

Praktikum 3 Merelasikan Tabel dengan Foreign Key dan Primary Key

Cek tabel barang

```
C:\Windows\system32\cmd.exe - mysql -u root -p
MariaDB [toko]> show columns from barang;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_barang  | varchar(10) | NO   | PRI | NULL    |       |
| nama_barang | varchar(50) | YES  |     | NULL    |       |
| satuan     | varchar(20) | YES  |     | NULL    |       |
| stok       | int(3)      | NO   |     | NULL    |       |
| tgl_input  | date       | YES  |     | NULL    |       |
| jenis_barang | varchar(20) | YES  |     | NULL    |       |
| harga      | int(7)      | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
7 rows in set (0.01 sec)

MariaDB [toko]> _
```

Untuk menghilangkan primary key dengan cara

```
ALTER TABLE nama_tabel
DROP PRIMARY KEY;
```

Contoh :

```
C:\Windows\system32\cmd.exe - mysql -u root -p
MariaDB [toko]> ALTER TABLE barang DROP PRIMARY KEY;
Query OK, 3 rows affected (0.06 sec)
Records: 3 Duplicates: 0 Warnings: 0

MariaDB [toko]> show columns from barang;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_barang  | varchar(10) | NO   |     | NULL    |       |
| nama_barang | varchar(50) | YES  |     | NULL    |       |
| satuan     | varchar(20) | YES  |     | NULL    |       |
| stok       | int(3)      | NO   |     | NULL    |       |
| tgl_input  | date       | YES  |     | NULL    |       |
| jenis_barang | varchar(20) | YES  |     | NULL    |       |
| harga      | int(7)      | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
7 rows in set (0.01 sec)

MariaDB [toko]>
```

Menambah Primary key dengan cara

```
ALTER TABLE nama_tabel ADD PRIMARY KEY(nama_field);
```

Contoh :

```
C:\Windows\system32\cmd.exe - mysql -u root -p
7 rows in set (0.01 sec)
MariaDB [toko]> ALTER TABLE barang ADD PRIMARY KEY(id_barang);
Query OK, 0 rows affected (0.06 sec)
Records: 0 Duplicates: 0 Warnings: 0
MariaDB [toko]> show columns from barang;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_barang  | varchar(10)   | NO   | PRI | NULL    |       |
| nama_barang | varchar(50)   | YES  |     | NULL    |       |
| satuan     | varchar(20)   | YES  |     | NULL    |       |
| stok       | int(3)        | NO   |     | NULL    |       |
| tgl_input  | date          | YES  |     | NULL    |       |
| jenis_barang | varchar(20)   | YES  |     | NULL    |       |
| harga      | int(7)        | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
7 rows in set (0.01 sec)
MariaDB [toko]> _
```

Untuk merelasikan tabel barang dengan tabel jenis_barang dan merk_barang perlu dibuatkan 2 tabel baru.

Membuat tabel jenis barang

```
C:\Windows\system32\cmd.exe - mysql -u root -p
MariaDB [toko]> create table jenis_barang(id_jenis VARCHAR(4) PRIMARY KEY,nama_jenis VARCHAR(20) NOT NULL);
Query OK, 0 rows affected (0.02 sec)
MariaDB [toko]> show columns from jenis_barang;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_jenis   | varchar(4)    | NO   | PRI | NULL    |       |
| nama_jenis | varchar(20)   | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)
MariaDB [toko]> _
```

Membuat tabel merk barang

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

MariaDB [toko]> create table merk_barang(id_merk VARCHAR(4) PRIMARY KEY,nama_mer
k VARCHAR(20) NOT NULL);
Query OK, 0 rows affected (0.04 sec)

MariaDB [toko]> show columns from merk_barang;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_merk    | varchar(4)    | NO   | PRI | NULL    |       |
| nama_merk  | varchar(20)   | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

MariaDB [toko]>
```

Agar tidak terjadi redundancy data perlu dibuang colom jenis_barang :

Delete jenis_barang pada table barang

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

MariaDB [toko]> ALTER TABLE barang DROP COLUMN jenis_barang;
Query OK, 0 rows affected (0.09 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [toko]> show columns from barang;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_barang  | varchar(10)    | NO   | PRI | NULL    |       |
| nama_barang| varchar(50)    | YES  |     | NULL    |       |
| satuan     | varchar(20)    | YES  |     | NULL    |       |
| stok       | int(3)         | NO   |     | NULL    |       |
| tgl_input  | date           | YES  |     | NULL    |       |
| harga      | int(7)         | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.01 sec)

MariaDB [toko]> _
```

