'),
15     (5, 'Tivany', 'Aurelia', '12-02-21'),
16     (6, 'Nita', 'Gunawan', '12-02-21'),
17     (7, 'siska', 'Sukaesih', '12-02-21'),
18     (8, 'Juned', 'Sukirman', '12-02-21'),
19     (9, 'Gunawan', 'Jaya', '12-02-21'),
20     (10, 'Rizki', 'Sujewo', '12-02-21');
21
22 select * from actor;
```

pgAdmin 4

File Object Tools Help

Object Explorer

- Servers (1)
 - PostgreSQL 16
 - Databases (2)
 - muhamadriel_50421859**
 - Cast
 - Catalogs
 - Event Triggers
 - Extensions
 - Foreign Data Wrappers
 - Languages
 - Publications
 - Schemas
 - Subscriptions
 - postgres
 - Login/Group Roles
 - Tablespaces

Dashboard Properties SQL Statistics Dependencies Dependents Processes **mu**

muhamadriel_50421859/postgres@PostgreSQL 16

Query Query History

Data Output Messages Notifications

	actor_id integer	first_name character varying (45)	last_name character varying (45)	last_update timestamp without time zone
1	1	Muhamad	Ariel	2021-03-20 00:00:00
2	4	Nita	Ardila	2021-05-20 00:00:00
3	2	Andian	Indira	2021-02-12 00:00:00
4	1	Muhamad	Ariel	2021-12-02 00:00:00
5	2	Surya	Kinc	2021-12-02 00:00:00
6	3	Andian	Aisl	2021-12-02 00:00:00
7	4	Nita	Ardila	2021-12-02 00:00:00
8	1	Muhamad	Ariel	2021-12-02 00:00:00
9	2	Surya	Kinc	2021-12-02 00:00:00
10	3	Andian	Aisl	2021-12-02 00:00:00
11	4	Ayu	Indira	2021-12-02 00:00:00
12	5	Tivany	Aurelia	2021-12-02 00:00:00
13	6	Nita	Gunawan	2021-12-02 00:00:00
14	7	siska	Sukaesih	2021-12-02 00:00:00
15	8	Juned	Sukirman	2021-12-02 00:00:00
16	9	Gunawan	Jaya	2021-12-02 00:00:00
17	10	Rizki	Sujewo	2021-12-02 00:00:00

Total rows: 17 of 17 Query complete 00:00:00.187 Ln 22, Col 21

2. Jelaskan fungsi yang digunakan.(contoh : fungsi delete, insert, Dll)?

Jawab:

Fungsi dari Create database yaitu untuk membuat database baru

pgAdmin 4

File Object Tools Help

Object Explorer

- Servers (1)
 - PostgreSQL 16
 - Databases (2)
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Dashboard Properties SQL Statistics Dependencies Dependents Processes **mu**

muhamadriel_50421859/postgres@PostgreSQL 16

Query Query History

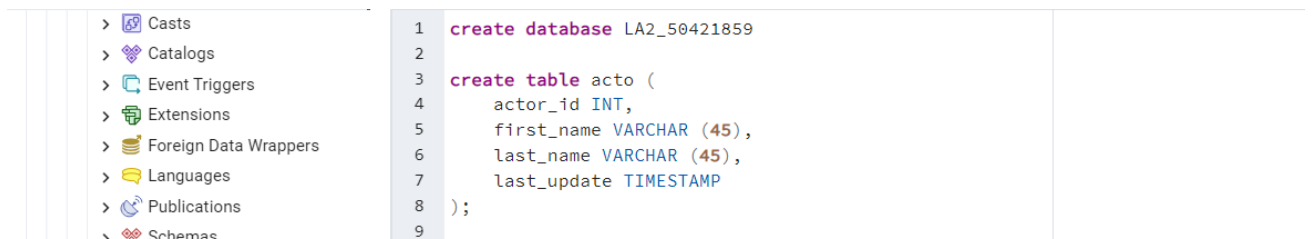
Scratch Pad

