

Rancangan Relasi Database

Diajukan untuk memenuhi tugas matakuliah Basis Data 1

Pada Program Studi D IV Teknik Informatika

Oleh:

Deriska Fadilla Musdalifa (1194010)



Dosen Pengampu :

Syafrial Fachrie Pane

PROGRAM STUDI DIPLOMA IV TEKNIK INFORMATIKA

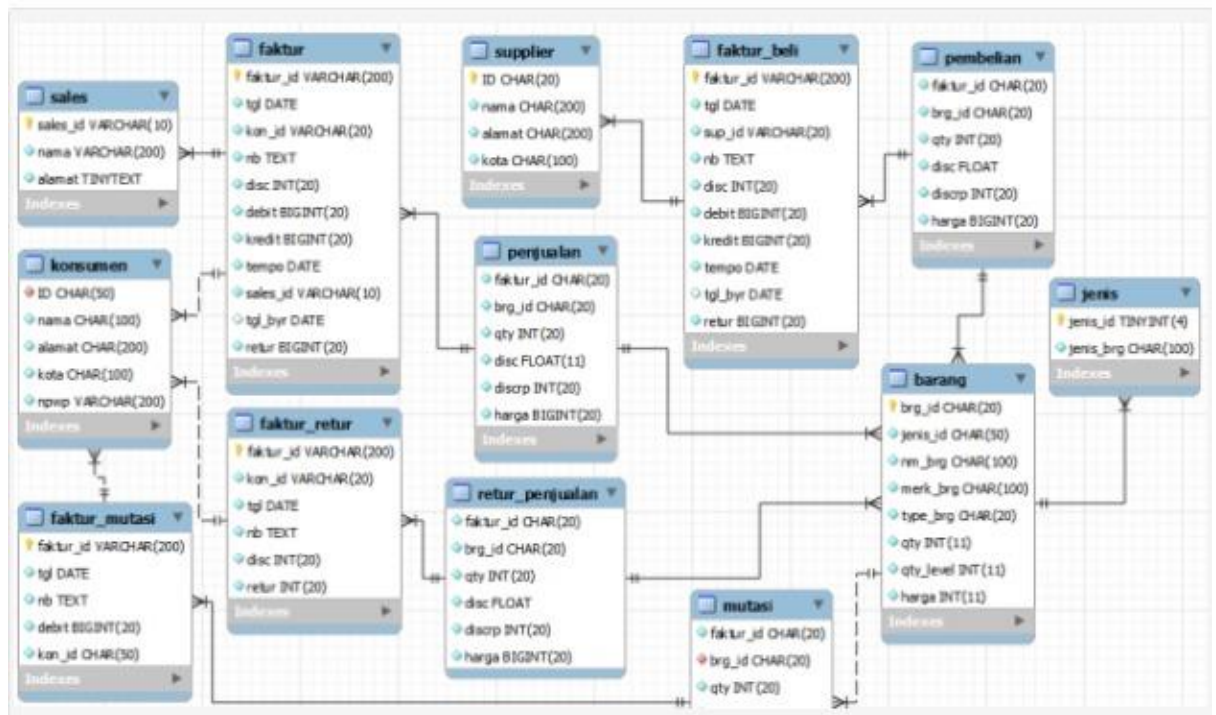
POLITEKNIK POS INDONESIA

BANDUNG

2020

Langkah untuk membuat database secara manual menggunakan xampp dan CMD windows:

SOAL: Buatlah table seperti gambar dibawah ini menggunakan CMD!



