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Tugas: Database



- 1. Buat sebuah database dengan nama latihan1!
- create database latihanOl;

```
Setting environment for using XAMPP for Windows.
Windows 8.10ASUS d:\xampp
# cd mysql/bin
Windows 8.10ASUS d:\xampp\mysql\bin
# mysql -u root
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 67
Server version: 10.1.10-MariaDB mariadb.org binary distribution
Copyright (c) 2000, 2015, Oracle, MariaDB Corporation Ab and others.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
MariaDB [(none)]> create database latihan01;
Query OK, 1 row affected (0.00 sec)
```

2. Buat sebuah tabel dengan nama **biodata** dengan field nama dan alamat pada database **latihan1**!

```
use latihanOl;
create table biodata (
nama varchar (15)not null;
(alamat varchar (50) not null);
```

```
MariaDB [(none)]> use latihan01;
Database changed
MariaDB [latihan01]> create table biodata
-> ( nama varchar (15) not null,
-> alamat varchar (20) not null );
Query OK, 0 rows affected (0.28 sec)
```

ketik desc biodata;

3. Tambahkan sebuah kolom **keterangan** (varchar 15), sebagai kolom terakhir!

alter table biodata add keterangan varchar (15) not null;

```
fariaDB [latihan01]> alter table biodata
-> add keterangan varchar (15) not null;
Query OK, O rows affected (0.58 sec)
Records: O Duplicates: O Warnings: O
```

ketik desc biodata;

```
dariaDB [latihan01]> alter table biodata

-> add keterangan varchar (15) not null;
Query OK, 0 rows affected (0.58 sec)
Records: 0 Duplicates: 0 Warnings: 0

dariaDB [latihan01]> desc biodata;

Field | Type | Null | Key | Default | Extra |

nama | varchar(15) | NO | NULL |

alamat | varchar(20) | NO | NULL |

keterangan | varchar(15) | NO | NULL |

NULL |

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```

4. Tambahkan kolom **id** (int 11) di awal (sebagai kolom pertama)!

```
alter table biodata add id int (11) null first;
```

```
MariaDB [latihan01]> alter table biodata

-> add id int (11) null

-> first;
Query OK, 0 rows affected (0.61 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

ketik desc biodata;

```
MariaDB [latihan01]> alter table biodata
-> add id int (11) null
-> first;
Query OK, 0 rows affected (0.61 sec)
Records: 0 Duplicates: 0 Warnings: 0
MariaDB [latihan01]> desc biodata;
                                            ! Null ! Key
  Field
                       Type
                                                                    Default
                                                                                     Extra
                                               YES
NO
NO
NO
                        int(11)
                                                                     NULL
  id
                        varchar(15)
varchar(20)
                                                                     NULL
  nama
                                                                     NULL
   alamat
   keterangan
                        varchar(15)
                                                                     NULL
4 rows in set (0.01 sec)
```

5. Sisipkan sebuah kolom dengan nama phone (varchar 15) setelah kolom alamat!

```
alter table biodata
add column
phone varchar (15) not null
after alamat;
```

```
fariaDB [latihan01]> alter table biodata

-> add column

-> phone varchar (15) not null

-> after alamat;
Query OK, O rows affected (0.60 sec)
Records: O Duplicates: O Warnings: O
```

ketik desc biodata;

```
MariaDB [latihan01]> alter table biodata

-> add column

-> phone varchar (15) not null

-> after alamat;
Query OK, Ø rows affected (0.60 sec)
Records: Ø Duplicates: Ø Warnings: Ø
MariaDB [latihan01]> desc biodata;
  Field
                                                   | Null | Key | Default
                        ! Type
                                                                                                 Extra
   id
                            int(11)
                                                      YES
                                                                               NULL
                                                     NO NO NO
                                                                               NULL
   nama
alamat
                           varchar(15)
                          varchar(20)
varchar(15)
varchar(15)
   phone
keterangan
                                                                               NULL
                                                                               NULL
   rows in set (0.01 sec)
```

