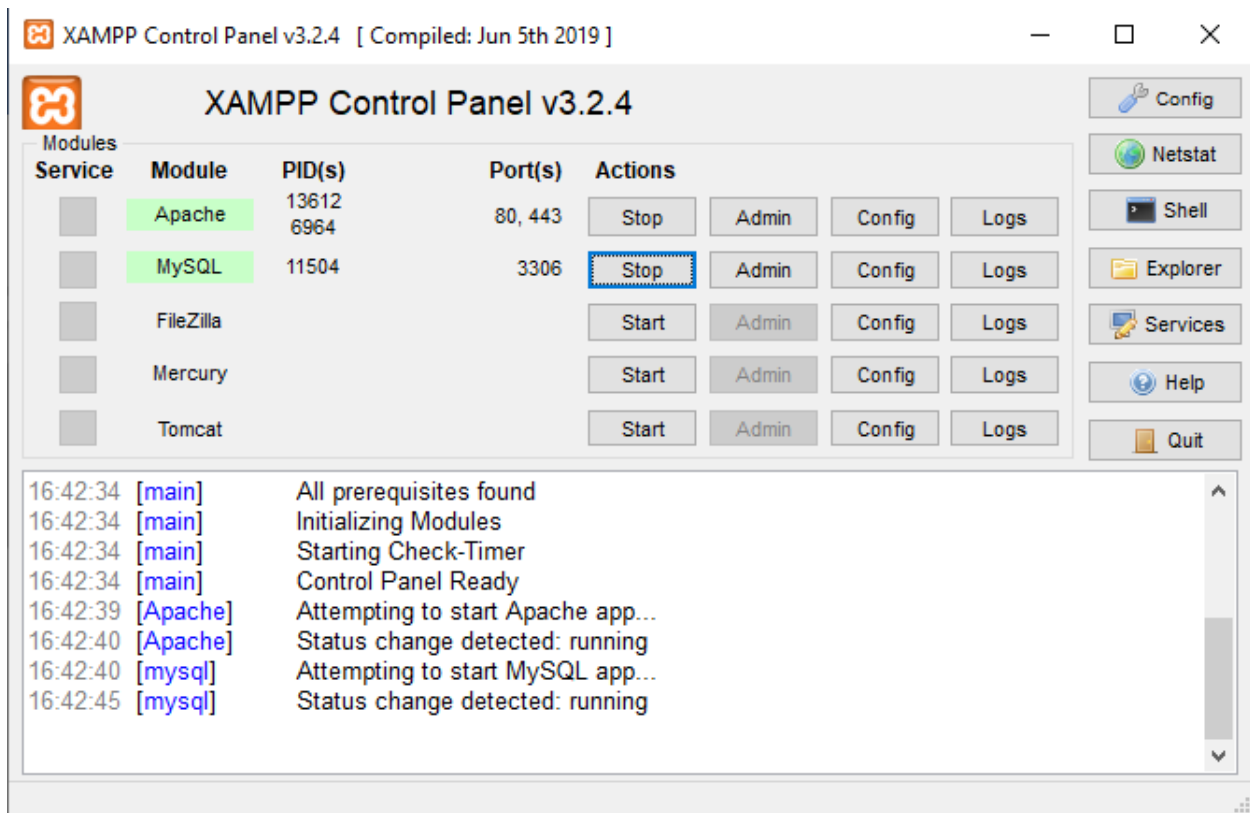


Nama : Arindita Prihastama  
NIM : L200180058  
Kelas : C

## TUGAS MODUL 5

### Data Manipulation Language(DML)

1. Jalankan XAMPP Control Panel.
2. Jalankan server Apache dan MySQL.



3. Buka Command Prompt dan login sebagai root ke MySQL seperti di Modul 1.

```
C:\Users\Lenovo>cd/
C:\>cd C:\xampp\mysql\bin
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 8
Server version: 10.4.11-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)]>
```

4. Pilih database perbankan dengan perintah 'use tugasm4;'. Sehingga akan muncul pemberitahuan "database changed".

```
MariaDB [(none)]> use tugasm4;
Database changed
```