1. Jika sudah selesai install aplikasi xampp, buka CMD lalu ketikkan perintah **cd** untuk masuk ke penyimpanan c. lalu ketikkan lagi perintah **cd xampp** untuk masuk ke dalam folder xampp (sesuaikan dimana letak kalian menyimpan xampp yg sudah di install tadi). Masuk lagi kedalam folder mysql dengan perintah **cd mysql**. Lalu masuk kedalam folder bin dengan perintah **cd bin**. Sebelum lanjut nyalakan dahulu aplikasi xampp nya. Setelah itu masukkan perintah **mysql -u root -p**, lalu enter saja pada bagian password. Maka akan berpidah pada direktori MariaDB bukan direktori C lagi.

```
C:\windows\system32\cmd.exe - mysql -u root -p
Microsoft Windows [Version 10.0.16299.15]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\WINDOWS 10>cd\

C:\>cd xampp

C:\xampp>cd mysql

C:\xampp\mysql>cd bin

C:\xampp\mysql\bin>mysql -u root -p
Enter password:
ERROR 2002 (HY000): Can't connect to MySQL server on 'localhost' (10061)

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: 10.3.15-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)]>
```

- Setelah masuk ke dalam direktori MariaDB maka ketikkan perintah **use aplikasipenjualan;** untuk memulai membuat database, jangan lupa pada setiap akhir perintah diberi tanda titik koma(;). Setelah terbuat databasenya, isi table dengan cara ketik perintah **create table sales(sales_id varchar(10) primary key, nama varchar(200), alamat tinytext);** Setelah itu ketikkan perintah untuk menampilkan hasil table manual tersebut dengan perintah **show tables;** Untuk lebih mengetahui rinciannya ketikkan perintah **describe sales;**

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

MariaDB [(none)]> use aplikasipenjualan;
Database changed
MariaDB [aplikasipenjualan]> create table sales(sales_id varchar(10) primary key, nama varchar(200), alamat tinytext);
Query OK, 0 rows affected (0.306 sec)

MariaDB [aplikasipenjualan]> show tables;
+-----+
| Tables_in_aplikasipenjualan |
+-----+
| sales                        |
+-----+
1 row in set (0.003 sec)

MariaDB [aplikasipenjualan]> describe sales;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| sales_id   | varchar(10)   | NO   | PRI | NULL    |       |
| nama       | varchar(200)  | YES  |     | NULL    |       |
| alamat     | tinytext      | YES  |     | NULL    |       |
+-----+
3 rows in set (0.166 sec)

MariaDB [aplikasipenjualan]>
```

- Lalu untuk membuat table selanjutnya caranya sama seperti diatas, namun hanya berbeda pada tablenya saja, untuk perintah sama. Berikut ini hasil kodingan dari table barang_id.

```
MariaDB [aplikasipenjualan]> create table barang(brg_id char(20) primary key, jenis_id char(50), nm_brg char(100), merk_brg char(100), type_brg char(20), qty int, qty_level int, harga int);
Query OK, 0 rows affected (0.396 sec)

MariaDB [aplikasipenjualan]> show tables;
+-----+
| Tables_in_aplikasipenjualan |
+-----+
| barang                        |
| sales                        |
+-----+
2 rows in set (0.001 sec)

MariaDB [aplikasipenjualan]> describe barang;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| brg_id     | char(20)      | NO   | PRI | NULL    |       |
| jenis_id   | char(50)      | YES  |     | NULL    |       |
| nm_brg     | char(100)     | YES  |     | NULL    |       |
| merk_brg   | char(100)     | YES  |     | NULL    |       |
| type_brg   | char(20)      | YES  |     | NULL    |       |
| qty        | int(11)       | YES  |     | NULL    |       |
| qty_level  | int(11)       | YES  |     | NULL    |       |
| harga      | int(11)       | YES  |     | NULL    |       |
+-----+
8 rows in set (0.098 sec)

MariaDB [aplikasipenjualan]>
```

4. Selanjutnya membuat table supplier, seperti gambar dibawah ini.

