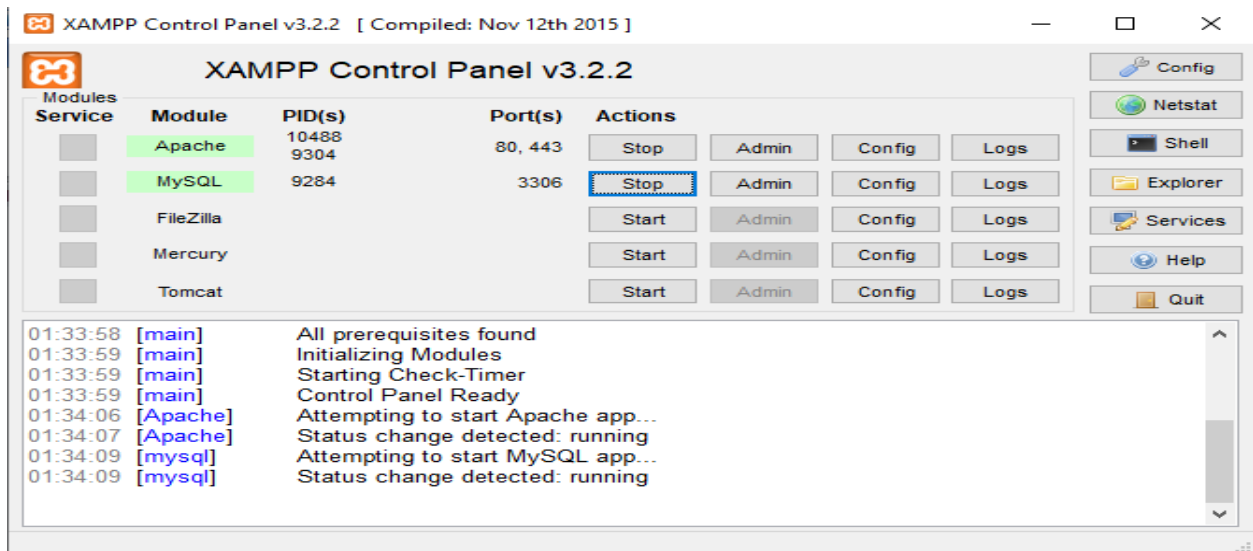


Tugas 1

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NPM : 201843501583

Kelas : S4C



(Gambar 1)

Buka Aplikasi Xampp dan Start MySQL seperti gambar 1

```
C:\Users\LENOVO>cd..
C:\Users>cd..
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 2
Server version: 10.1.36-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.
```

(Gambar 2)

Masuk ke Data C dengan perintah seperti pada **gambar 2**

Setelah masuk di dalam folder C:\xampp\mysql\bin> masukan perintah mysql -u root untuk Masuk ke dalam database

```
MariaDB [Tugas1]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| phpmyadmin |
| test |
| tugas1 |
+-----+
6 rows in set (0.00 sec)

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

(Gambar3)

1. Buat database dengan perintah crate database Tugas1;
Untuk melihat tugas gunakan perintah Show databases;
Disini sudah tersedia database tugas 1,
2. Aktifkan Database dengan perintah USE TUGAS1, Setelah muncul tulisan Database changed itu artinya database sudah aktif

```
MariaDB [Tugas1]> CREATE TABLE Mahasiswa (NPM Bigint auto_increment Primary key, Nama varchar(25), Alamat varchar(25));
Query OK, 0 rows affected (0.20 sec)

MariaDB [Tugas1]> insert into mahasiswa(NPM, Nama, Alamat) values (201143500439, "Andi", "Jakarta");
Query OK, 1 row affected (0.06 sec)

MariaDB [Tugas1]> insert into mahasiswa(NPM, Nama, Alamat) values (201143500121, "Desi", "Bekasi");
Query OK, 1 row affected (0.11 sec)

MariaDB [Tugas1]> insert into mahasiswa(NPM, Nama, Alamat) values (201143500234, "Endah", "Depok");
Query OK, 1 row affected (0.06 sec)