Kemudian perlu Menambahkan colom id_jenis dan id_merk pada tabel barang

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

MariaDB [toko]> ALTER TABLE barang ADD COLUMN id_jenis VARCHAR(4);
Query OK, 0 rows affected (0.11 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [toko]> ALTER TABLE barang ADD COLUMN id_merk VARCHAR(4);
Query OK, 0 rows affected (0.08 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [toko]> show columns from barang;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_barang  | varchar(10)    | NO   | PRI | NULL    |       |
| nama_barang| varchar(50)    | YES  |     | NULL    |       |
| satuan     | varchar(20)    | YES  |     | NULL    |       |
| stok       | int(3)         | NO   |     | NULL    |       |
| tgl_input  | date           | YES  |     | NULL    |       |
| harga      | int(7)         | YES  |     | NULL    |       |
| id_jenis   | varchar(4)     | YES  |     | NULL    |       |
| id_merk    | varchar(4)     | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.01 sec)

MariaDB [toko]> _
```

Jika tabel lain sudah dibuat kemudian dapat direlaskan dengan perintah

```
ALTER TABLE tabel1 ADD FOREIGN KEY (colom_tabel1/foreign key) REFERENCES
tabel2(colom_tabel2/primary key);
```

Kemudian untuk merelasikan tabel barang dengan tabel jenis_barang adalah sebagai berikut

```
C:\Windows\system32\cmd.exe - mysql -u root -p
MariaDB [toko]> ALTER TABLE barang ADD FOREIGN KEY (id_jenis) REFERENCES jenis_b
arang(id_jenis);
Query OK, 3 rows affected (0.07 sec)
Records: 3 Duplicates: 0 Warnings: 0

MariaDB [toko]> show columns from barang;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_barang  | varchar(10)   | NO   | PRI | NULL    |       |
| nama_barang| varchar(50)   | YES  |     | NULL    |       |
| satuan     | varchar(20)   | YES  |     | NULL    |       |
| stok       | int(3)        | NO   |     | NULL    |       |
| tgl_input  | date          | YES  |     | NULL    |       |
| harga      | int(7)        | YES  |     | NULL    |       |
| id_jenis   | varchar(4)    | YES  | MUL | NULL    |       |
| id_merk    | varchar(4)    | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.01 sec)

MariaDB [toko]>
```

merelasikan tabel barang dengan tabel merk_barang adalah sebagai berikut

```
C:\Windows\system32\cmd.exe - mysql -u root -p
MariaDB [toko]> ALTER TABLE barang ADD FOREIGN KEY (id_merk) REFERENCES merk_bar
ang(id_merk);
Query OK, 3 rows affected (0.05 sec)
Records: 3 Duplicates: 0 Warnings: 0

MariaDB [toko]> show columns from barang;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id_barang  | varchar(10)   | NO   | PRI | NULL    |       |
| nama_barang| varchar(50)   | YES  |     | NULL    |       |
| satuan     | varchar(20)   | YES  |     | NULL    |       |
| stok       | int(3)        | NO   |     | NULL    |       |
| tgl_input  | date          | YES  |     | NULL    |       |
| harga      | int(7)        | YES  |     | NULL    |       |
| id_jenis   | varchar(4)    | YES  | MUL | NULL    |       |
| id_merk    | varchar(4)    | YES  | MUL | NULL    |       |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.01 sec)

MariaDB [toko]> _
```

Tugas

tulis proses dan hasil masing-masing dengan word :

Buat relasi antara tabel pelanggan dengan kota (pada tugas 1 pembuatan tabel).

Buatlah tabel :

pembelian (id_pembelian (Varchar (10) primary key), tanggal(date), id_pelangan (varchar (10) foreign key dengan id_pelanggan di tabel pelaggan)),

```
detail_pembelian (id_detail (primary key int(10) key autoincrement),id_pembelian(foreign key  
varchar(10)),id_barang(foreign key varchar(10)))
```

foreign key dibuat terakhir dengan merelasikan tabel pembelian dengan tabel pelanggan,
merelasikan tabel pembelian dengan detail pembelian dan merelasikan tabel detail pembelian
dengan tabel barang.