

Tugas 1 Praktikum Sistem Basis Data

Mahasiswa

NPM	Nama	Alamat
201143500439	Andi	Jakarta
201143500121	Desi	Bekasi
201143500234	Endah	Depok
201143500165	Firdaus	Jakarta
201143500228	Gandi	Depok
201143500326	Hilda	Bogor

Matakuliah

KD_MK	Nama_MK	SKS
KK021	Sistem Basis Data	2

KD132	Interaksi Manusia Komputer	3
KU122	Ilmu Budaya Dasar	2

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

1. Buatlah Database Tugas1

```
MariaDB [(none)]> create database tugas1;
Query OK, 1 row affected (0.002 sec)
```

2. Aktifkan database

```
* X11:      pkg install x11-repo

Report issues at https://termux.com/issues

$ mysql
2020-04-23 14:25:50 0 [Note] mysqld (mysqld 10.4.12-MariaDB
) starting as process 10758
2020-04-23 14:25:50 0 [Note] InnoDB: Mutexes and rw_locks u
se GCC atomic builtins
2020-04-23 14:25:50 0 [Note] InnoDB: Uses event mutexes
2020-04-23 14:25:50 0 [Note] InnoDB: Compressed tables use
zlib 1.2.11
2020-04-23 14:25:50 0 [Note] InnoDB: Number of pools: 1
2020-04-23 14:25:50 0 [Note] InnoDB: Using generic crc32 in
structions
2020-04-23 14:25:50 0 [Note] mysqld: O_TMPFILE is not suppo
rted on /data/data/com.termux/files/usr/tmp (disabling futu
re attempts)
2020-04-23 14:25:50 0 [Note] InnoDB: Initializing buffer po
ol, total size = 128M, instances = 1, chunk size = 128M
2020-04-23 14:25:50 0 [Note] InnoDB: Completed initializati
on of buffer pool
2020-04-23 14:25:50 0 [Note] InnoDB: Starting crash recover
y from checkpoint LSN=76958
2020-04-23 14:25:50 0 [Note] InnoDB: 128 out of 128 rollbac
k segments are active.
2020-04-23 14:25:50 0 [Note] InnoDB: Removed temporary tabl
espace data file: "ibtmp1"
2020-04-23 14:25:50 0 [Note] InnoDB: Creating shared tables
pace for temporary tables
2020-04-23 14:25:50 0 [Note] InnoDB: Setting file './ibtmp1
' size to 12 MB. Physically writing the file full; Please w
ait ...
2020-04-23 14:25:50 0 [Note] InnoDB: File './ibtmp1' size i
s now 12 MB.
2020-04-23 14:25:50 0 [Note] InnoDB: Waiting for purge to s
tart
2020-04-23 14:25:50 0 [Note] InnoDB: 10.4.12 started; log s
equence number 76967; transaction id 64
2020-04-23 14:25:50 0 [Note] InnoDB: Loading buffer pool(s)
from /data/data/com.termux/files/usr/var/lib/mysql/ib_buff
er_pool
2020-04-23 14:25:50 0 [Note] Plugin 'FEEDBACK' is disabled.
2020-04-23 14:25:50 0 [Note] InnoDB: Buffer pool(s) load co
mpleted at 200423 14:25:50
2020-04-23 14:25:50 0 [Note] Server socket created on IP: '
::'
2020-04-23 14:25:50 0 [Note] Reading of all Master_info ent
ries succeeded
2020-04-23 14:25:50 0 [Note] Added new Master_info '' to ha
sh table
2020-04-23 14:25:50 0 [Note] mysqld: ready for connections.
Version: '10.4.12-MariaDB'  socket: '/data/data/com.termux/
files/usr/tmp/mysqld.sock'  port: 3306  MariaDB Server

ESC  CTRL  ALT  -  _  +
```

```
$ mysql
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 8
Server version: 10.4.12-MariaDB MariaDB Server
```

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)]> show databases;
```

```
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| test |
| tugas1 |
+-----+
5 rows in set (0.002 sec)
```

3. Buatlah 3 buah tabel diatas

```
MariaDB [tugas1]> Create table Matakuliah (KD_MK varchar(30
),Nama_MK varchar(25), SKS int (5));
Query OK, 0 rows affected (0.070 sec)

MariaDB [tugas1]> Insert into Matakuliah (KD_MK,Nama_MK,SKS
) values ("KK021","Sistem Basis Data",2);
MariaDB [tugas1]> Insert into Matakuliah (KD_MK,Nama_MK,SKS
) values ("KK021","Sistem Basis Data",2);
Query OK, 3 rows affected (0.024 sec);
Records: 3 Duplicates: 0 Warnings: 0a Dasar",2);

MariaDB [tugas1]> Create table Nilai (Npm Bigint auto_incre
ment primary key,KD_MK varchar(10), UTS int(5), UAS int(5));
Query OK, 0 rows affected (0.050 sec)

MariaDB [tugas1]> Insert into Nilai (Npm,KD_MK,UTS,UAS) val
ues ("201143500439","KK021",60,75);
Query OK, 1 row affected (0.031 sec)

MariaDB [tugas1]> Insert into Nilai (Npm,KD_MK,UTS,UAS) val
ues ("201143500121","KD123",70,90);
Query OK, 1 row affected (0.080 sec)

MariaDB [tugas1]> Insert into Nilai (Npm,KD_MK,UTS,UAS) val
ues ("201143500234","KK021",50,40);
Query OK, 1 row affected (0.011 sec)

MariaDB [tugas1]> Insert into Nilai (Npm,KD_MK,UTS,UAS) val
ues ("201143500165","KU122",90,80);
Query OK, 1 row affected (0.012 sec)