MariaDB [Tugas1]> insert into mahasiswa(NPM, Nama, Alamat) values (201143500165, "Firdaus", "Jakarta");
Query OK, 1 row affected (0.06 sec)

MariaDB [Tugas1]> insert into mahasiswa(NPM, Nama, Alamat) values (201143500228, "Gandi", "Depok");
Query OK, 1 row affected (0.05 sec)

MariaDB [Tugas1]> insert into mahasiswa(NPM, Nama, Alamat) values (201143500326, "Hilda", "Bogor");
Query OK, 1 row affected (0.06 sec)

MariaDB [Tugas1]> Select * From Mahasiswa;
+-----+-----+-----+
| NPM | Nama | Alamat |
+-----+-----+-----+
| 201143500121 | Desi | Bekasi |
| 201143500165 | Firdaus | Jakarta |
| 201143500228 | Gandi | Depok |
| 201143500234 | Endah | Depok |
| 201143500326 | Hilda | Bogor |
| 201143500439 | Andi | Jakarta |
+-----+-----+-----+
6 rows in set (0.00 sec)

MariaDB [Tugas1]>
```

(Gambar4)

3. Selanjutnya buat table mahasiswa dengan perintah CREATE TABLE Mahasiswa (NPM Bigint auto_increment primary key, nama varchar(10), alamat varchar (25)); [enter] Seperti di blok warna kuning pada gambar4
 - I. Input data mahasiswa dengan perintah insert into mahasiswa (NPM,Nama,alamat) values (201143500439,"Andi","Jakarta"); [enter] dan seterusnya Seperti contoh pada blok warna hijau
 - II. Tampilkan hasil database dengan perintah Select * from Mahasiswa; [Enter]

```

MariaDB [tugas1]> create table Matakuliah(KD_MK varchar(10), Nama_MK varchar(25), SKS Integer);
Query OK, 0 rows affected (0.21 sec)

MariaDB [tugas1]> insert into matakuliah (KD_MK, Nama_MK, SKS) values ("KK021","Sistem Basis Data",2);
Query OK, 1 row affected (0.04 sec)

MariaDB [tugas1]> insert into matakuliah (KD_MK, Nama_MK, SKS) values ("KD132","Interaksi Manusia Komputer",3);
Query OK, 1 row affected, 1 warning (0.06 sec)

MariaDB [tugas1]> insert into matakuliah (KD_MK, Nama_MK, SKS) values ("KU122","Ilmu Budaya Dasar",2);
Query OK, 1 row affected (0.05 sec)

MariaDB [tugas1]> Select * From matakuliah;
+-----+-----+-----+
| KD_MK | Nama_MK | SKS |
+-----+-----+-----+
| KK021 | Sistem Basis Data | 2 |
| KD132 | Interaksi Manusia Kompute | 3 |
| KU122 | Ilmu Budaya Dasar | 2 |
+-----+-----+-----+
3 rows in set (0.00 sec)

MariaDB [tugas1]>

```

(Gambar5)

- III. Buat Tabel Matakuliah CREATE TABLE Matakuliah (KD_MK varchar(10), Nama_MK varchar(25), SKS integer); [enter] Seperti di blok warna kuning pada gambar5
- IV. insert into Matakuliah (KD_MK,Nama_Mk,SKS) values ("KK021","Sistem Basis Data",2); [enter] dan seterusnya seperti blok merah pada gambar 5
- V. Tampilkan hasil database dengan perintah Select * from matakuliah; [Enter]

```

MariaDB [tugas1]> create table nilai (NPM Bigint, KD_MK varchar(10), UTS Integer, UAS Integer);
Query OK, 0 rows affected (0.28 sec)

MariaDB [tugas1]> insert into nilai(NPM, KD_MK, UTS, UAS) values (201143500439,"KK021",60,75);
Query OK, 1 row affected (0.06 sec)

MariaDB [tugas1]> insert into nilai(NPM, KD_MK, UTS, UAS) values (201143500121,"KD123",70,90);
Query OK, 1 row affected (0.08 sec)

