MODUL 9 Data Control Language

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Kelas : A

D. Langkah - langkah Praktikum

- 1. Jalankan XAMPP Control Panel
- 2. Jalankan server Apache dan MySQL
- 3. Buka Command Prompt dan login sebagai root ke MySQL
- 4. Pilih database perbankan dengan perintah "use mysql". sehingga akan muncul pemberitahuan "database changed"

```
C:\xampp\mysql\bin>mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 33
Server version: 10.1.38-MariaDB mariadb.org binary distribution

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

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

5. Masukkan user baru ke tabel user dengan sintaks berikut ini

Create user 'myuser'@'localhost' identified by 'myuser';

```
MariaDB [mysql]> create user 'myuser'@'localhost' identified by 'myuser';
Query OK, 0 rows affected (0.00 sec)
```

6. Berikan hak akses kepada user "myuser" dengan sintaks berikut ini

Grant select on perbankan.nasabah to myuser;

Flush privileges;

Grant select on perbankan.cabang_bank to myuser;

Flush privileges;

```
MariaDB [mysql]> grant select on perbankan2.nasabah to myuser@localhost;

Query OK, 0 rows affected (0.00 sec)

MariaDB [mysql]> flush privileges;

Query OK, 0 rows affected (0.00 sec)

MariaDB [mysql]> grant select on perbankan2.cabang_bank to myuser@localhost;

Query OK, 0 rows affected (0.00 sec)

MariaDB [mysql]> flush privileges;

Query OK, 0 rows affected (0.00 sec)

MariaDB [mysql]> exit

Bye
```

- 7. Keluar sebagai user root dengan sintax "exit;"
- 8. Login lagi sebagai "myuser" dengan sintaks sebagai berikut

Mysql -u myuser

```
C:\xampp\mysql\bin>mysql -u myuser -p
Enter password: *******
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 34
Server version: 10.1.38-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.
```

9. Ubah database yang digunakan ke database perbankan dengan sintaks "use perbankan" Sehingga akan muncul konfirmasi "database changed"

```
Database changed

Database changed
```

 Coba lakukan select pada tabel nasabah dengan sintaks berikut select * from nasabah;

```
riaDB [perbankan2]> select * from nasabah;
 id_nasabah | nama_nasabah
                                                    | alamat_nasabah
                                                            Jendral Sudirman 12
                      Sutopo
                                                      Jl. MT. Haryono 31
Jl. Hasanudin 81
                     Suparman
Kartika Padmasari
Budi Eko Prayogo
Satria Eka Jaya
Indri Hapsari
Sari Murti
Canka Lokananta
                                                     Jl. Manggis 15
Jl. Kantil 30
Jl. Slamet Riyadi 45
Jl. Sutoyo 5
                                                      Jl. Pangandaran 11
Jl. Tidar 86
              10
11
                     Budi Murtono
Joko Ndo Kondo
                                                      Jl. Merak 22
Jl. Bareng jadian kagak
                      Jon Koplo
                                                      Jl. Angin Besar 12
                      Anggit
                                                      Jl. Jendral Sudirman
Jl. MT Haryono 31
           1000
                      Maryati
5 rows in set (0.00 sec)
```

- 11. Kemudian ketikkan perintah "exit" . kemudian login lagi sebagai root
- 12. Kemudian hilangkan salah satu privilege untuk user myuser dengan sintaks berikut ini Revoke select on perbankan.nasabah from myuser;

Flush privilege;

```
C:\xampp\mysql\bin>mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 35
Server version: 10.1.38-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)]> revoke select on perbankan2.nasabah from myuser@localhost;
Query OK, 0 rows affected (0.06 sec)

MariaDB [(none)]> flush privileges;
Query OK, 0 rows affected (0.00 sec)

MariaDB [(none)]> exit
Bye
```

- 13. Kemudian exit dan kembali login sebagai user "myuser"
- 14. Gunakan database perbankan dengan sintaks "use perbankan"

```
C:\xampp\mysql\bin>mysql -u myuser -p
Enter password: ******
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 36
Server version: 10.1.38-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)]> use perbankan2;
```

15. Selanjutnya silahkan coba untuk menggunakan perintah select pada tabel nasabah.

