1. Membuat database Tugas 1

```
Microsoft Windows [Version 6.1.7601]
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C:\Users\L420>cd/

C:\>cd
C:\

C:\>cd xampp

C:\xampp>cd mysql

C:\xampp\mysql>cd bin

C:\xampp\mysql\bin>mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 28
Server version: 10.4.6-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 database tugas;
Query OK, 1 row affected (0.016 sec)
```

2. Mengaktifkan database

```
MariaDB [RizkiMaulanaK]> use Tugas1;
Database changed
MariaDB [Tugas1]>
```

3. Membuat table Tugas1

```
MariaDB [tugas1]> create table mahasiswa(
    -> NPM varchar(20),
    -> Nama varchar(15),
    -> Alamat varchar(15));
Query OK, 0 rows affected (0.704 sec)

MariaDB [tugas1]> create table Matakuliah(
    -> KD_MK varchar,
    -> Nama_MK varchar:
    -> ;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MariaDB server version for the right syntax to use near '
Nama_MK varchar:' at line 2
MariaDB [tugas1]> create table Matakuliah(
    -> KD_MK varchar(10),
    -> Nama_MK varchar(15),
    -> SKS varchar(5));
Query OK, 0 rows affected (0.318 sec)

MariaDB [tugas1]> create table Nilai(
    -> NPM varchar(15),
    -> KD_MK varchar(10),
    -> UTS integer(5),
    -> UAS integer(5));
Query OK, 0 rows affected (0.219 sec)
```

4. Menampilkan seluruh database

```
MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| phpmyadmin         |
| test               |
| tugas1             |
+--------------------+
6 rows in set (0.002 sec)

MariaDB [(none)]> use tugas1;
Database changed
MariaDB [tugas1]> create table mahasiswa;
ERROR 1113 (42000): A table must have at least 1 column
```

5. Menampilkan seluruh tabel

```
MariaDB [Tugas1]> Select*from Mahasiswa;
+-------------+---------+----------+---------+
| NPM         | Nama    | Tgl_Lahir | Alamat  |
+-------------+---------+----------+---------+
| 201143500439 | Andi    | NULL     | Jakarta |
| 201143500121 | Desi    | NULL     | Bekasi  |
| 201143500234 | Endah   | NULL     | Depok   |
| 201143500165 | Firdaus | NULL     | Jakarta |
| 201143500228 | Gandi   | NULL     | Depok   |
| 201143500228 | Gandi   | NULL     | Depok   |
+-------------+---------+----------+---------+
6 rows in set (0.001 sec)

MariaDB [Tugas1]> Select*from MT_kuliah;
+-------+--------------------------+-----+
| KD_MK | NM_MK                    | SKS |
+-------+--------------------------+-----+
| KK021 | Sistem basis data        | 2   |
| KD132 | interaksi manusia komputer | 3 |
| KU122 | Ilmu Budaya dasar        | 3   |
+-------+--------------------------+-----+
3 rows in set (0.001 sec)

MariaDB [Tugas1]> Select*from Nilai;
+-------------+-------+-----+-----+
| NPM         | KD_MK | UTS | UAS |
+-------------+-------+-----+-----+
| 201143500439 | KK021 | 60  | 75  |
| 201143500121 | KD123 | 70  | 90  |
| 201143500234 | KD021 | 50  | 40  |
| 201143500165 | KU122 | 90  | 80  |
| 201143500228 | KU122 | 75  | 75  |
| 201143500326 | KD123 | 80  | 0   |
| 201143500439 | KD123 | 40  | 30  |
+-------------+-------+-----+-----+
7 rows in set (0.001 sec)
```

6. Menampikan seluruh tabel mata kuliah

```
MariaDB [Tugas1]> Select*from MT_kuliah;
+-------+--------------------------+-----+
| KD_MK | NM_MK                    | SKS |
+-------+--------------------------+-----+
| KK021 | Sistem basis data        | 2   |
| KD132 | interaksi manusia komputer | 3 |
| KU122 | Ilmu Budaya dasar        | 3   |
+-------+--------------------------+-----+
3 rows in set (0.001 sec)
```

7. menghapus tabel Matakuliah

```
MariaDB [tugas1]> drop table Matakuliah;
Query OK, 0 rows affected (0.208 sec)
```

8. membuat tabel Matakuliah

```
MariaDB [tugas1]> create table Matakuliah(
    -> KD_MK varchar(10),
    -> Nama_MK varchar(15),
    -> SKS varchar(5));
Query OK, 0 rows affected (0.227 sec)
```