MariaDB [tugas1]> insert into nilai(NPM, KD_MK, UTS, UAS) values (201143500234,"KK021",50,40);
Query OK, 1 row affected (0.08 sec)

MariaDB [tugas1]> insert into nilai(NPM, KD_MK, UTS, UAS) values (201143500165,"KU122",90,80);
Query OK, 1 row affected (0.08 sec)

MariaDB [tugas1]> insert into nilai(NPM, KD_MK, UTS, UAS) values (201143500228,"KU122",75,75);
Query OK, 1 row affected (0.04 sec)

MariaDB [tugas1]> insert into nilai(NPM, KD_MK, UTS, UAS) values (201143500326,"KD123",80,0);
Query OK, 1 row affected (0.05 sec)

MariaDB [tugas1]> insert into nilai(NPM, KD_MK, UTS, UAS) values (201143500439,"KD123",40,30);
Query OK, 1 row affected (0.08 sec)

MariaDB [tugas1]> select * From Nilai;
+-----+-----+-----+-----+
| NPM | KD_MK | UTS | UAS |
+-----+-----+-----+-----+
| 201143500439 | KK021 | 60 | 75 |
| 201143500121 | KD123 | 70 | 90 |
| 201143500234 | KK021 | 50 | 40 |
| 201143500165 | KU122 | 90 | 80 |
| 201143500228 | KU122 | 75 | 75 |
| 201143500326 | KD123 | 80 | 0 |
| 201143500439 | KD123 | 40 | 30 |
+-----+-----+-----+-----+
7 rows in set (0.00 sec)

MariaDB [tugas1]>

```

(Gambar6)

- VI. Membuat table nilai dengan perintah CREATE TABLE Nilai (NPM Bigint, KD_MK varchar(10), UTS Integer, Uas Integer); seperti pada gambar6 yang di blok garis hijau
- VII. Masukan data untuk table nilai dengan perintah insert into Nilai (NPM,KD_MK,UTS,UAS) values (201143500439,"KK021",60,75)[enter] dan seterusnya.
- VIII. Menampilkan table Nilai dengan perintah Select*from Nilai;

```

MariaDB [Tugas1]> Show Databases;
+-----+
| Database |
+-----+
| information_schema |
| m_syifaus_shudur_ilyas |
| mysql |
| performance_schema |
| phpmyadmin |
| test |
| tugas1 |
| tugas2 |
| tugas3 |
+-----+
9 rows in set (0.00 sec)

MariaDB [Tugas1]>

```

(Gambar7)

4. Menampilkan Semua database dengan perintah SHOW DATABASES

```

MariaDB [tugas1]> Alter Table matakuliah rename MT_Kuliah;
Query OK, 0 rows affected (0.18 sec)

MariaDB [tugas1]> Show Tables;
+-----+
| Tables_in_tugas1 |
+-----+
| mahasiswa |
| mt_kuliah |
| nilai |
+-----+
3 rows in set (0.00 sec)

MariaDB [tugas1]>

```

(Gambar8)

```

MariaDB [tugas1]> select * From Mahasiswa;
+-----+-----+-----+
| NPM      | Nama      | Alamat |
+-----+-----+-----+
| 201143500121 | Desi      | Bekasi |
| 201143500165 | Firdaus   | Jakarta |
| 201143500228 | Gandi     | Depok  |
| 201143500234 | Endah     | Depok  |
| 201143500326 | Hilda     | Bogor  |
| 201143500439 | Andi      | Jakarta |
+-----+-----+-----+
6 rows in set (0.03 sec)

MariaDB [tugas1]> select * From Matakuliah;
+-----+-----+-----+
| KD_MK | Nama_MK      | SKS |
+-----+-----+-----+
| KK021 | Sistem Basis Data | 2 |
| KD132 | Interaksi Manusia Kompute | 3 |
| KU122 | Ilmu Budaya Dasar | 2 |
+-----+-----+-----+
3 rows in set (0.00 sec)

