

LAPORAN PRAKTIKUM BASIS DATA
MODUL 2 DATA DEFINITION LANGUAGE



Disusun Oleh :

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PROGRAM STUDI SAINS DATA
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1. Masuk ke dalam MariaDB melalui command prompt

Disini saya tidak menggunakan xampp oleh karena itu tidak ada MariaDB, saya sudah terlanjur menginstall mysql versi full sehingga cukup menggunakan mysql shell walaupun demikian fungsinya tetap sama seperti yang terlihat pada gambar dibawah.

```
MySQL Shell 8.0.32

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Type '\help' or '\?' for help; '\quit' to exit.
MySQL JS > \sql
Switching to SQL mode... Commands end with ;
MySQL SQL > \connect root@localhost:3306
Creating a session to 'root@localhost:3306'
Please provide the password for 'root@localhost:3306': *****
Save password for 'root@localhost:3306'? [Y]es/[N]o/[e]ver (default No): no
Fetching global names for auto-completion... Press ^C to stop.
Your MySQL connection id is 13
Server version: 8.0.32 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL localhost:3306 ssl SQL >
```

2. Buat dua buah database masing-masing dengan nama “komik_coba1” dan “komik_cobalagi”

```
Fetching global names for auto-completion... Press ^C to stop.
Your MySQL connection id is 13
Server version: 8.0.32 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL localhost:3306 ssl SQL > create database komik_coba1;
Query OK, 1 row affected (0.0028 sec)
MySQL localhost:3306 ssl SQL > create database komik_cobalagi;
Query OK, 1 row affected (0.0021 sec)
MySQL localhost:3306 ssl SQL >
```

3. Tampilkan seluruh daftar database yang ada

```
Query OK, 1 row affected (0.0021 sec)
MySQL localhost:3306 ssl SQL > show databases;
+-----+
| Database |
+-----+
| information_schema |
| komik_coba1 |
| komik_cobalagi |
| mysql |
| performance_schema |
| prak1basdat |
| praksql1 |
| sakila |
| sys |
| tgsprakbasdat |
| world |
+-----+
11 rows in set (0.0009 sec)
MySQL localhost:3306 ssl SQL >
```

4. Hapus database “komik_cobalagi.”

```
11 rows in set (0.0009 sec)
MySQL localhost:3306 ssl SQL > drop database komik_cobalagi;
Query OK, 0 rows affected (0.0145 sec)
MySQL localhost:3306 ssl SQL > show databases;
+-----+
| Database |
+-----+
| information_schema |
| komik_coba1 |
| mysql |
| performance_schema |
| prak1basdat |
| praksi1 |
| sakila |
| sys |
| tgsprakbasdat |
| world |
+-----+
10 rows in set (0.0007 sec)
MySQL localhost:3306 ssl SQL >
```

5. Aktifkan database komik_coba1.

```
10 rows in set (0.0007 sec)
MySQL localhost:3306 ssl SQL > use komik_coba1;
Default schema set to 'komik_coba1'.
Fetching global names, object names from 'komik_coba1' for auto-completion... Press ^C to stop.
MySQL localhost:3306 ssl komik_coba1 SQL >
```

6. Tampilkan daftar tabel pada database komik_coba1.

Karena kita belum memberikan perintah untuk create table(membuat tabel) maka output yang dihasilkan adalah empty set(masih kosong) seperti yang terlihat pada gambar dibawah.

```
Fetching global names, object names from 'komik_coba1' for au
MySQL localhost:3306 ssl komik_coba1 SQL > show tables;
Empty set (0.0012 sec)
MySQL localhost:3306 ssl komik_coba1 SQL >
```

7. Buat 3 buah tabel, dengan ketentuan sebagai berikut :

Tabel”anggota”

```
Empty set (0.0012 sec)
MySQL localhost:3306 ssl komik_coba1 SQL > create table anggota(id_anggota char(4), Nama cv
create table anggota(id_anggota char(4), Nama c
MySQL localhost:3306 ssl komik_coba1 SQL > create table anggota(id_anggota char(4), Nama var
char(20), Alamat varchar(20), No_telp varchar(15), Tgl_lahir date);
Query OK, 0 rows affected (0.0491 sec) alter table anggota add primary key(id_anggota);
Query OK, 0 rows affected (0.0307 sec)1 SQL > alter table anggota add primary key(id_anggota);

Records: 0 Duplicates: 0 Warnings: 0
MySQL localhost:3306 ssl komik_coba1 SQL >
```