```

1 create database LA2_50421859
2
3
4 create table acto (
5     actor_id INT,
6     first_name VARCHAR (45),
7     last_name VARCHAR (45),
8     last_update TIMESTAMP
9 );
10
11 insert into actor values
12     (1, 'Muhamad', 'Ariel', '12-02-21'),
13     (2, 'Surya', 'Kinc', '12-02-21'),
14     (3, 'Andian', 'Aisl', '12-02-21'),
15     (4, 'Ayu', 'Indira', '12-02-21'),
16     (5, 'Tivany', 'Aurelia', '12-02-21'),
17     (6, 'Nita', 'Gunawan', '12-02-21'),
18     (7, 'siska', 'Sukaesih', '12-02-21'),
19     (8, 'Juned', 'Sukirman', '12-02-21'),
20     (9, 'Gunawan', 'Jaya', '12-02-21'),
21     (10, 'Rizki', 'Sujewo', '12-02-21');
22
23 select * from actor;
24

```

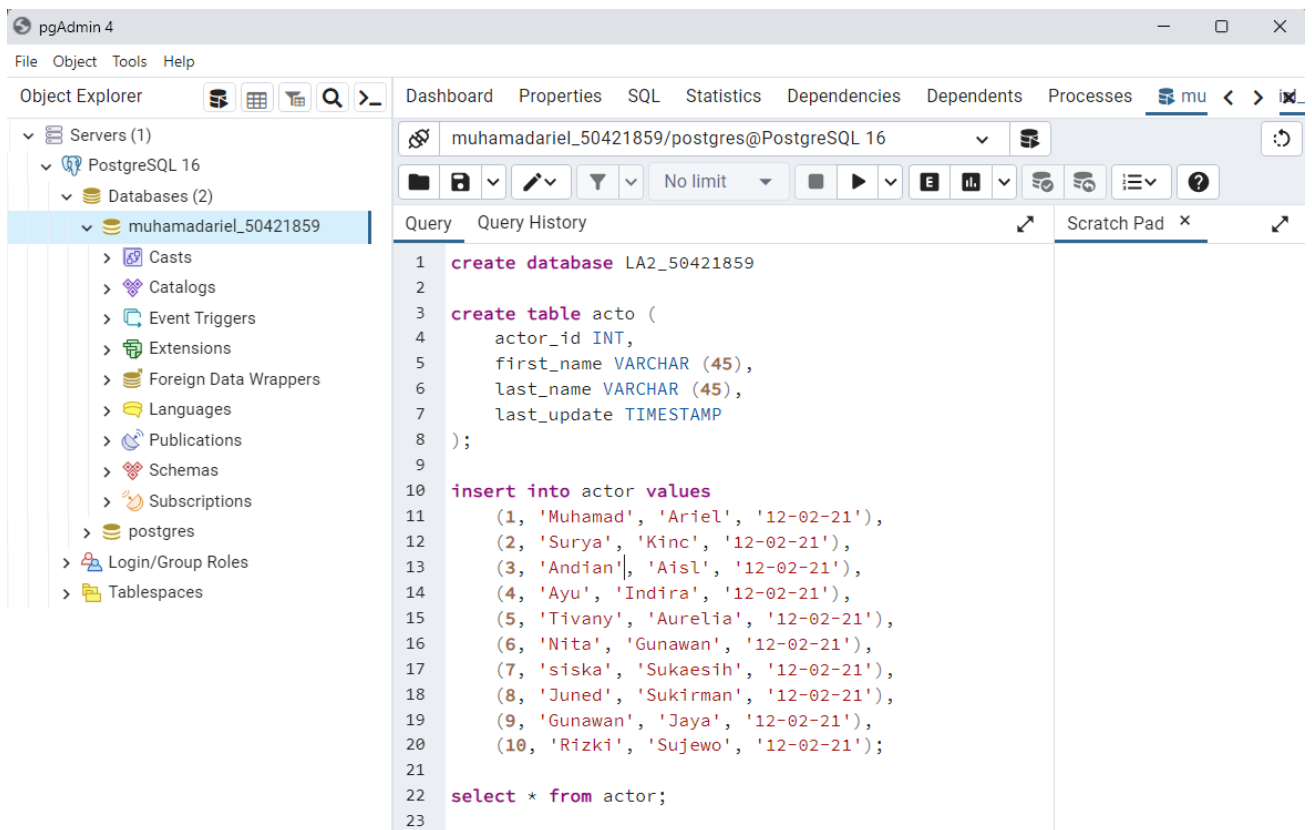
Setelah membuat database kita harus mmembuat table dangan query **create table**



The screenshot shows the pgAdmin 4 interface. On the left, the 'Object Explorer' pane displays a tree structure with 'Schemas' selected. The main SQL editor pane contains the following SQL code:

