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Prodi : Manajemen Informatika

Praktikum

```
C:\Windows\system32\cmd.exe - mysql -u root -p

MariaDB [db_polinema]> ALTER TABLE dosen ADD alamat varchar(50);
Query OK, 0 rows affected (0.101 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [db_polinema]> ALTER TABLE mahasiswa ADD agama varchar(10);
Query OK, 0 rows affected (0.116 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [db_polinema]> INSERT INTO prodi (kode_prodi, nama_prodi) VALUES ('MI-1A', 'Manajemen Informatika');
Query OK, 1 row affected (0.054 sec)

MariaDB [db_polinema]> INSERT INTO mahasiswa (nim, nama_mhs, jenis_kelamin, alamat, kota, asal_sma, no_hp, umur, kode_prodi, agama) VALUES (2231750015, 'Iqbal Maulana', 'L', 'Perum. Barisan Indah', 'Sampang', 'SMA Negeri 1 Sampang', '081336099595', 20, 'MI-1A', 'Islam');
Query OK, 1 row affected, 1 warning (0.078 sec)

MariaDB [db_polinema]> INSERT INTO mata_kuliah (mk_id, nama_mk, jumlah_jam, sks) VALUES ('BD001', 'Basis Data', 5, 4);
Query OK, 1 row affected (0.077 sec)

MariaDB [db_polinema]> INSERT INTO ruang (ruang_id, nama_ruang, kapasitas) VALUES ('A01', 'Ruang A', 30);
Query OK, 1 row affected (0.081 sec)

MariaDB [db_polinema]> INSERT INTO dosen (nidn, nama_dosen, status, jenis_kelamin, no_hp, alamat) VALUES (1234567890, 'Dr. John Doe', 'PNS', 'L', '081234567890', 'Jl. P. rof. Sudarto No. 22');
Query OK, 1 row affected (0.080 sec)

MariaDB [db_polinema]> SHOW TABLES;
+-----+
| Tables_in_db_polinema |
+-----+
| dosen                  |
| mahasiswa              |
| mata_kuliah            |
| prodi                  |
| ruang                  |
+-----+
5 rows in set (0.001 sec)

MariaDB [db_polinema]>
```

```
C:\Windows\system32\cmd.exe - mysql -u root -p

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [db_polinema]> ALTER TABLE mahasiswa ADD agama varchar(10);
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Query OK, 1 row affected (0.080 sec)

MariaDB [db_polinema]> SHOW TABLES;
+-----+
| Tables_in_db_polinema |
+-----+
| dosen                  |
| mahasiswa              |
| mata_kuliah            |
| prodi                  |
| ruang                  |
+-----+
5 rows in set (0.001 sec)

MariaDB [db_polinema]> SELECT * FROM mahasiswa;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| nim      | nama_mhs | jenis_kelamin | alamat          | kota      | asal_sma      | no_hp      | umur | kode_prodi | agama |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 2147483647 | Iqbal Maulana | L              | Perum. Barisan Indah | Sampang   | SMA Negeri 1 Sampang | 081336099595 | 20   | MI-1A      | Islam |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.019 sec)

MariaDB [db_polinema]>
```

```
C:\Windows\system32\cmd.exe - mysql -u root -p
rof. Sudarto No. 22');
Query OK, 1 row affected (0.080 sec)

MariaDB [db_polinema]> SHOW TABLES;
+-----+
| Tables_in_db_polinema |
+-----+
| dosen                |
| mahasiswa            |
| mata_kuliah          |
| prodi                |
| ruang                |
+-----+
5 rows in set (0.001 sec)

MariaDB [db_polinema]> SELECT * FROM mahasiswa;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| nim      | nama_mhs | jenis_kelamin | alamat      | kota      | asal_sma      | no_hp      | umur | kode_prodi | agama |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 2147483647 | Iqbal Maulana | L              | Perum. Barisan Indah | Sampang   | SMA Negeri 1 Sampang | 081336099595 | 20   | MI-1A      | Islam |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.019 sec)

MariaDB [db_polinema]> DESC mahasiswa;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nim        | int(8)    | NO   | PRI | NULL    |       |
| nama_mhs   | char(50)  | YES  |     | NULL    |       |
| jenis_kelamin | enum('L','P') | YES  |     | L        |       |
| alamat     | varchar(50) | YES  |     | NULL    |       |
| kota       | varchar(20) | YES  |     | malang   |       |
| asal_sma   | char(30)  | YES  |     | NULL    |       |
| no_hp      | varchar(12) | YES  |     | NULL    |       |
| umur       | int(11)   | YES  |     | NULL    |       |
| kode_prodi | char(6)   | YES  | MUL | NULL    |       |
| agama      | varchar(10) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
10 rows in set (0.018 sec)

MariaDB [db_polinema]>
```

