TUGAS 02

Membuat ROLE pada database "*classicmodels*".
Dan akan dikelompokkan menjadi 3 yaitu Pemilik, Manajer, dan Kasir.

1. Masuk ke database "classicmodels" dan membuat role yang diinginkan.

```
MariaDB [(none)]> use classic
Database changed

MariaDB [classicmodels]> CREATE ROLE pemilik, manajer, kas
Query OK, 0 rows affected (0.00 sec)
```

Perintah untuk membuat ROLE adalah :
```
CREATE ROLE namaROLE, namaROLE, ...;
```

2. Memberikan hak akses untuk semua ROLE yang telah dibuat.
   - Pemilik   : akan diberikan seluruh hak akses
   - Manajer   : diberikan hak akses SELECT, UPDATE, INSERT, DELETE
   - Kasir   : diberikan hak akses SELECT dan INSERT

```
MariaDB [classicmodels]> GRANT ALL ON classicmodels.* TO pemilik;
Query OK, 0 rows affected (0.00 sec)

MariaDB [classicmodels]> GRANT SELECT, UPDATE, INSERT, DELETE ON classicmodels.* TO manajer;
Query OK, 0 rows affected (0.00 sec)

MariaDB [classicmodels]> GRANT SELECT, INSERT ON classicmodels.* TO kasir;
Query OK, 0 rows affected (0.00 sec)
```

Perintah untuk memerikan hak akses pada ROLE adalah :
```
GRANT hakAkses ON namaDatabase.namaKolom TO namaROLE;
```

3. Setelah itu membuat USER ACCOUNT yang akan diberikan hak akses tertentu.

```
MariaDB [classicmodels]> CREATE USER Fatih_pemilik@localhost IDENTIFIED BY 'pemilik';
Query OK, 0 rows affected (0.00 sec)

MariaDB [classicmodels]> CREATE USER Dina_manajer1@localhost IDENTIFIED BY 'manajer1';
Query OK, 0 rows affected (0.00 sec)

MariaDB [classicmodels]> CREATE USER Dinda_manajer2@localhost IDENTIFIED BY 'manajer2';
Query OK, 0 rows affected (0.00 sec)

MariaDB [classicmodels]> CREATE USER kasir@localhost IDENTIFIED BY 'kasir';
Query OK, 0 rows affected (0.00 sec)
```

Perintah untuk membuat USER adalah :
```
CREATE USER namaUser@host IDENTIFIED BY 'password';
```

4. Memberikan hak akses pada USER dengan ROLE yang telah dibuat sebelumnya dengan perintah GRANT.

```
MariaDB [classicmodels]> GRANT pemilik TO Fatih_pemilik@localhost;
Query OK, 0 rows affected (0.00 sec)

MariaDB [classicmodels]> GRANT manajer TO Dina_manajer1@localhost;
Query OK, 0 rows affected (0.00 sec)

MariaDB [classicmodels]> GRANT manajer TO Dinda_manajer2@localhost;
Query OK, 0 rows affected (0.00 sec)

MariaDB [classicmodels]> GRANT kasir TO kasir@localhost;
Query OK, 0 rows affected (0.00 sec)
```

Perintah untuk memberikan hak akses pada USER :

```
GRANT namaROLE TO namaUSER@host;
```

5. Terkadang USER tidak secara otomatis dapat langsung mengakses role tersebut. Maka harus diperlukan untuk mengaktifkan terlebih dahulu dengan perintah :

```
SET ROLE namaROLE;
```

```
c:\xampp\mysql\bin>mysql -u Fatih_pemilik -p
Enter password: *******
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 25
Server version: 10.1.9-MariaDB mariadb.org binary distribution

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

MariaDB [(none)]> use classicmodels;
ERROR 1044 (42000): Access denied for user 'Fatih_pemilik'@'localhost' to database 'classicmodels'
MariaDB [(none)]>
MariaDB [(none)]>
MariaDB [(none)]>
MariaDB [(none)]> SET ROLE pemilik;
Query OK, 0 rows affected (0.00 sec)
```

Baru bisa kita dapat mengaksesnya.

```
MariaDB [(none)]> use classicmodels;
Database changed
MariaDB [classicmodels]> SELECT * FROM customers LIMIT 5;
+----------------+---------------------------+-----------------+---------------+------------+--
------------+-----------+----------------------+-------------+
| customerNumber | customerName              | contactLastName | contactFirstName | phone    | a
 postalCode | country   | salesRepEmployeeNumber | creditLimit |
+----------------+---------------------------+-----------------+---------------+------------+--
------------+-----------+----------------------+-------------+
|            103 | Atelier graphique         | Schmitt         | Carine          | 40.32.2555 | 5
 44000      | France    |                   1370 |    21000.00 |
|            112 | Signal Gift Stores        | King            | Jean            | 7025551838 | 8
 83030      | USA       |                   1166 |    71800.00 |
|            114 | Australian Collectors, Co.| Ferguson        | Peter           | 03 9520 4555 | 6
 3004       | Australia |                   1611 |   117300.00 |
```

6. Dilakukan dengan hal yang sama pada user Manajer dan Kasir agar dapat mengakses.
   Pada user Manajer

```
c:\xampp\mysql\bin>mysql -u Dina_manajer1 -p
Enter password: ********
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 26
Server version: 10.1.9-MariaDB mariadb.org binary distribution

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

MariaDB [(none)]> SET ROLE manajer;
Query OK, 0 rows affected (0.00 sec)

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

Pada user Kasir

```
c:\xampp\mysql\bin>mysql -u kasir -p
Enter password: *****
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 27
Server version: 10.1.9-MariaDB mariadb.org binary distribution

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

MariaDB [(none)]> SET ROLE kasir;
Query OK, 0 rows affected (0.00 sec)

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