```
1 create database LA2_50421859
2
3 create table acto (
4     actor_id INT,
5     first_name VARCHAR (45),
6     last_name VARCHAR (45),
7     last_update TIMESTAMP
8 );
9
```

Setelah membuat table kita mengisi table dengan menggunakan query *insert into*, query tersebut digunakan untuk menambahkan data pada table yang sudah dibuat.



The screenshot shows the pgAdmin 4 interface with the 'muhamadriel_50421859' database selected in the 'Object Explorer'. The SQL editor pane contains the following SQL code:

```
1 create database LA2_50421859
2
3 create table acto (
4     actor_id INT,
5     first_name VARCHAR (45),
6     last_name VARCHAR (45),
7     last_update TIMESTAMP
8 );
9
10 insert into actor values
11 (1, 'Muhamad', 'Ariel', '12-02-21'),
12 (2, 'Surya', 'Kinc', '12-02-21'),
13 (3, 'Andian', 'Aisl', '12-02-21'),
14 (4, 'Ayu', 'Indira', '12-02-21'),
15 (5, 'Tivany', 'Aurelia', '12-02-21'),
16 (6, 'Nita', 'Gunawan', '12-02-21'),
17 (7, 'siska', 'Sukaesih', '12-02-21'),
18 (8, 'Juned', 'Sukirman', '12-02-21'),
19 (9, 'Gunawan', 'Jaya', '12-02-21'),
20 (10, 'Rizki', 'Sujewo', '12-02-21');
21
22 select * from actor;
23
```

Selanjutnya untuk melihat table yang sudah kita buat dan kita isi datanya, kita harus menggunakan query `Select * from actor;`, query ini akan menampilkan tabel actor.

```

10 insert into actor values
11     (1, 'Muhamad', 'Ariel', '12-02-21'),
12     (2, 'Surya', 'Kinc', '12-02-21'),
13     (3, 'Andian', 'Aisl', '12-02-21'),
14     (4, 'Ayu', 'Indira', '12-02-21'),
15     (5, 'Tivany', 'Aurelia', '12-02-21'),

```

Data Output Messages Notifications

	actor_id integer	first_name character varying (45)	last_name character varying (45)	last_update timestamp without time zone
1	1	Muhamad	Ariel	2021-03-20 00:00:00
2	4	Nita	Ardila	2021-05-20 00:00:00
3	2	Andian	Indira	2021-02-12 00:00:00
4	1	Muhamad	Ariel	2021-12-02 00:00:00
5	2	Surya	Kinc	2021-12-02 00:00:00
6	3	Andian	Aisl	2021-12-02 00:00:00
7	4	Nita	Ardila	2021-12-02 00:00:00
8	1	Muhamad	Ariel	2021-12-02 00:00:00

Total rows: 17 of 17 Query complete 00:00:00.187 Ln 13, Col 14

Untuk mencari data yang lebih spesifik dari data tabel yang sudah kita buat tadi, kita dapat menggunakan query `select (actor_id, first_name, last_name) from actor;`
`select * from actor where first_name = 'Nita';`, query itu berarti akan menampilkan data dari tabel actor dimana nama depan 'Nita'