MariaDB [tugas1]> select * From Nilai;
+-----+-----+-----+
| NPM      | KD_MK | UTS | UAS |
+-----+-----+-----+
| 201143500439 | KK021 | 60 | 75 |
| 201143500121 | KD123 | 70 | 90 |
| 201143500234 | KK021 | 50 | 40 |
| 201143500165 | KU122 | 90 | 80 |
| 201143500228 | KU122 | 75 | 75 |
| 201143500326 | KD123 | 80 | 0 |
| 201143500439 | KD123 | 40 | 30 |
+-----+-----+-----+
7 rows in set (0.00 sec)

MariaDB [tugas1]>

```

(Gambar9)

- Menampilkan Seluruh Tabel yang ada di dalam Tugas1 dengan perintah Show Tables.

```

MariaDB [tugas1]> desc matakuliah;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| KD_MK | varchar(10) | YES  |     | NULL    |       |
| Nama_MK | varchar(25) | YES  |     | NULL    |       |
| SKS    | int(11)    | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.06 sec)

MariaDB [tugas1]>

```

(Gambar10)

- Menampilkan struktur table matakuliah dengan perintah DESC Matakuliah.

```

MariaDB [tugas1]> drop table matakuliah;
Query OK, 0 rows affected (0.19 sec)

MariaDB [tugas1]> Show Tables;
+-----+
| Tables_in_tugas1 |
+-----+
| mahasiswa        |
| nilai            |
+-----+
2 rows in set (0.00 sec)

MariaDB [tugas1]> create table matakuliah (KD_MK varchar(10), Nama_MK varchar(25), SKS Integer);
Query OK, 0 rows affected (0.28 sec)

MariaDB [tugas1]> Show Tables;
+-----+
| Tables_in_tugas1 |
+-----+
| mahasiswa        |
| matakuliah       |
| nilai            |
+-----+
3 rows in set (0.00 sec)

MariaDB [tugas1]>

```

(Gambar11)

7. Menghapus Tabel Matakuliah dengan Perintah Drop table matakuliah, seperti pada gambar11
8. Buat ulang Tabel mahasiswa dengan perintah Create Table Matakuliah(KD_MK,Nama_Mk,SKS) values ("KK021","Sistem Basis Data",2),(dst) [enter] seperti pada Gambar11 bagian tengah
- 9.

```

MariaDB [tugas1]> select * From MT_Kuliah;
+-----+-----+-----+
| KD_MK | Nama_MK                | SKS |
+-----+-----+-----+
| KK021 | Sistem Basis Data      | 2   |
| KD132 | Interaksi Manusia Kompute | 3   |
| KU122 | Ilmu Budaya Dasar      | 2   |
+-----+-----+-----+
3 rows in set (0.00 sec)

MariaDB [tugas1]> Alter table MT_Kuliah change Nama_MK NM_MK varchar(30);
Query OK, 3 rows affected (0.92 sec)
Records: 3  Duplicates: 0  Warnings: 0

MariaDB [tugas1]> select * From MT_Kuliah;
+-----+-----+-----+
| KD_MK | NM_MK                  | SKS |
+-----+-----+-----+
| KK021 | Sistem Basis Data      | 2   |
| KD132 | Interaksi Manusia Kompute | 3   |
| KU122 | Ilmu Budaya Dasar      | 2   |
+-----+-----+-----+
3 rows in set (0.00 sec)

MariaDB [tugas1]>

```

10. Mengganti Nama Field Nama_MK menjadi NM_MK varchar(30) dengan perintah ALTER TABLE MT_KULIAH change NAMA_MK NM_MK varchar(30).