5. Memasukkan data ke dalam database perbankan.

- Tabel mahasiswa

```
MariaDB [tugasm4]> INSERT INTO mahasiswa(nim_mhs, nip_dosenFK, nama_mhs, alamat_mhs) VALUES
-> ('L200180078', '101', 'Akbar Probo Baskoro', 'Magetan'),
-> ('L200180065', '103', 'Wahyu Setyaji Rama Dwijaya', 'Sragen'),
-> ('L200180088', '108', 'Aprinta Sewelastami', 'Sragen'),
-> ('L200180066', '102', 'Annisa Nugraheni', 'Sukoharjo'),
-> ('L200180087', '109', 'Reylian Prealdream Anareka', 'Solo'),
-> ('L200180079', '110', 'Rahmat Beny Susanto', 'Karanganyar'),
-> ('L200180084', '107', 'Sindhiana Aulia Friska', 'Klaten'),
-> ('L200180074', '104', 'Abdillah Ahmad', 'Klaten'),
-> ('L200180069', '105', 'Nur Taufiq Hidayat', 'Nganjuk'),
-> ('L200180058', '106', 'Arindita Prihastama', 'Ngawi');
Query OK, 10 rows affected (0.096 sec)
Records: 10  Duplicates: 0  Warnings: 0

MariaDB [tugasm4]> select * from mahasiswa;
+-----+-----+-----+-----+
| nim_mhs | nip_dosenFK | nama_mhs | alamat_mhs |
+-----+-----+-----+-----+
| L200180058 | 106 | Arindita Prihastama | Ngawi |
| L200180065 | 103 | Wahyu Setyaji Rama Dwijaya | Sragen |
| L200180066 | 102 | Annisa Nugraheni | Sukoharjo |
| L200180069 | 105 | Nur Taufiq Hidayat | Nganjuk |
| L200180074 | 104 | Abdillah Ahmad | Klaten |
| L200180078 | 101 | Akbar Probo Baskoro | Magetan |
| L200180079 | 110 | Rahmat Beny Susanto | Karanganyar |
| L200180084 | 107 | Sindhiana Aulia Friska | Klaten |
| L200180087 | 109 | Reylian Prealdream Anareka | Solo |
| L200180088 | 108 | Aprinta Sewelastami | Sragen |
+-----+-----+-----+-----+
10 rows in set (0.049 sec)
```

- Tabel dosen

```
MariaDB [tugasm4]> INSERT INTO dosen(nip_dosen, nama_dosen) VALUES
-> ('101', 'Husni Thamrin, Dr., S.T., M.T.'),
-> ('102', 'Azizah Fatmawati, S.T.'),
-> ('103', 'Ihsan Cahyo Utomo, S.Kom., M.Kom.'),
-> ('104', 'Fatah Yasin Al Irsyadi, S.T., M.T.'),
-> ('105', 'Aris Rakhmadi, S.T., M.Eng.'),
-> ('106', 'Devi Afriyanti Puspa Putri, S.Kom., M.Sc.'),
-> ('107', 'Dimas Aryo Anggoro, S.Kom., M.Sc.'),
-> ('108', 'Endah Sudarmilah, Dr., S.T., M.Eng.'),
-> ('109', 'Yogiek Indra Kurniawan, S.T., M.T.'),
-> ('110', 'Dyah Priyawati, S.T.');
```

Query OK, 10 rows affected (0.110 sec)  
Records: 10 Duplicates: 0 Warnings: 0

```
MariaDB [tugasm4]> select * from dosen;
```

nip_dosen	nama_dosen
105	Aris Rakhmadi, S.T., M.Eng.
102	Azizah Fatmawati, S.T.
106	Devi Afriyanti Puspa Putri, S.Kom., M.Sc.
107	Dimas Aryo Anggoro, S.Kom., M.Sc.
110	Dyah Priyawati, S.T.
108	Endah Sudarmilah, Dr., S.T., M.Eng.
104	Fatah Yasin Al Irsyadi, S.T., M.T.
101	Husni Thamrin, Dr., S.T., M.T.
103	Ihsan Cahyo Utomo, S.Kom., M.Kom.
109	Yogiek Indra Kurniawan, S.T., M.T.