```
MariaDB [aplikasipenjualan]> create table supplier(id char(20)primary key, nama char(200), alamat char(200), kota char(100));
Query OK, 0 rows affected (0.416 sec)

MariaDB [aplikasipenjualan]> show tables;
+-----+
| Tables_in_aplikasipenjualan |
+-----+
| barang                        |
| sales                        |
| supplier                     |
+-----+
3 rows in set (0.001 sec)

MariaDB [aplikasipenjualan]> describe sales;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| sales_id   | varchar(10)   | NO   | PRI | NULL    |       |
| nama       | varchar(200)  | YES  |     | NULL    |       |
| alamat     | tinytext      | YES  |     | NULL    |       |
+-----+
3 rows in set (0.084 sec)

MariaDB [aplikasipenjualan]> describe supplier;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| id         | char(20)      | NO   | PRI | NULL    |       |
| nama       | char(200)     | YES  |     | NULL    |       |
| alamat     | char(200)     | YES  |     | NULL    |       |
| kota       | char(100)     | YES  |     | NULL    |       |
+-----+
4 rows in set (0.035 sec)

MariaDB [aplikasipenjualan]>
```

5. Berikut ini table faktur_mutasi

```
MariaDB [aplikasipenjualan]> create table faktur_mutasi(faktur_id varchar (200) primary key, tgl date, rb text, debit bigint(20), kon_id char(50));
Query OK, 0 rows affected (0.291 sec)

MariaDB [aplikasipenjualan]> show tables;
+-----+
| Tables_in_aplikasipenjualan |
+-----+
| barang                        |
| faktur_mutasi                |
| sales                        |
| supplier                     |
+-----+
4 rows in set (0.001 sec)

MariaDB [aplikasipenjualan]> describe faktur_mutasi;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| faktur_id  | varchar(200)  | NO   | PRI | NULL    |       |
| tgl        | date          | YES  |     | NULL    |       |
| rb         | text          | YES  |     | NULL    |       |
| debit      | bigint(20)    | YES  |     | NULL    |       |
| kon_id     | char(50)      | YES  |     | NULL    |       |
+-----+
5 rows in set (0.103 sec)

MariaDB [aplikasipenjualan]>
```

6. Lalu table faktur_retur

```

MariaDB [aplikasipenjualan]> create table faktur_retur(faktur_id varchar(200) primary key, kon_id varchar(20), tgl date, rb text, disc int, retur int);
Query OK, 0 rows affected (0.308 sec)

MariaDB [aplikasipenjualan]> show tables;
+-----+
| Tables_in_aplikasipenjualan |
+-----+
| barang                        |
| faktur_mutasi                |
| faktur_retur                 |
| sales                        |
| supplier                     |
+-----+
5 rows in set (0.001 sec)

MariaDB [aplikasipenjualan]> describe faktur_retur;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| faktur_id  | varchar(200)  | NO   | PRI | NULL    |       |
| kon_id     | varchar(20)   | YES  |     | NULL    |       |
| tgl        | date          | YES  |     | NULL    |       |
| rb         | text          | YES  |     | NULL    |       |
| disc       | int(11)       | YES  |     | NULL    |       |
| retur      | int(11)       | YES  |     | NULL    |       |
+-----+
6 rows in set (0.037 sec)

MariaDB [aplikasipenjualan]>

```

7. Create table faktur

```

MariaDB [aplikasipenjualan]> create table faktur(faktur_id varchar(200) primary key, tgl date, kon_id varchar(20), rb text, disc int, debit bigint(20), kredit bigint(20), tempo date, sales_id varchar(10), tgl_byr date, retur bigint(20));
Query OK, 0 rows affected (0.301 sec)

MariaDB [aplikasipenjualan]> show tables;
+-----+
| Tables_in_aplikasipenjualan |
+-----+
| barang                        |
| faktur                        |
| faktur_mutasi                |
| faktur_retur                 |
| sales                        |
| supplier                     |
+-----+
6 rows in set (0.001 sec)

