

UJIAN

Mata Praktikum : Sistem Basis Data 1
Kelas : 3IA24
Praktikum ke- : 5
Tanggal : 9 Januari 2024
Materi : Ujian
NPM : 50421704
Nama : Juan Samuel Christopher
Ketua Asisten : Madanil
Nama Asisten :
Paraf Asisten :
Jumlah Lembar : 7



LABORATORIUM TEKNIK INFORMATIKA

UNIVERSITAS GUNADARMA

2024

1. Buatlah database baru dengan nama “Nama_NPM”

```
1 CREATE DATABASE juansamuelchristopher_50421704;
```

Data Output Messages Notifications

CREATE DATABASE

Query returned successfully in 789 msec.

2. Buatlah table dengan nama “mahasiswa” dengan kolom , NPM (Primary key), Nama, alamat, kota. (Tampilkan dengan perintah DESC).

```
3 CREATE TABLE mahasiswa (  
4     NPM VARCHAR(8) not null primary key,  
5     nama VARCHAR(30),  
6     alamat VARCHAR(50),  
7     kota VARCHAR(30)  
8 );
```

```
16 SELECT * FROM mahasiswa ORDER BY NPM DESC;
```

Data Output Messages Notifications

						
npm	nama	alamat	kota			
[PK] character varying (8)	character varying (30)	character varying (50)	character varying (30)			

3. Buatlah table dengan nama “nilai” dengan kolom, NPM. kode_mk, Nilai. (Tampilkan dengan perintah DESC).

```
23 CREATE TABLE nilai (  
24     NPM VARCHAR(8) not null primary key,  
25     kode_mk VARCHAR(10),  
26     Nilai INT  
27 );
```





Data Output Messages Notifications

CREATE TABLE

Query returned successfully in 49 msec.

```
35 SELECT * FROM nilai ORDER BY NPM DESC;
```

Data Output Messages Notifications

						
npm	kode_mk	nilai				
[PK] character varying (8)	character varying (10)	integer				

4. Buatlah table dengan nama 'matakuliah' dengan kolom, "kode_mk"(primary key), nama_mk, semester, sks. (Tampilkan dengan perintah DESC).

```

38 CREATE TABLE matakuliah (
39     kode_mk VARCHAR(8) not null primary key,
40     nama_mk VARCHAR(30),
41     semester INT,
42     sks INT
43 );

```

Data Output Messages Notifications

CREATE TABLE

Query returned successfully in 198 msec.

```

51 SELECT * FROM matakuliah ORDER BY kode_mk DESC;

```

Data Output Messages Notifications

	kode_mk [PK] character varying (8)	nama_mk character varying (30)	semester integer	sks integer
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5. Isi ketiga table masing" minimal 5 data. (Tampilkan dengan perintah select).

- Table mahasiswa

```

9 INSERT INTO mahasiswa (NPM, nama, alamat, kota)
10 VALUES
11 ('50421704', 'Juan Samuel Christopher', 'Perumahan Tambun', 'Kab.Tambun'),
12 ('50421235', 'Audya Wirnu', 'Perumahan Ngawi', 'Bogor'),
13 ('50411111', 'Markel Jurnal', 'Perumahan Kp.China', 'Bali'),
14 ('50421197', 'Arief Puury', 'Perumahan FNAF', 'Jakarta'),
15 ('50424623', 'Alif Kairing', 'Perumahan Rumput midlane', 'Lenofdon'),
16 ('50421700', 'Dodi Omar Tambun', 'Perumahan Palo', 'Decendant');

```

Messages

Query returned successfully in 91 msec.

```

18 SELECT * FROM mahasiswa;

```

Data Output Messages Notifications

	npm [PK] character varying (8)	nama character varying (30)	alamat character varying (50)	kota character varying (30)
1	50421704	Juan Samuel Christopher	Perumahan Tambun	Kab.Tambun
2	50421235	Audya Wirnu	Perumahan Ngawi	Bogor
3	50411111	Markel Jurnal	Perumahan Kp.China	Bali
4	50421197	Arief Puury	Perumahan FNAF	Jakarta
5	50424623	Alif Kairing	Perumahan Rumput midlane	Lenofdon
6	50421700	Dodi Omar Tambun	Perumahan Palo	Decendant

- Table Nilai

```

29 INSERT INTO nilai (NPM, kode_mk, nilai)
30 VALUES
31 ('50421704', 'TI23IA01', '96'),
32 ('50421235', 'TI23IA02', '88'),
33 ('50411111', 'TI23IA03', '85'),
34 ('50421197', 'TI23IA33', '90'),
35 ('50424623', 'TI23IA22', '85'),
36 ('50421700', 'TI23IA11', '92');

```

Data Output Messages Notifications
 INSERT 0 6
 Query returned successfully in 53 msec.

```

38 SELECT * FROM nilai;

```

	npm [PK] character varying (8)	kode_mk character varying (10)	nilai integer
1	50421704	TI23IA01	96
2	50421235	TI23IA02	88
3	50411111	TI23IA03	85
4	50421197	TI23IA33	90
5	50424623	TI23IA22	85
6	50421700	TI23IA11	92

