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KELAS : A

Modul 9

Data Control Language

- >> membuka command prompt dan login sebagai root ke mySQL
- >> melakukan perintah 'use mysql' hingga muncul 'database changed'
- >> memasukan user baru serta password dengan nama 'myuser'

```
Command Prompt
                                                                                    X
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.
:\Users\ASUS>cd/
C:\>cd C:\xampp\mysql\bin
::\xampp\mysql\bin>mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 3
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 'myuser'@'localhost' identified by 'myuser';
Query OK, 0 rows affected (0.08 sec)
```

- >>memberi hak akses pada user 'myuser'
- >> keluar sebagai root dengan sintax 'exit'

```
MariaDB [mysql]> grant select on perbankan.nasabah to myuser@localhost;
Query OK, 0 rows affected (0.05 sec)

MariaDB [mysql]> flush privileges;
Query OK, 0 rows affected (0.04 sec)

MariaDB [mysql]> grant select on perbankan.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

C:\xampp\mysql\bin>
```

- >>login sebagai 'myuser'
- >>mengubah database dengan sintax 'use perbankan' hingga muncul 'database changed'
- >>mencoba melakukan select pada table nasabah >>muncul hasil karena sudah ada grant select sebelumnya

```
Command Prompt - mysql -u myuser -p
::\xampp\mysql\bin>mysql -u myuser -p
Enter password:
ERROR 1045 (28000): Access denied for user 'myuser'@'localhost' (using password: NO)
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 5
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 perbankan;
Database changed
MariaDB [perbankan]> select * from nasabah;
 id_nasabah | nama_nasabah
                               alamat_nasabah
                                  31. Jend Sudirman 12
          1 Sutopo
          2 | Maryati
                                  Jl. M.T Haryanto 31
            Parman
                                  Jl. Hassanudin 81
            | Kartika Padmasari
                                 31. Manggis 15
          5 | Budi Eko Prayoga
                                  Jl. Kantil 30
          6 | Satria Eka Jaya
                                  Jl. Slamt Riyadi 45
                                  31. Pangandaran 1
          8 | Sari Murti
          9 | Canka Lokananta
                                  Jl. Tidar 86
         10 | Budi Murtono
                                  Jl. Merak 22
         11 | Ahmad
                                  Jl. Jend Sudirman 20
              Sri Maryati
         12
                                  31. M.T Haryanto 11
         13
              Supardi
                                  Jl. Hassanudin 31
                                  Jl. Manggis 5
         14
              Riska
              Andi Setiawan
         15
                                 Jl. Kantil 10
              Eko Atmaja
                                 Jl. Slamt Riyadi 5
         17
              Listiani
                                  Jl. Sutoyo 25
                                  01. Pangandaran 31
         18
              Yuliana
              Candra Aji
                                  Jl. Tidar 6
         20
             Asriana
                                 Jl. Merak 2
19 rows in set (0.00 sec)
```

>>menghilangkan salah satu privileges untuk user myuser dengan 'revoke'

```
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 6
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 perbankan.nasabah from myuser@localhost;
Query OK, 0 rows affected (0.29 sec)

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

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

- >> masuk sebagai myuser
- >> mengubah database perbankan dengan 'use perbankan' hingga muncul 'database changed' >> melakukan perintah select pada table nasabah >> disini hasilnya error karena sebelumnya belum member hak akses select pada table nasabah

```
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 7
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 perbankan;
Database changed
MariaDB [perbankan]> select * from nasabah;
ERROR 1142 (42000): SELECT command denied to user 'myuser'@'localhost' for table 'nasabah'

MariaDB [perbankan]>
```

TUGAS

>>Membuat user baru dengan nama 'ArlinWidya'

```
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 47
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)]> create user 'ArlinWidya'@'localhost' identified by 'ArlinWidya';
Query OK, 0 rows affected (0.00 sec)
```

- >>Member privileges dengan insert, update dan delete pada table nasabah
- >>Melakukan select pada table cabang_bank >>> pada saat melakukan select hasilnya error karena sebelumnya tidak membuat grant select pada cabang_bank.

```
Command Prompt
                                                                                      ×
                                                                                 MariaDB [(none)]> grant insert on perbankan.nasabah to ArlinWidya@localhost
Query OK, 0 rows affected (0.00 sec)
MariaDB [(none)]> flush privileges;
Query OK, 0 rows affected (0.00 sec)
MariaDB [(none)]> grant update on perbankan.nasabah to ArlinWidya@localhost;
Query OK, 0 rows affected (0.00 sec)
MariaDB [(none)]> flush privileges;
Query OK, 0 rows affected (0.00 sec)
MariaDB [(none)]> grant delete on perbankan.nasabah to ArlinWidya@localhost;
Query OK, 0 rows affected (0.00 sec)
MariaDB [(none)]> flush privileges;
Query OK, 0 rows affected (0.00 sec)
MariaDB [(none)]> grant select on perbankan.cabang bank to ArlinWidya@localhost;
Query OK, 0 rows affected (0.00 sec)
MariaDB [(none)]> flush privileges;
Query OK, 0 rows affected (0.00 sec)
MariaDB [(none)]> exit;
Bye
C:\xampp\mysql\bin>
```

- Perintah select pada table nasabah >>> hasilnya error karena tidak membuat grant dengan hak akses select
- Perintah insert pada table nasabah >>> hasilnya tidak error/memiliki hasil karena sebelumnya sudah membuat grant insert
- Perintah insert pada table cabang_bank >>> hasilnya error karena tidak membuat grant select pada cabang_bank

```
:\xampp\mysql\bin>mysql -u ArlinWidya -p
nter password: ******
Velcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 50
Server version: 10.1.38-MariaDB mariadb.org binary distribution
opyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.
 ype 'help;' or '\h' for help. Type '\c' to clear the current input statement.
lariaDB [(none)]> use perbankan;
Database changed
MariaDB [perbankan]> select * from nasabah;
RROR 1142 (42000): SELECT command denied to user 'ArlinWidya'@'localhost' for table '
lariaDB [perbankan]> insert into nasabah (id_nasabah, nama_nasabah, alamat nasabah) val
ues (41, 'Lisa', 'Solo');
Query OK, 1 row affected (0.08 sec)
           'Lisa', 'Solo');
MariaDB [perbankan]> insert into cabang_bank(kode_cabang, nama_cabang, alamat_cabang) v
alues ("BRUJS", "Bank Rut Unit Jakarta Selatan", "Jl. Merak 23");
ERROR 1142 (42000): INSERT command denied to user 'ArlinWidya'@'localhost' for table 'o
abang bank'
tariaDB [perbankan]>
```

>>Analisa percobaan: 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 makan harus membuat GRANT dengan privilege yang dibutuhkan terlebih dahulu. Apabila tidak membuat grant dengan privilege terlebih dahulu maka hasilnya akan error. Revoke digunakan untuk menghapus batasan hak akses yang telah diatur menggunakan perintah GRANT.