MariaDB [aplikasipenjualan]> describe faktur;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| faktur_id  | varchar(200)  | NO   | PRI | NULL    |       |
| tgl        | date          | YES  |     | NULL    |       |
| kon_id     | varchar(20)   | YES  |     | NULL    |       |
| rb         | text          | YES  |     | NULL    |       |
| disc       | int(11)       | YES  |     | NULL    |       |
| debit      | bigint(20)    | YES  |     | NULL    |       |
| kredit     | bigint(20)    | YES  |     | NULL    |       |
| tempo      | date          | YES  |     | NULL    |       |
| sales_id   | varchar(10)   | YES  |     | NULL    |       |
| tgl_byr    | date          | YES  |     | NULL    |       |
| retur      | bigint(20)    | YES  |     | NULL    |       |
+-----+
11 rows in set (0.121 sec)

MariaDB [aplikasipenjualan]>

```

8. Create table retur_penjualan

```

MariaDB [aplikasipenjualan]> create table retur_penjualan(faktur_id char(20), brg_id char(20), qty int, disc float, discrp int(20), harga bigint(20));
Query OK, 0 rows affected (0.261 sec)

MariaDB [aplikasipenjualan]> show tables;
+-----+
| Tables_in_aplikasipenjualan |
+-----+
| barang                        |
| faktur                        |
| faktur_mutasi                |
| faktur_retur                 |
| retur_penjualan              |
| sales                        |
| supplier                     |
+-----+
7 rows in set (0.001 sec)

MariaDB [aplikasipenjualan]> describe retur_penjualan;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| faktur_id  | char(20)      | YES  |     | NULL    |       |
| brg_id     | char(20)      | YES  |     | NULL    |       |
| qty        | int(11)       | YES  |     | NULL    |       |
| disc       | float         | YES  |     | NULL    |       |
| discrp     | int(20)       | YES  |     | NULL    |       |
| harga      | bigint(20)    | YES  |     | NULL    |       |
+-----+
6 rows in set (0.049 sec)

MariaDB [aplikasipenjualan]>

```

9. Create table_penjualan

```

MariaDB [aplikasipenjualan]> create table penjualan(faktur_id char(20), brg_id char(20), qty int(20), disc float(11), discrp int(20), harga bigint(20));
Query OK, 0 rows affected (0.243 sec)

MariaDB [aplikasipenjualan]> show tables;
+-----+
| Tables_in_aplikasipenjualan |
+-----+
| barang                        |
| faktur                       |
| faktur_mutasi                |
| faktur_retur                 |
| penjualan                    |
| retur_penjualan              |
| sales                        |
| supplier                     |
+-----+
8 rows in set (0.001 sec)

MariaDB [aplikasipenjualan]> describe penjualan;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| faktur_id  | char(20)  | YES  |     | NULL    |       |
| brg_id     | char(20)  | YES  |     | NULL    |       |
| qty        | int(20)   | YES  |     | NULL    |       |
| disc       | float     | YES  |     | NULL    |       |
| discrp     | int(20)   | YES  |     | NULL    |       |
| harga      | bigint(20)| YES  |     | NULL    |       |
+-----+
6 rows in set (0.068 sec)

MariaDB [aplikasipenjualan]>

```

10. Create table Faktur_beli

```

MariaDB [aplikasipenjualan]> create table faktur_beli(faktur_id varchar(200) primary key, tgl date, sup_id varchar(20), rb text, disc int(20), debit bigint(20), kredit
bigint(20), tempo date, tgl_byr date, retur bigint(20));
Query OK, 0 rows affected (0.239 sec)

MariaDB [aplikasipenjualan]> show tables;
+-----+
| Tables_in_aplikasipenjualan |
+-----+
| barang                        |
| faktur                       |
| faktur_beli                  |
| faktur_mutasi                |
| faktur_retur                 |
| penjualan                    |
| retur_penjualan              |
| sales                        |
| supplier                     |
+-----+
9 rows in set (0.001 sec)

