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Prodi : Teknik Komputer

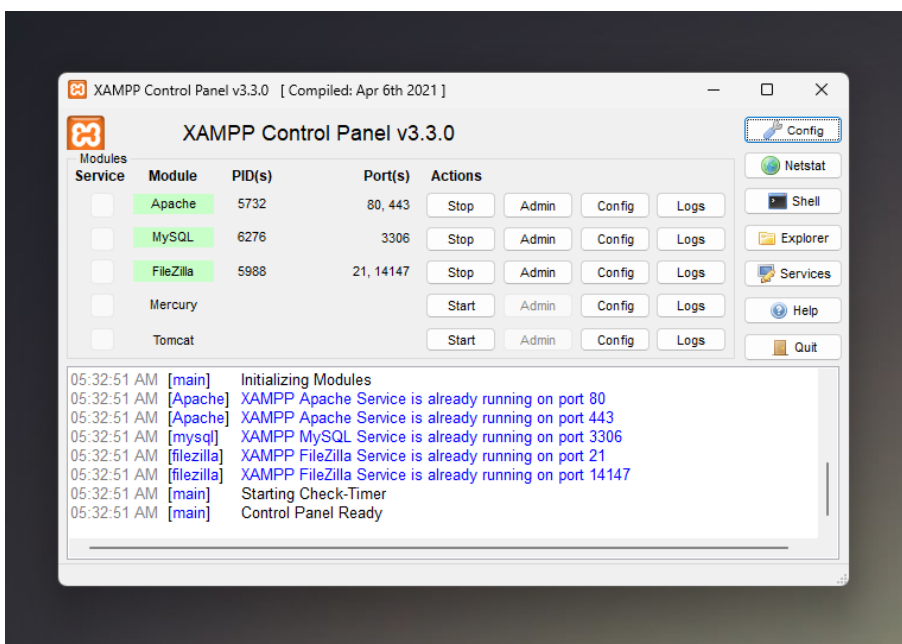
Matkul: Basis Data

Tugas Pertemuan 11

Data Definition Language

Jalankan XAMPP Control Panel.

Jalankan server Apache dan MySQL.



Buka Command Prompt dan login sebagai root ke MySQL seperti di langkah pada Modul 1.

```
Command Prompt - mysql -u X + v
Microsoft Windows [Version 10.0.22631.3527]
(c) Microsoft Corporation. All rights reserved.

C:\Users\andre>cd..

C:\Users>cd..

C:\>cd Program Files\xampp\mysql\bin

C:\Program Files\xampp\mysql\bin>mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 8
Server version: 10.4.32-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> |
```

Buat database baru dengan perintah berikut ini.

create database perbankan;

```
MariaDB [(none)]> create database perbankan;  
Query OK, 1 row affected (0.001 sec)
```

Hubungkan ke dalam database yang telah dibuat dengan perintah berikut. Sehingga akan muncul pemberitahuan “database changed”.

use perbankan;

```
MariaDB [(none)]> use perbankan;  
Database changed
```

Membuat tabel nasabah dengan script berikut.

```
CREATE TABLE nasabah ( id_nasabah INTEGER PRIMARY KEY, nama_nasabah VARCHAR(45) NOT  
NULL, alamat_nasabah VARCHAR(255) NOT NULL);
```

```
MariaDB [perbankan]> CREATE TABLE nasabah  
Query OK, 0 rows affected (0.006 sec)
```

Membuat tabel cabang_bank dengan script berikut.

```
CREATE TABLE cabang_bank ( kode_cabang VARCHAR(20) PRIMARY KEY, nama_cabang  
VARCHAR(45) UNIQUE NOT NULL, alamat_cabang VARCHAR(255) NOT NULL);
```

```
MariaDB [perbankan]> CREATE TABLE cabang_bank  
Query OK, 0 rows affected (0.023 sec)
```

Membuat tabel rekening dengan script berikut.

```
CREATE TABLE rekening ( no_rekening INTEGER PRIMARY KEY, kode_cabangFK VARCHAR(20)  
REFERENCES cabang_bank(kode_cabang) ON DELETE CASCADE ON UPDATE CASCADE, pin  
VARCHAR(20) DEFAULT '1234' NOT NULL, saldo INTEGER DEFAULT 0 NOT NULL);
```

```
MariaDB [perbankan]> CREATE TABLE rekening  
OT NULL, saldo INTEGER DEFAULT 0 NOT NULL);  
Query OK, 0 rows affected (0.009 sec)
```

Membuat tabel transaksi dengan script berikut ini.

```
CREATE TABLE transaksi ( no_transaksi SERIAL PRIMARY KEY, id_nasabahFK INTEGER  
REFERENCES nasabah(id_nasabah) ON DELETE SET NULL ON UPDATE CASCADE, no_rekeningFK  
INTEGER REFERENCES rekening(no_rekening) ON DELETE SET NULL ON UPDATE CASCADE,  
jenis_transaksi VARCHAR(20) DEFAULT 'debit' NOT NULL, tanggal DATETIME NOT NULL  
DEFAULT CURRENT_TIMESTAMP, jumlah INTEGER NOT NULL CHECK (jumlah>=20000));
```

```
MariaDB [perbankan]> CREATE TABLE transaksi  
g(no_rekening) ON DELETE SET NULL ON UPDATE  
Query OK, 0 rows affected (0.008 sec)
```

Membuat tabel nasabah_has_rekening dengan script berikut ini.

```
CREATE TABLE nasabah_has_rekening ( id_nasabahFK INTEGER REFERENCES nasabah(id_nasabah)
ON DELETE CASCADE ON UPDATE CASCADE, no_rekeningFK INTEGER REFERENCES
rekening(no_rekening) ON DELETE CASCADE ON UPDATE CASCADE, PRIMARY
KEY(id_nasabahFK, no_rekeningFK));
```

```
MariaDB [perbankan]> CREATE TABLE nasabah_has_rekening
E CASCADE ON UPDATE CASCADE, PRIMARY KEY(id_nasabahFK,
Query OK, 0 rows affected (0.010 sec)
```

Untuk mengecek hasil pembuatan database gunakan perintah show tables;

```
MariaDB [perbankan]> show tables;
+-----+
| Tables_in_perbankan |
+-----+
| cabang_bank         |
| nasabah             |
| nasabah_has_rekening |
| rekening            |
| transaksi           |
+-----+
5 rows in set (0.001 sec)
```

Kemudian untuk melihat struktur tiap tabel dapat dilakukan dengan perintah describe. Misalkan untuk melihat struktur tabel nasabah dapat dilakukan dengan perintah describe nasabah;

```
MariaDB [perbankan]> describe nasabah;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_nasabah     | int(11)       | NO   | PRI | NULL    |       |
| nama_nasabah   | varchar(45)   | NO   |     | NULL    |       |
| alamat_nasabah | varchar(255)  | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
```