Tabel”Komik”

```
Records: 0 Duplicates: 0 Warnings: 0
MySQL localhost:3306 ssl komik_coba1 SQL > create table Komik(id_komik char(5), Judul varchar(25), Pengarang varchar(30), Thn_terbit year, Jenis_komik varchar(15));
Query OK, 0 rows affected (0.0176 sec)
MySQL localhost:3306 ssl komik_coba1 SQL > alter table Komik add primary key(id_komik);
Query OK, 0 rows affected (0.0237 sec)
```

Tabel”Pinjam”

```
Records: 0 Duplicates: 0 Warnings: 0
MySQL localhost:3306 ssl komik_coba1 SQL > create table Pinjam(No_pinjam int(4), id_anggota char(4), id_komik char(5), jumlah int(2));
Query OK, 0 rows affected, 2 warnings (0.0184 sec)
Warning (code 1681): Integer display width is deprecated and will be removed in a future release
```

8. Tampilkan daftar tabel yang ada pada database.

```
MySQL localhost:3306 ssl komik_coba1 SQL > show tables;
+-----+
| Tables_in_komik_coba1 |
+-----+
| anggota               |
| komik                 |
| pinjam                |
+-----+
3 rows in set (0.0011 sec)
MySQL localhost:3306 ssl komik_coba1 SQL >
```

9. Buka struktur tabel dari masing – masing tabel yang telah dibuat

```
3 rows in set (0.0011 sec)
MySQL localhost:3306 ssl komik_coba1 SQL > desc anggota;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_anggota | char(4)   | NO   | PRI | NULL    |       |
| Nama       | varchar(20) | YES  |     | NULL    |       |
| Alamat     | varchar(20) | YES  |     | NULL    |       |
| No_telp    | varchar(15) | YES  |     | NULL    |       |
| Tgl_lahir  | date      | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.0013 sec)
MySQL localhost:3306 ssl komik_coba1 SQL > desc komik;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_komik   | char(5)   | NO   | PRI | NULL    |       |
| Judul      | varchar(25) | YES  |     | NULL    |       |
| Pengarang  | varchar(30) | YES  |     | NULL    |       |
| Thn_terbit | year      | YES  |     | NULL    |       |
| Jenis_komik | varchar(15) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.0012 sec)
MySQL localhost:3306 ssl komik_coba1 SQL > desc pinjam;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| No_pinjam  | int       | YES  |     | NULL    |       |
| id_anggota | char(4)   | YES  |     | NULL    |       |
| id_komik   | char(5)   | YES  |     | NULL    |       |
| jumlah     | int       | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.0015 sec)
MySQL localhost:3306 ssl komik_coba1 SQL >
```

10. Hapus primary key pada tabel anggota

```
5 rows in set (0.0012 sec)
MySQL localhost:3306 ssl komik_coba1 SQL > alter table anggota drop primary key;
Query OK, 0 rows affected (0.0125 sec)

Records: 0 Duplicates: 0 Warnings: 0
MySQL localhost:3306 ssl komik_coba1 SQL > desc anggota;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_anggota | char(4)        | NO   |     | NULL    |       |
| Nama       | varchar(20)    | YES  |     | NULL    |       |
| Alamat     | varchar(20)    | YES  |     | NULL    |       |
| No_telp    | varchar(15)    | YES  |     | NULL    |       |
| Tgl_lahir  | date           | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.0012 sec)
```

11. Buat field baru pada tabel anggota, yaitu, “tgl_daftar” dengan type=”date”.

```
3 rows in set (0.0010 sec)
MySQL localhost:3306 ssl komik_coba1 SQL > alter table anggota add tgl_daftar date;
Query OK, 0 rows affected (0.0203 sec)

Records: 0 Duplicates: 0 Warnings: 0
MySQL localhost:3306 ssl komik_coba1 SQL > desc anggota;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_anggota | char(4)        | NO   |     | NULL    |       |
| Nama       | varchar(20)    | YES  |     | NULL    |       |
| Alamat     | varchar(20)    | YES  |     | NULL    |       |
| No_telp    | varchar(15)    | YES  |     | NULL    |       |
| Tgl_lahir  | date           | YES  |     | NULL    |       |
| tgl_daftar | date           | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.0009 sec)
```

12. Ubah nama tabel “anggota” menjadi “anggota_warnet.”

```
6 rows in set (0.0030 sec)
MySQL localhost:3306 ssl komik_coba1 SQL > alter table anggota rename anggota_warnet;
Query OK, 0 rows affected (0.0096 sec)
MySQL localhost:3306 ssl komik_coba1 SQL > show tables;
+-----+
| Tables_in_komik_coba1 |
+-----+
| anggota_warnet        |
| komik                  |
| pinjam                 |
+-----+
3 rows in set (0.0011 sec)
```