```

19     (9, 'Gunawan', 'Jaya', '12-02-21'),
20     (10, 'Rizki', 'Sujewo', '12-02-21');
21
22 select * from actor;
23
24 select (actor_id, first_name, last_name) from actor;
25 select * from actor where first_name = 'Nita';
26
27

```

Data Output Messages Notifications

	actor_id integer	first_name character varying (45)	last_name character varying (45)	last_update timestamp without time zone
1	4	Nita	Ardila	2021-05-20 00:00:00
2	4	Nita	Ardila	2021-12-02 00:00:00
3	6	Nita	Gunawan	2021-12-02 00:00:00

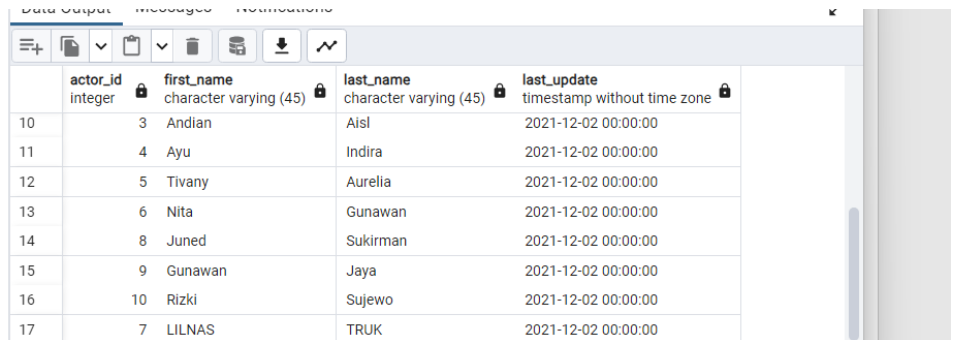
Query update digunakan untuk merubah isi dari tabel.

The screenshot shows a PostgreSQL query editor interface. On the left is a sidebar with a tree view of database objects under the user 'muhamadariel_50421859'. The main area is split into 'Query' and 'Query History' tabs. The 'Query' tab contains a SQL script that inserts data into an 'actor' table, selects all records, selects records with first_name 'Nita', updates the record with actor_id 7 to have first_name 'LILNAS' and last_name 'TRUK', and finally selects all records again. Below the query editor is a 'Data Output' tab showing the results of the final SELECT query. The results are displayed in a table with columns: actor_id, first_name, last_name, and last_update. The table contains 10 rows of data, including the updated record for actor_id 7.

```
16 (6, 'Nita', 'Gunawan', '12-02-21'),
17 (7, 'siska', 'Sukaesih', '12-02-21'),
18 (8, 'Juned', 'Sukirman', '12-02-21'),
19 (9, 'Gunawan', 'Jaya', '12-02-21'),
20 (10, 'Rizki', 'Sujewo', '12-02-21');
21
22 select * from actor;
23
24 select (actor_id, first_name, last_name) from actor;
25 select * from actor where first_name = 'Nita';
26
27 update actor
28 set first_name = 'LILNAS', last_name = 'TRUK'
29 where actor_id = 7;
30
31 select * from actor;
```

	actor_id integer	first_name character varying (45)	last_name character varying (45)	last_update timestamp without time zone
10	3	Andian	Aisl	2021-12-02 00:00:00
11	4	Ayu	Indira	2021-12-02 00:00:00
12	5	Tivany	Aurelia	2021-12-02 00:00:00
13	6	Nita	Gunawan	2021-12-02 00:00:00
14	8	Juned	Sukirman	2021-12-02 00:00:00
15	9	Gunawan	Jaya	2021-12-02 00:00:00
16	10	Rizki	Sujewo	2021-12-02 00:00:00
17	7	LILNAS	TRUK	2021-12-02 00:00:00

OUTPUT



	actor_id integer	first_name character varying (45)	last_name character varying (45)	last_update timestamp without time zone
10	3	Andian	Aisl	2021-12-02 00:00:00
11	4	Ayu	Indira	2021-12-02 00:00:00
12	5	Tivany	Aurelia	2021-12-02 00:00:00
13	6	Nita	Gunawan	2021-12-02 00:00:00
14	8	Juned	Sukirman	2021-12-02 00:00:00
15	9	Gunawan	Jaya	2021-12-02 00:00:00
16	10	Rizki	Sujewo	2021-12-02 00:00:00
17	7	LILNAS	TRUK	2021-12-02 00:00:00

Query *Drop table* berarti akan menghapus tabel dan seluruh data yang ada didalamnya.



```
31 select * from actor ;
32
33 DROP table actor;
34
```