```
MariaDB [(none)]> use perbankan2;
Database changed
MariaDB [perbankan2]> select * from nasabah;
ERROR 1142 (42000): SELECT command denied to user 'myuser'@'localhost' for table 'nasabah'
MariaDB [perbankan2]> _
```

E. Tugas

1. Buat user baru sesuai dengan nama anda masing - masing

```
C:\Campp\mysql\bin>mysql -u Dessynaa-p

C:\xampp\mysql\bin>mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 37
Server version: 10.1.38-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)]> use mysql;
Database changed
MariaDB [mysql]> create user 'Dessynaa'@'localhost' identified by 'dessyna';
Query OK, 0 rows affected (0.00 sec)
```

- 2. Beri Privilege untuk user tersebut dengan ketentuan sebagai berikut ini.
 - Dapat melakukan insert, update, dan delete pada tabel nasabah.

```
MariaDB [mysql]> grant insert on perbankan2.nasabah to Dessynaa@localhost;
Query OK, 0 rows affected (0.00 sec)

MariaDB [mysql]> flush privileges;
Query OK, 0 rows affected (0.00 sec)

MariaDB [mysql]> grant update on perbankan2.nasabah to Dessynaa@localhost;
Query OK, 0 rows affected (0.00 sec)

MariaDB [mysql]> flush privileges;
Query OK, 0 rows affected (0.00 sec)

MariaDB [mysql]> grant delete on perbankan2.nasabah to Dessynaa@localhost;
Query OK, 0 rows affected (0.00 sec)
```

b. Hanya dapat melakukan select pada tabel cabang_bank.

```
MariaDB [mysql]> flush privileges;
Query OK, 0 rows affected (0.00 sec)

MariaDB [mysql]> grant select on perbankan2.cabang_bank to Dessynaa@localhost;
Query OK, 0 rows affected (0.00 sec)

MariaDB [mysql]> flush privileges;
Query OK, 0 rows affected (0.00 sec)

MariaDB [mysql]> exit
Bye
```

- Coba lakukan kasus berikut ini dengan login sebagai user yang dibuat dan screenshot hasilnya.
 - a. Lakukan perintah select pada tabel nasabah.

```
C:\xampp\mysql\bin>mysql -u Dessynaa -p
Enter password: *******
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 38
Server version: 10.1.38-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)]> use perbankan2;
Database changed
MariaDB [perbankan2]> select * from nasabah;
ERROR 1142 (42000): SELECT command denied to user 'Dessynaa'@'localhost' for table 'nasabah'
```

b. Lakukan perintah insert pada tabel nasabah.

```
MariaDB [perbankan2]> insert into nasabah(id_nasabah,nama_nasabah,alamat_nasabah) values(19,'Nur','Kalimantan');
Query OK, 1 row affected (0.01 sec)
```

c. Lakukan perintah insert pada tabel cabang_bank

```
Command Prompt - mysql -u Dessynaa -p

MariaDB [perbankan2]> insert into cabang_bank values('BRUK','Bank Cabang Kalimantan','Kalimantan');

ERROR 1142 (42000): INSERT command denied to user 'Dessynaa'@'localhost' for table 'cabang_bank'

MariaDB [perbankan2]>
```

4. Analisa hasil percobaan kalian tersebut

Grant memiliki fungsi untuk membuat user baru dan memberikan hak istimewa. Grant merupakan privilege untuk tabel. Dimana dalam percobaan ini apabila sebelum melakukan hak akses pada sebuah tabel maka harus membuat GRANT dengan privilege yang dibutuhkan terlebih dahulu. Apabila tidak membuat grant dengan privilege terlebih dahulu maka hasilnya akan eror. Revoke digunakan untuk menghapus batasan akses yang telah diatur menggunakan perintah GRANT.