MariaDB [aplikasipenjualan]> describe faktur_beli;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| faktur_id  | varchar(200) | NO   | PRI | NULL    |       |
| tgl        | date        | YES  |     | NULL    |       |
| sup_id     | varchar(20) | YES  |     | NULL    |       |
| rb         | text        | YES  |     | NULL    |       |
| disc       | int(20)     | YES  |     | NULL    |       |
| debit      | bigint(20)  | YES  |     | NULL    |       |
| kredit     | bigint(20)  | YES  |     | NULL    |       |
| tempo      | date        | YES  |     | NULL    |       |
| tgl_byr    | date        | YES  |     | NULL    |       |
| retur      | bigint(20)  | YES  |     | NULL    |       |
+-----+
10 rows in set (0.050 sec)

MariaDB [aplikasipenjualan]>

```

11. Create table Pembelian

```

MariaDB [aplikasipenjualan]> create table pembelian(faktur_id char(20), brg_id char(20), qty int(20), disc float, discrp int(20), harga bigint(20));
Query OK, 0 rows affected (0.246 sec)

MariaDB [aplikasipenjualan]> show tables;
+-----+
| Tables_in_aplikasipenjualan |
+-----+
| barang                        |
| faktur                       |
| faktur_beli                  |
| faktur_mutasi                |
| faktur_retur                 |
| pembelian                    |
| penjualan                    |
| retur_penjualan              |
| sales                        |
| supplier                     |
+-----+
10 rows in set (0.001 sec)

MariaDB [aplikasipenjualan]> describe pembelian;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| faktur_id  | char(20)  | YES  |     | NULL    |       |
| brg_id     | char(20)  | YES  |     | NULL    |       |
| qty        | int(20)   | YES  |     | NULL    |       |
| disc       | float     | YES  |     | NULL    |       |
| discrp     | int(20)   | YES  |     | NULL    |       |
| harga      | bigint(20)| YES  |     | NULL    |       |
+-----+
6 rows in set (0.053 sec)

MariaDB [aplikasipenjualan]>

```

12. Create Table jenis

```

MariaDB [aplikasipenjualan]> create table jenis(jenis_id tinyint(4) primary key, jenis_brg char(100));
Query OK, 0 rows affected (0.276 sec)

MariaDB [aplikasipenjualan]> show tables;
+-----+
| Tables_in_aplikasipenjualan |
+-----+
| barang                      |
| faktur                     |
| faktur_beli                |
| faktur_mutasi              |
| faktur_retur               |
| jenis                      |
| pembelian                  |
| penjualan                  |
| retur_penjualan            |
| sales                      |
| supplier                   |
+-----+
11 rows in set (0.002 sec)

MariaDB [aplikasipenjualan]> describe jenis;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| jenis_id | tinyint(4) | NO | PRI | NULL | |
| jenis_brg | char(100) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.124 sec)

MariaDB [aplikasipenjualan]>

```

13. Create table konsumen

```

MariaDB [aplikasipenjualan]> create table konsumen(id char(50) unique key, nama char(100), alamat char(200), kota char(100), npwp varchar(200));
Query OK, 0 rows affected (0.332 sec)

MariaDB [aplikasipenjualan]> show tables;
+-----+
| Tables_in_aplikasipenjualan |
+-----+
| barang                      |
| faktur                     |
| faktur_beli                |
| faktur_mutasi              |
| faktur_retur               |
| jenis                      |
| konsumen                   |
| pembelian                  |
| penjualan                  |
| retur_penjualan            |
| sales                      |
| supplier                   |
+-----+
12 rows in set (0.001 sec)

MariaDB [aplikasipenjualan]> describe konsumen;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id | char(50) | YES | UNI | NULL | |
| nama | char(100) | YES | | NULL | |
| alamat | char(200) | YES | | NULL | |
| kota | char(100) | YES | | NULL | |
| npwp | varchar(200) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.085 sec)

MariaDB [aplikasipenjualan]>

```