6. Ubah kolom id menjadi char(11)!

alter table biodata modify id chart (11) null;

```
MariaDB [latihan01]> alter table biodata
-> modify id char (11) null;
Query OK, O rows affected (0.00 sec)
Records: O Duplicates: O Warnings: O
```

ketik desc biodata;

```
lariaDB [latihan01]> alter table biodata
-> modify id char (11) null;
Query OK, 0 rows affected (0.00 sec)
Records: 0 Duplicates: 0 Warnings: 0
lariaDB [latihan01]> desc biodata;
                      | Type
                                              | Null | Key
                                                                     | Default
  Field
                                                                                         Extra
  id
                         char(11)
                                                 YES
                                                                        NULL
                        varchar(15)
varchar(20)
                                                NO
NO
                                                                        NULL
NULL
 nama
alamat
  phone | varchar(15)
keterangan | varchar(15)
                                              -
                                                 NO
                                                                        NULL
  rows in set (0.01 sec)
```

7. Ubah nama kolom **phone** menjadi **hp** (varchar 20)!

alter table biodata change phone hp varchar (20) not null;

```
MariaDB [latihanO1]> alter table biodata
-> change phone hp varchar (20) not null;
Query OK, O rows affected (0.81 sec)
Records: O Duplicates: O Warnings: O
```

ketik desc biodata;

```
lariaDB [latihan01]> alter table biodata
-> change phone hp varchar (20) not null;
luery OK, 0 rows affected (0.81 sec)
lecords: 0 Duplicates: 0 Warnings: 0
 lariaDB [latihan01]> desc biodata;
  Field
                        ! Type
                                                   | Null | Key | Default
                                                                                              Extra
                                                     YES
NO
NO
NO
NO
                           char(11)
varchar(15)
varchar(20)
varchar(20)
                                                                              NULL
NULL
NULL
NULL
NULL
   id
  nama
  alamat
   hp
                           varchar(15)
   keterangan
   rows in set (0.01 sec)
```

8. Hapus kolom keterangan dari tabel!

alter table biodata drop keterangan;

```
MariaDB [latihan01]> alter table biodata
-> drop keterangan;
Query OK, O rows affected (0.84 sec)
Records: O Duplicates: O Warnings: O
```

ketik desc biodata;

```
MariaDB [latihan01]> alter table biodata
-> drop keterangan;
Query OK, O rows affected (0.84 sec)
Records: O Duplicates: O Warnings: O
MariaDB [latihan01]> desc biodata;
                                   ! Null ! Key
  Field
             ! Type
                                                          Default
                                                                         Extra
               char(11)
varchar(15)
varchar(20)
varchar(20)
                                     YES
NO
                                                         NULL
NULL
NULL
  id
  nama
  alamat
                                     NO
NO
  hp
  rows in set (0.01 sec)
```

9. Ganti nama tabel menjadi data_mahasiswa!

rename table biodata to data_mahasiswa;

```
MariaDB [latihan01]> rename table biodata to data_mahasiswa;
Query OK, 0 rows affected (0.23 sec)
```

ketik desc data_mahasiswa;

10. Ganti nama **field** id menjadi **nim**!

alter table data_mahasiswa
change is nim char (11) null;

```
MariaDB [latihan01]> alter table data_mahasiswa
—> change id nim char (11) null;
Query OK, O rows affected (0.10 sec)
Records: O Duplicates: O Warnings: O
```

ketik desc data_mahasiswa;

11. Jadikan nim sebagai primary key!

alter table data_mahasiswa add primary key (nim);

```
MariaDB [latihanØ1]> alter table data_mahasiswa add primary key (nim);
Query OK, Ø rows affected (1.24 sec)
Records: Ø Duplicates: Ø Warnings: Ø
```

ketik desc data_mahasiswa;