13. Buat field baru pada tabel komik, yaitu , “status” dengan type = “varchar” dan size=”10”.

```
MySQL localhost:3306 ssl komik_coba1 SQL > alter table Komik add status varchar(10);
Query OK, 0 rows affected (0.0172 sec)
```

```
MySQL localhost:3306 ssl komik_coba1 SQL > desc komik;
```

Field	Type	Null	Key	Default	Extra
id_komik	char(5)	NO	PRI	NULL	
Judul	varchar(25)	YES		NULL	
Pengarang	varchar(30)	YES		NULL	
Thn_terbit	year	YES		NULL	
Jenis_komik	varchar(15)	YES		NULL	
status	varchar(10)	YES		NULL	

6 rows in set (0.0016 sec)

14. Lihat struktur tabel pinjam

```
MySQL localhost:3306 ssl komik_coba1 SQL > desc pinjam;
```

Field	Type	Null	Key	Default	Extra
No_pinjam	int	YES		NULL	
id_anggota	char(4)	YES		NULL	
id_komik	char(5)	YES		NULL	
jumlah	int	YES		NULL	

4 rows in set (0.0024 sec)

15. Beri primary key pada field “no_pinjam” pada tabel pinjam.

```
MySQL localhost:3306 ssl komik_coba1 SQL > alter table pinjam add primary key (No_pinjam);
Query OK, 0 rows affected (0.0169 sec)
```

Records: 0 Duplicates: 0 Warnings: 0

16. Lihat Kembali struktur tabel pinjam.

```
MySQL localhost:3306 ssl komik_coba1 SQL > desc pinjam;
```

Field	Type	Null	Key	Default	Extra
No_pinjam	int	NO	PRI	NULL	
id_anggota	char(4)	YES		NULL	
id_komik	char(5)	YES		NULL	
jumlah	int	YES		NULL	

4 rows in set (0.0017 sec)

```
MySQL localhost:3306 ssl komik_coba1 SQL >
```

17. Ubah nama tabel tabel “pinjam” menjadi “transaksi”

```
MySQL localhost:3306 ssl komik_coba1 SQL > alter table pinjam rename transaksi;
Query OK, 0 rows affected (0.0153 sec)
MySQL localhost:3306 ssl komik_coba1 SQL > show tables;
+-----+
| Tables_in_komik_coba1 |
+-----+
| anggota_warnet        |
| komik                  |
| transaksi              |
+-----+
3 rows in set (0.0016 sec)
```

18. Buat primary key field “id_anggota” pada tabel anggota_warnet

```
MySQL localhost:3306 ssl komik_coba1 SQL > alter table anggota_warnet add primary key (id_anggota);
Query OK, 0 rows affected (0.0254 sec)
Records: 0 Duplicates: 0 Warnings: 0
MySQL localhost:3306 ssl komik_coba1 SQL > desc anggota_warnet;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_anggota | char(4)    | NO   | PRI | NULL    |       |
| Nama       | varchar(20)| YES  |     | NULL    |       |
| Alamat     | varchar(20)| YES  |     | NULL    |       |
| No_telp    | varchar(15)| YES  |     | NULL    |       |
| Tgl_lahir  | date       | YES  |     | NULL    |       |
| tgl_daftar | date       | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.0015 sec)
```

19. Hapus field “jenis_komik” pada tabel komik.

```
MySQL localhost:3306 ssl komik_coba1 SQL > alter table Komik drop jenis_komik;
Query OK, 0 rows affected (0.0442 sec)
Records: 0 Duplicates: 0 Warnings: 0
MySQL localhost:3306 ssl komik_coba1 SQL > desc Komik;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_komik   | char(5)    | NO   | PRI | NULL    |       |
| Judul      | varchar(25)| YES  |     | NULL    |       |
| Pengarang  | varchar(30)| YES  |     | NULL    |       |
| Thn_terbit | year       | YES  |     | NULL    |       |
| status     | varchar(10)| YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.0013 sec)
```

20. Ganti field “jumlah” pada tabel transaksi menjadi “jml_komik” type”int”Size”4”

```
MySQL localhost:3306 ssl komik_coba1 SQL > alter table transaksi change jumlah jml_komik int(4);
Query OK, 0 rows affected, 1 warning (0.0159 sec)
Records: 0 Duplicates: 0 Warnings: 1
Warning (code 1681): Integer display width is deprecated and will be removed in a future release.
MySQL localhost:3306 ssl komik_coba1 SQL > desc transaksi;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| No_pinjam  | int        | NO   | PRI | NULL    |       |
| id_anggota | char(4)    | YES  |     | NULL    |       |
| id_komik   | char(5)    | YES  |     | NULL    |       |
| jml_komik  | int        | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.0017 sec)
```