10 rows in set (0.001 sec)

- Tabel matakuliah

```
MariaDB [tugasm4]> INSERT INTO matakuliah(kode_mk, kode_ruangFK, nip_dosenFK, nama_mk, smt_mk) VALUES
-> ('IF401', 0407, 101, 'Algoritma dan Struktur Data', 4),
-> ('IF402', 0410, 107, 'Sistem Basis Data', 4),
-> ('IF408', 0311, 103, 'Praktikum Jaringan Komputer', 4),
-> ('IF104', 0102, 109, 'Pemrograman Web Statis', 1),
-> ('IF302', 0408, 105, 'Matematika Diskret', 3),
-> ('IF505', 0408, 110, 'Probabilitas dan Statistik', 5),
-> ('IF102', 0102, 108, 'Kalkulus', 1),
-> ('IF203', 0410, 102, 'Sistem Informasi', 2),
-> ('IF307', 0410, 106, 'Komunikasi Data', 3),
-> ('IF201', 0407, 104, 'Sistem Digital', 2);
```

Query OK, 10 rows affected (0.193 sec)  
Records: 10 Duplicates: 0 Warnings: 0

```
MariaDB [tugasm4]> select * from matakuliah;
```

kode_mk	kode_ruangFK	nip_dosenFK	nama_mk	smt_mk
IF102	102	108	Kalkulus	1
IF104	102	109	Pemrograman Web Statis	1
IF201	407	104	Sistem Digital	2
IF203	410	102	Sistem Informasi	2
IF302	408	105	Matematika Diskret	3
IF307	410	106	Komunikasi Data	3
IF401	407	101	Algoritma dan Struktur Data	4
IF402	410	107	Sistem Basis Data	4
IF408	311	103	Praktikum Jaringan Komputer	4
IF505	408	110	Probabilitas dan Statistik	5

10 rows in set (0.000 sec)

- Tabel ruangkelas

```
MariaDB [tugasm4]> INSERT INTO ruangkelas(kode_ruang, nama_ruang) VALUES
  -> (0407, 'J0407'),
  -> (0408, 'J0408'),
  -> (0410, 'J0410'),
  -> (0311, 'LABRPL'),
  -> (0312, 'LABJAR'),
  -> (0313, 'LABSI'),
  -> (0403, 'J0403'),
  -> (0305, 'J0305'),
  -> (0101, 'JSEM Barat'),
  -> (0102, 'JSEM Timur');
Query OK, 10 rows affected (3.426 sec)
Records: 10  Duplicates: 0  Warnings: 0

MariaDB [tugasm4]> select * from ruangkelas;
+-----+-----+
| kode_ruang | nama_ruang |
+-----+-----+
| 305 | J0305 |
| 403 | J0403 |
| 407 | J0407 |
| 408 | J0408 |
| 410 | J0410 |
| 101 | JSEM Barat |
| 102 | JSEM Timur |
| 312 | LABJAR |
| 311 | LABRPL |
| 313 | LABSI |
+-----+-----+
10 rows in set (0.001 sec)
```

- Tabel mahasiswa\_has\_matakuliah

```

MariaDB [tugasm4]> INSERT INTO mahasiswa_has_matakuliah(nim_mhsFK, kode_mkFK) VALUES
-> ('L200180065', 'IF104'),
-> ('L200180088', 'IF201'),
-> ('L200180079', 'IF302'),
-> ('L200180058', 'IF307'),
-> ('L200180069', 'IF408'),
-> ('L200180074', 'IF402'),
-> ('L200180078', 'IF401'),
-> ('L200180084', 'IF203'),
-> ('L200180066', 'IF102'),
-> ('L200180087', 'IF505'),
-> ('L200180065', 'IF203'),
-> ('L200180058', 'IF408'),
-> ('L200180079', 'IF402'),
-> ('L200180074', 'IF408'),
-> ('L200180087', 'IF102'),
-> ('L200180066', 'IF505'),
-> ('L200180078', 'IF104'),
-> ('L200180084', 'IF302'),
-> ('L200180088', 'IF402'),
-> ('L200180069', 'IF307');

```

Query OK, 20 rows affected (0.185 sec)  
Records: 20 Duplicates: 0 Warnings: 0

```

MariaDB [tugasm4]> select * from mahasiswa_has_matakuliah;

```

nim_mhsFK	kode_mkFK
L200180058	IF307
L200180058	IF408
L200180065	IF104
L200180065	IF203
L200180066	IF102
L200180066	IF505
L200180069	IF307
L200180069	IF408
L200180074	IF402
L200180074	IF408
L200180078	IF104
L200180078	IF401
L200180079	IF302
L200180079	IF402
L200180084	IF203
L200180084	IF302
L200180087	IF102
L200180087	IF505
L200180088	IF201
L200180088	IF402

20 rows in set (0.001 sec)