9. mengganti tabel Matakuliah dengan MT_Kuliah

```
MariaDB [tugas1]> alter table Matakuliah change MT_Kuliah;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MariaDB server version for the right syntax to use near ''
t line 1
MariaDB [tugas1]> alter table Matakuliah rename MT_Kuliah;
Query OK, 0 rows affected (0.239 sec)

MariaDB [tugas1]> desc MT_Kuliah;
+---------+-------------+------+-----+---------+-------+
| Field   | Type        | Null | Key | Default | Extra |
+---------+-------------+------+-----+---------+-------+
| KD_MK   | varchar(10) | YES  |     | NULL    |       |
| Nama_MK | varchar(15) | YES  |     | NULL    |       |
| SKS     | varchar(5)  | YES  |     | NULL    |       |
+---------+-------------+------+-----+---------+-------+
3 rows in set (0.044 sec)
```

10. mengganti nama field Nama_MK dengan NM_MK dan panjang field 30

```
MariaDB [tugas1]> alter table MT_Kuliah change Nama_MK
    -> NM_MK varchar(30);
Query OK, 0 rows affected (0.127 sec)
Records: 0  Duplicates: 0  Warnings: 0

MariaDB [tugas1]> desc MT_Kuliah
    -> ;
+-------+-------------+------+-----+---------+-------+
| Field | Type        | Null | Key | Default | Extra |
+-------+-------------+------+-----+---------+-------+
| KD_MK | varchar(10) | YES  |     | NULL    |       |
| NM_MK | varchar(30) | YES  |     | NULL    |       |
| SKS   | varchar(5)  | YES  |     | NULL    |       |
+-------+-------------+------+-----+---------+-------+
3 rows in set (0.041 sec)
```

11. menambahkan kolom Tgl_lahir pada tabel Mahasiswa

```
MariaDB [tugas1]> alter table Mahasiswa add column Tgl_Lahir varchar(25)
Query OK, 0 rows affected (0.139 sec)
Records: 0  Duplicates: 0  Warnings: 0

MariaDB [tugas1]> desc Mahasiswa;
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| NPM       | varchar(20) | YES  |     | NULL    |       |
| Nama      | varchar(15) | YES  |     | NULL    |       |
| Alamat    | varchar(15) | YES  |     | NULL    |       |
| Tgl_Lahir | varchar(25) | YES  |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
4 rows in set (0.043 sec)
```

12. menghapus kolom Tgl_lahir

```
MariaDB [tugas1]> alter table Mahasiswa drop Tgl_Lahir;
Query OK, 0 rows affected (0.127 sec)
Records: 0  Duplicates: 0  Warnings: 0

MariaDB [tugas1]> desc Mahasiswa
    -> ;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| NPM    | varchar(20) | YES  |     | NULL    |       |
| Nama   | varchar(15) | YES  |     | NULL    |       |
| Alamat | varchar(15) | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
3 rows in set (0.039 sec)
```

13. menambahkan kolom Tgl_Lahir pada tabel Mahasiswa pada awal field

```
MariaDB [tugas1]> alter table Mahasiswa add column Tgl_Lahir varchar(30);
Query OK, 0 rows affected (0.167 sec)
Records: 0  Duplicates: 0  Warnings: 0

MariaDB [tugas1]> desc Mahasiswa;
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| NPM       | varchar(20) | YES  |     | NULL    |       |
| Nama      | varchar(15) | YES  |     | NULL    |       |
| Alamat    | varchar(15) | YES  |     | NULL    |       |
| Tgl_Lahir | varchar(30) | YES  |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
4 rows in set (0.046 sec)
```

14. menghapus kolom Tgl_Lahir

```
ERROR 1060 (42S21): Duplicate column name 'Tgl_Lahir'
MariaDB [tugas1]> alter table Mahasiswa drop Tgl_Lahir;
Query OK, 0 rows affected (0.145 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

15. menambahkan kolom Tgl_Lahir pada tabel Mahasiswa setelah kolom nama

```
MariaDB [tugas1]> alter table Mahasiswa add column Tgl_Lahir varchar(25) afte
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual th
corresponds to your MariaDB server version for the right syntax to use near '
t line 1
MariaDB [tugas1]> alter table Mahasiswa add column Tgl_Lahir varchar(25)
    -> after nama;
Query OK, 0 rows affected (0.112 sec)
Records: 0  Duplicates: 0  Warnings: 0

MariaDB [tugas1]> desc Mahasiswa;
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| NPM       | varchar(20) | YES  |     | NULL    |       |
| Nama      | varchar(15) | YES  |     | NULL    |       |
| Tgl_Lahir | varchar(25) | YES  |     | NULL    |       |
| Alamat    | varchar(15) | YES  |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
4 rows in set (0.039 sec)
```