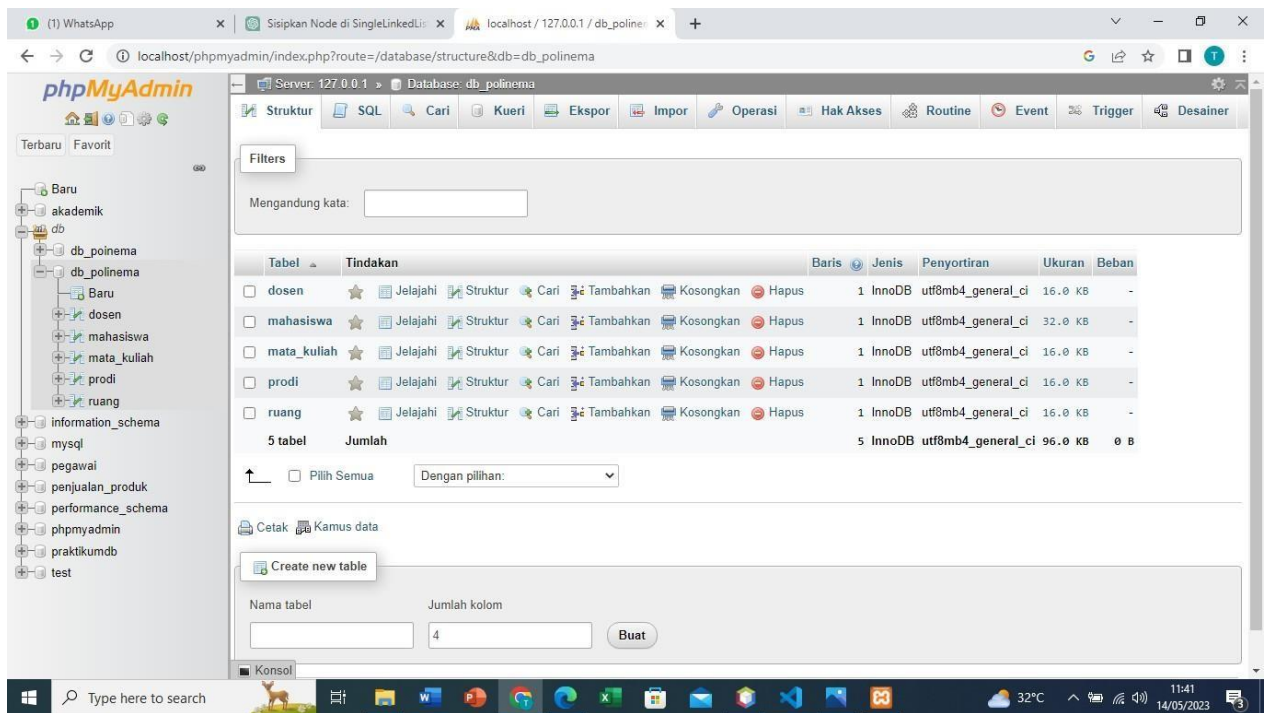
```
Select C:\Windows\system32\cmd.exe - mysql -u root -p

MariaDB [db_polinema]> ALTER TABLE mahasiswa DROP COLUMN asal_sma;
Query OK, 0 rows affected (0.146 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [db_polinema]> DESC mahasiswa;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nim        | int(8)    | NO   | PRI | NULL    |       |
| nama_mhs   | char(50)  | YES  |     | NULL    |       |
| jenis_kelamin | enum('L','P') | YES  |     | L        |       |
| alamat     | varchar(50) | YES  |     | NULL    |       |
| kota       | varchar(20) | YES  |     | malang   |       |
| no_hp      | varchar(12) | YES  |     | NULL    |       |
| umur       | int(11)   | YES  |     | NULL    |       |
| kode_prodi | char(6)   | YES  | MUL | NULL    |       |
| agama      | varchar(10) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
9 rows in set (0.017 sec)

MariaDB [db_polinema]> SELECT * FROM mahasiswa;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| nim      | nama_mhs | jenis_kelamin | alamat      | kota      | no_hp      | umur | kode_prodi | agama |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 2147483647 | Iqbal Maulana | L              | Perum. Barisan Indah | Sampang   | 081336099595 | 20   | MI-1A      | Islam |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.001 sec)

MariaDB [db_polinema]>
```



Tugas 1

```

C:\Windows\system32\cmd.exe - mysql -u root -p
MariaDB [akademik]> SELECT * FROM mahasiswa;
+----+-----+-----+
| No_Mhs | Nama_mhs | Jurusan |
+----+-----+-----+
| 1921001 | Aminah | MI |
| 1921002 | Budiman | MI |
| 1921003 | Carina | MI |
| 1921004 | Della | TI |
| 1921005 | Firda | TI |
+----+-----+-----+
5 rows in set (0.020 sec)

MariaDB [akademik]> SELECT * FROM dosen;
+----+-----+
| Kd_Dosen | Nm_Dosen |
+----+-----+
| B104 | Ati |
| B105 | Dita |
| C102 | Leo |
+----+-----+
3 rows in set (0.001 sec)

MariaDB [akademik]> SELECT * FROM mata_kuliah;
+----+-----+-----+
| Kd_MK | Nama_MK | Kd_Dosen |
+----+-----+-----+
| MI350 | Basis Data | B104 |
| MI465 | Pemrograman | B105 |
| TI201 | Mobile | C102 |
+----+-----+-----+
3 rows in set (0.043 sec)

MariaDB [akademik]> SELECT * FROM nilai;
+----+-----+-----+
| No_Mhs | Kd_MK | nilai |
+----+-----+-----+
| 1921001 | MI350 | 85 |
| 1921002 | MI465 | 87 |
| 1921003 | MI465 | 95 |
| 1921004 | TI201 | 78 |
| 1921005 | TI201 | 80 |
+----+-----+-----+
5 rows in set (0.072 sec)

```

phpMyAdmin interface showing the database structure for 'akademik'.