- Table matakuliah

```

47 INSERT INTO matakuliah (kode_mk, nama_mk, semester, sks)
48 VALUES
49 ('TI23IA01', 'Kecerdasan Buatan', 6, 2),
50 ('TI23IA02', 'Sistem Basis Data', 6, 2),
51 ('TI23IA03', 'Grafik Komputer', 6, 2),
52 ('TI23IA33', 'Jaringan Komputer', 6, 2),
53 ('TI23IA22', 'Pemrograman Web', 6, 2),
54 ('TI23IA11', 'Sistem Komputer', 6, 2);

```

Data Output Messages Notifications

INSERT 0 6

Query returned successfully in 54 msec.

```
56 SELECT * FROM matakuliah;
```

	kode_mk [PK] character varying (8)	nama_mk character varying (30)	semester integer	sks integer
1	TI23IA01	Kecerdasan Buatan	6	2
2	TI23IA02	Sistem Basis Data	6	2
3	TI23IA03	Grafik Komputer	6	2
4	TI23IA33	Jaringan Komputer	6	2
5	TI23IA22	Pemrograman Web	6	2
6	TI23IA11	Sistem Komputer	6	2

6. Ubah kolom “kota” menjadi “domisili”. (Tampilkan dengan perintah DESC).

```
20 ALTER TABLE mahasiswa
21 RENAME COLUMN kota to domisili;
```

Query returned successfully in 53 msec.

```
17 SELECT * FROM mahasiswa ORDER BY NPM DESC;
```

	npm [PK] character varying (8)	nama character varying (30)	alamat character varying (50)	domisili character varying (30)
1	50424623	Alif Kairing	Perumahan Rumpun midlane	Lenofdon
2	50421704	Juan Samuel Christopher	Perumahan Tambun	Kab. Tambun
3	50421700	Dodi Omar Tambun	Perumahan Palo	Decendant
4	50421235	Audya Wirnu	Perumahan Ngawi	Bogor
5	50421197	Arief Puury	Perumahan FNAF	Jakarta
6	50411111	Markel Jurnal	Perumahan Kp. China	Bali

7. Hapus kolom domisili. (Tampilkan dengan perintah DESC).

```
20 ALTER TABLE mahasiswa
21 DROP COLUMN domisili;
```

Query returned successfully in 92 msec.

```
17 SELECT * FROM mahasiswa ORDER BY NPM DESC;
```

Data Output Messages Notifications

	npm [PK] character varying (8)	nama character varying (30)	alamat character varying (50)
1	50424623	Alif Kairing	Perumahan Rumput midlane
2	50421704	Juan Samuel Christopher	Perumahan Tambun
3	50421700	Dodi Omar Tambun	Perumahan Palo
4	50421235	Audya Wirnu	Perumahan Ngawi
5	50421197	Arief Puury	Perumahan FNAF
6	50411111	Markel Jurnal	Perumahan Kp.China

8. Lakukan perintah SELECT pada table 'mahasiswa' untuk menampilkan dengan awalan huruf 'A'.

```
25 SELECT * FROM mahasiswa WHERE LEFT (nama, 1) = 'A';
```

Data Output Messages Notifications

	npm [PK] character varying (8)	nama character varying (30)	alamat character varying (50)
1	50421235	Audya Wirnu	Perumahan Ngawi
2	50421197	Arief Puury	Perumahan FNAF
3	50424623	Alif Kairing	Perumahan Rumput midlane

9. Lakukan perintah inner join untuk table mahasiswa dan nilai.

```
61 select * from mahasiswa
62 inner join nilai on mahasiswa.npm = nilai.npm;
```

Data Output Messages Notifications

	npm character varying (8)	nama character varying (30)	alamat character varying (50)	npm character varying (8)	kode_mk character varying (10)	nilai integer
1	50421704	Juan Samuel Christopher	Perumahan Tambun	50421704	Ti23IA01	96
2	50421235	Audya Wirnu	Perumahan Ngawi	50421235	Ti23IA02	88
3	50411111	Markel Jurnal	Perumahan Kp.China	50411111	Ti23IA03	85
4	50421197	Arief Puury	Perumahan FNAF	50421197	Ti23IA33	90
5	50424623	Alif Kairing	Perumahan Rumput midlane	50424623	Ti23IA22	85
6	50421700	Dodi Omar Tambun	Perumahan Palo	50421700	Ti23IA11	92

10. Lakukan perintah left join untuk table nilai dan matakuliah.

```
72 select n.kode_mk, n.nilai, m.npm, m.nama
73 from nilai n left join mahasiswa m
74 on n.npm = m.nama;
```

Data Output Messages Notifications

	kode_mk character varying (10)	nilai integer	npm character varying (8)	nama character varying (30)
1	TI23IA02	88	[null]	[null]
2	TI23IA22	85	[null]	[null]
3	TI23IA01	96	[null]	[null]
4	TI23IA33	90	[null]	[null]
5	TI23IA03	85	[null]	[null]
6	TI23IA11	92	[null]	[null]

11. Lakukan perintah right join untuk table nilai dan matakuliah.

```
72 select n.kode_mk, n.nilai, m.npm, m.nama
73 from nilai n right join mahasiswa m
74 on n.npm = m.nama;
```

Data Output Messages Notifications

	kode_mk character varying (10)	nilai integer	npm character varying (8)	nama character varying (30)
1	[null]	[null]	50421704	Juan Samuel Christopher
2	[null]	[null]	50421235	Audya Wirnu
3	[null]	[null]	50411111	Markel Jurnal
4	[null]	[null]	50421197	Arief Puury
5	[null]	[null]	50424623	Alif Kairing
6	[null]	[null]	50421700	Dodi Omar Tambun