```

MariaDB [tugas1]> Alter Table MT_Kuliah add Tgl_lahir Integer(30);
Query OK, 0 rows affected (0.41 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [tugas1]> select * from MT_Kuliah;
+-----+-----+-----+-----+
| KD_MK | NM_MK                | SKS | Tgl_lahir |
+-----+-----+-----+-----+
| KK021 | Sistem Basis Data    | 2   | NULL      |
| KD132 | Interaksi Manusia Kompute | 3   | NULL      |
| KU122 | Ilmu Budaya Dasar    | 2   | NULL      |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)

MariaDB [tugas1]>

```

11. Memasukan Field Tanggal lahir dengan Perintah ALTER MT_KULIAH ADD COLUMN TGL_LAHIR Integer(30);[Enter]

```

MariaDB [tugas1]> Alter Table MT_Kuliah drop Tgl_lahir;
Query OK, 0 rows affected (0.41 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [tugas1]> select * From MT_Kuliah;
+-----+-----+-----+
| KD_MK | NM_MK                | SKS |
+-----+-----+-----+
| KK021 | Sistem Basis Data    | 2   |
| KD132 | Interaksi Manusia Kompute | 3   |
| KU122 | Ilmu Budaya Dasar    | 2   |
+-----+-----+-----+
3 rows in set (0.00 sec)

MariaDB [tugas1]> Alter Table MT_Kuliah add column Tgl_lahir Integer(30) After NM_MK;
Query OK, 0 rows affected (0.44 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [tugas1]> select * From MT_Kuliah;
+-----+-----+-----+-----+
| KD_MK | NM_MK                | Tgl_lahir | SKS |
+-----+-----+-----+-----+
| KK021 | Sistem Basis Data    | NULL      | 2   |
| KD132 | Interaksi Manusia Kompute | NULL      | 3   |
| KU122 | Ilmu Budaya Dasar    | NULL      | 2   |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)

MariaDB [tugas1]>

```

12. Menghapus Field Tgl_lahir dengan perintah ALTER TABLE MT_KULIAH DROP TGL_LAHIR;
Buktikan dengan select * form MT_Kuliah;
13. Script Selanjutnya untuk membuat Columnn tgl_lahir di Awal Field dengan perintah ALTER TABLE MT_kuliah ADD Columnn Tg;_lahir Integer(30) After NM_MK;

Buktikan dengan memunculkan tabelnya.

```
MariaDB [tugas1]> Alter Table MT_Kuliah drop Tgl_lahir;
Query OK, 0 rows affected (0.50 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [tugas1]> select * From MT_Kuliah;
+-----+-----+-----+
| KD_MK | NM_MK                | SKS |
+-----+-----+-----+
| KK021 | Sistem Basis Data    | 2   |
| KD132 | Interaksi Manusia Kompute | 3   |
| KU122 | Ilmu Budaya Dasar    | 2   |
+-----+-----+-----+
3 rows in set (0.00 sec)

MariaDB [tugas1]>
```

14. Menghapus kemabali field tgl_lahir, dengan Alter Drop

```
MariaDB [tugas1]> Alter Table MT_Kuliah drop Tgl_lahir;
Query OK, 0 rows affected (0.41 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [tugas1]> select * From MT_Kuliah;
+-----+-----+-----+
| KD_MK | NM_MK                | SKS |
+-----+-----+-----+
| KK021 | Sistem Basis Data    | 2   |
| KD132 | Interaksi Manusia Kompute | 3   |
| KU122 | Ilmu Budaya Dasar    | 2   |
+-----+-----+-----+
3 rows in set (0.00 sec)

MariaDB [tugas1]> Alter Table MT_Kuliah add column Tgl_lahir Integer(30) After NM_MK;
Query OK, 0 rows affected (0.44 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [tugas1]> select * From MT_Kuliah;
+-----+-----+-----+-----+
| KD_MK | NM_MK                | Tgl_lahir | SKS |
+-----+-----+-----+-----+
| KK021 | Sistem Basis Data    | NULL      | 2   |
| KD132 | Interaksi Manusia Kompute | NULL      | 3   |
| KU122 | Ilmu Budaya Dasar    | NULL      | 2   |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)

MariaDB [tugas1]>
```

15. Untuk Membuat table tgl_lahir dengan posisi setelah NM_MK dengan perintah Alter Table MT_Kuliah Add Column Tgl_lahir integer(30) After NM_MK;