Database: akademik

Tables:

Tabel	Tindakan	Baris	Jenis	Penyortiran	Ukuran	Beban
dosen	✱ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	3	InnoDB	utf8mb4_general_ci	16.0 KB	-
mahasiswa	✱ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	5	InnoDB	utf8mb4_general_ci	16.0 KB	-
mata_kuliah	✱ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	3	InnoDB	utf8mb4_general_ci	16.0 KB	-
nilai	✱ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	5	InnoDB	utf8mb4_general_ci	32.0 KB	-
4 tabel	Jumlah	16	InnoDB	utf8mb4_general_ci	80.0 KB	0 B

Buttons: Cetak, Kamus data, Create new table

Form: Nama tabel, Jumlah kolom, Buat

Tugas 2

Terminal output showing SQL queries and results in MariaDB:

```

MariaDB [pegawai]> SELECT * FROM Pegawai;
+-----+-----+-----+
| NoPegawai | NamaPegawai | Golongan |
+-----+-----+-----+
| Peg01     | Anton       | A        |
| Peg02     | Paula       | B        |
| Peg03     | Danian      | C        |
| Peg04     | Lubis       | C        |
| Peg05     | Anton       | A        |
| Peg06     | Koko         | C        |
| Peg07     | Keni        | B        |
| Peg08     | Sofi        | B        |
| Peg09     | Yuni        | C        |
| Peg12     | Sita        | B        |
| Peg14     | Yusni       | B        |
| Peg15     | Udin        | D        |
| Peg16     | Didit       | D        |
| Peg17     | Dani        | D        |
+-----+-----+-----+
14 rows in set (0.001 sec)

MariaDB [pegawai]> SELECT * FROM Golongan;
+-----+-----+
| Golongan | BesarGaji |
+-----+-----+
| A        | 1000000   |
| B        | 900000    |
| C        | 750000    |
| D        | 500000    |
+-----+-----+
4 rows in set (0.000 sec)

MariaDB [pegawai]> SELECT * FROM Proyek;
+-----+-----+
| Noprojek | NamaProyek |
+-----+-----+
| NP001    | BRR        |
| NP002    | PEKDA      |
| NP003    | CBR        |
| NP004    | ASK        |
| NP005    | OB         |
+-----+-----+
5 rows in set (0.000 sec)
  
```

```
C:\Windows\system32\cmd.exe - mysql -u root -p
MariaDB [pegawai]> SELECT * FROM Proyekpegawai;
+-----+-----+
| Noprojek | Nopegawai |
+-----+-----+
| NP001    | Peg01     |
| NP001    | Peg02     |
| NP001    | Peg06     |
| NP002    | Peg01     |
| NP002    | Peg12     |
| NP002    | Peg14     |
| NP003    | Peg02     |
| NP003    | Peg03     |
| NP003    | Peg04     |
| NP004    | Peg07     |
| NP004    | Peg08     |
| NP004    | Peg06     |
| NP005    | Peg15     |
| NP005    | Peg16     |
| NP005    | Peg17     |
+-----+-----+
15 rows in set (0.000 sec)

MariaDB [pegawai]>
```

phpMyAdmin interface showing the database structure for the 'pegawai' database. The left sidebar shows the database hierarchy, including 'pegawai' and its tables: 'golongan', 'pegawai', 'proyek', and 'proyekpegawai'.

The main panel displays the 'Struktur' (Structure) tab for the 'pegawai' database. It shows a list of tables with their respective actions (Jelajahi, Struktur, Cari, Tambahkan, Kosongkan, Hapus).

Tabel	Tindakan	Baris	Jenis	Penyortiran	Ukuran	Beban
<input type="checkbox"/> golongan	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	4	InnoDB	utf8mb4_general_ci	16.0 KB	-
<input type="checkbox"/> pegawai	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	14	InnoDB	utf8mb4_general_ci	16.0 KB	-
<input type="checkbox"/> proyek	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	5	InnoDB	utf8mb4_general_ci	16.0 KB	-
<input type="checkbox"/> proyekpegawai	Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	15	InnoDB	utf8mb4_general_ci	48.0 KB	-
4 tabel	Jumlah	38	InnoDB	utf8mb4_general_ci	96.0 KB	0 B

Below the table list, there is a 'Create new table' section with fields for 'Nama tabel' and 'Jumlah kolom' (set to 4), and a 'Buat' button.