MariaDB [tugas1]> Insert into Nilai (Npm,KD_MK,UTS,UAS) val
ues ("201143500228","KU122",75,75);
Query OK, 1 row affected (0.030 sec)

MariaDB [tugas1]> Insert into Nilai (Npm,KD_MK,UTS,UAS) val
ues ("201143500326","KD123",80,0);
Query OK, 1 row affected (0.039 sec)

MariaDB [tugas1]> Insert into Nilai (Npm,KD_MK,UTS,UAS) val
ues ("201143500439","KD123",40,30);
ERROR 1062 (23000): Duplicate entry '201143500439' for key
'PRIMARY'
MariaDB [tugas1]> Insert into Nilai (Npm,KD_MK,UTS,UAS) val
ues ("201143500440","KD123",40,30);
Query OK, 1 row affected (0.053 sec)
```

```
MariaDB [tugas1]> Create table Mahasiswa (NPM Bigint auto_i
ncrement primary key, nama varchar(25), Alamat varchar (25)
);
Query OK, 0 rows affected (0.117 sec)
```

```
MariaDB [tugas1]> Insert into Mahasiswa (NPM,Nama,Alamat) v
alues (201143500439,"Andi","Jakarta");
Query OK, 1 row affected (0.032 sec)
```

```
MariaDB [tugas1]> Insert into Mahasiswa (NPM,Nama,Alamat) v
alues (201143500121,"Desi","Bekasi");
Query OK, 1 row affected (0.018 sec)
```

```
MariaDB [tugas1]> Insert into Mahasiswa (NPM,Nama,Alamat) v
alues (201143500234,"Endah","Depok");
Query OK, 1 row affected (0.015 sec)
```

```
MariaDB [tugas1]> Insert into Mahasiswa (NPM,Nama,Alamat) v
alues (201143500165,"Firdaus","Jakarta");
Query OK, 1 row affected (0.017 sec)
```

```
MariaDB [tugas1]> Insert into Mahasiswa (NPM,Nama,Alamat) v
alues (201143500228,"Gandi","Depok");
Query OK, 1 row affected (0.013 sec)
```

```
MariaDB [tugas1]> Insert into Mahasiswa (NPM,Nama,Alamat) v
alues (201143500326,"Hilda","Bogor");
Query OK, 1 row affected (0.018 sec)
```

4. Tampilkan seluruh database

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

5. Tampilkan seluruh tabel

```
MariaDB [tugas1]> show tables;
+-----+
| Tables_in_tugas1 |
+-----+
| MT_Kuliah |
| Mahasiswa |
| Nilai |
+-----+
3 rows in set (0.128 sec)

MariaDB [tugas1]> █
```

6. Tampilkan struktur tabel Matakuliah

```
MariaDB [tugas1]> Select * From Matakuliah;
+-----+-----+-----+
| KD_MK | Nama_MK | SKS |
+-----+-----+-----+
| KK021 | Sistem Basis Data | 2 |
| KD132 | Interaksi Manusia Kom | 3 |
| KU122 | Ilmu Budaya Dasar | 2 |
+-----+-----+-----+
3 rows in set (0.002 sec)
```

7. Hapus tabel Matakuliah

```
MariaDB [tugas1]> Drop table Matakuliah;
Query OK, 0 rows affected (0.061 sec)

MariaDB [tugas1]> █
```

8. Buat tabel Matakuliah

```
MariaDB [tugas1]> Create table Matakuliah (KD_MK varchar(30), Nama_MK varchar(25), SKS int (5));  
Query OK, 0 rows affected (0.063 sec)
```

9. Ganti tabel Matakuliah dengan MT_Kuliah

```
MariaDB [tugas1]> ALTER TABLE Matakuliah rename MT_Kuliah;  
Query OK, 0 rows affected (0.050 sec)  
  
MariaDB [tugas1]> █
```

10. Ganti 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 (0.011 sec)  
Records: 0 Duplicates: 0 Warnings: 0  
  
MariaDB [tugas1]> █
```

11. Tambahkan kolom Tgl_lahir pada tabel Mahasiswa

```
MariaDB [tugas1]> ALTER TABLE Mahasiswa ADD Column Tgl_lahir int(30);  
Query OK, 0 rows affected (0.048 sec)  
Records: 0 Duplicates: 0 Warnings: 0  
  
MariaDB [tugas1]> █
```

12. Hapus kolom Tgl_lahir

```
MariaDB [tugas1]> ALTER TABLE Mahasiswa Drop Tgl_lahir;  
Query OK, 0 rows affected (0.049 sec)  
Records: 0 Duplicates: 0 Warnings: 0  
  
MariaDB [tugas1]> █
```

13. Tambahkan kolom Tgl_Lahir pada tabel Mahasiswa pada awal field

```
MariaDB [tugas1]> ALTER TABLE Mahasiswa ADD Column Tgl_lahir int(30) First;  
Query OK, 0 rows affected (0.055 sec)  
Records: 0 Duplicates: 0 Warnings: 0  
  
MariaDB [tugas1]> █
```

14. Hapus kolom Tgl_Lahir

```
MariaDB [tugas1]> ALTER TABLE Mahasiswa Drop Tgl_lahir;  
Query OK, 0 rows affected (0.049 sec)  
Records: 0 Duplicates: 0 Warnings: 0  
  
MariaDB [tugas1]> █
```

15. Tambahkan kolom Tgl_Lahir pada tabel Mahasiswa setelah kolom nama

```
MariaDB [tugas1]> ALTER TABLE Mahasiswa ADD Column Tgl_lahir int(30) After Nama;  
Query OK, 0 rows affected (0.040 sec)  
Records: 0 Duplicates: 0 Warnings: 0  
  
MariaDB [tugas1]> █
```

Nama: Mohamad Misbah

S4C

Npm: 201843500761

Tugas1