



# Tugas Kelompok Basis Data

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**Tahap I : Implementasi Basis Data**

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## MEMBUAT SKEMA DAN TABEL

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Membuat perintah DDL pembuatan setiap tabel dan menampilkan strukturnya.

1. Membuat skema TOKOKEREN dengan perintah

```
CREATE SCHEMA TOKOKEREN;
```

```
d04=# CREATE SCHEMA TOKOKEREN;  
CREATE SCHEMA
```

2. Set schema default dengan perintah

```
SET search_path TO TOKOKEREN;
```

```
d04=# SET search_path TO TOKOKEREN;  
SET
```

3. Membuat tabel PENGGUNA dengan perintah

```
CREATE TABLE PENGGUNA (
```

```
email VARCHAR(50) NOT NULL,  
password VARCHAR(20) NOT NULL,  
nama VARCHAR(100) NOT NULL,  
jenis_kelamin CHAR(1) NOT NULL,  
tgl_lahir DATE NOT NULL,  
no_telp VARCHAR (20) NOT NULL,  
alamat TEXT NOT NULL,
```

```
PRIMARY KEY (email),
```

```
CONSTRAINT jenis_kelamin_chk CHECK (jenis_kelamin IN('L','P')));
```

```
d04=# CREATE TABLE PENGGUNA (email VARCHAR(50) NOT NULL, password VARCHAR(20) NOT NULL, nama VARCHAR(100) NOT NULL, jenis_kelamin CHAR(1) NOT NULL, tgl_lahir DATE NOT NULL, no_telp VARCHAR (20) NOT NULL, alamat TEXT NOT NULL, PRIMARY KEY (email), CONSTRAINT jenis_kelamin_chk CHECK (jenis_kelamin IN('L','P')));  
CREATE TABLE
```

4. Membuat tabel PELANGGAN dengan perintah

```
CREATE TABLE PELANGGAN (
```

```
email VARCHAR(50) NOT NULL,  
is_penjual BOOLEAN NOT NULL,  
nilai_reputasi NUMERIC(10,1),  
poin INT,  
PRIMARY KEY (email),  
FOREIGN KEY (email) REFERENCES PENGGUNA(email) ON UPDATE CASCADE ON DELETE  
RESTRICT);
```

```
d04=# CREATE TABLE PELANGGAN (email VARCHAR(50) NOT NULL, is_penjual BOOLEAN NOT NULL, nilai_reputasi NUMERIC(10,1), point INT, PRIMARY KEY (email), FOREIGN KEY (email) REFERENCES PENGGUNA(email) ON UPDATE CASCADE ON DELETE RESTRICT);
CREATE TABLE
```

5. Membuat tabel TOKO dengan perintah

```
CREATE TABLE TOKO (
    nama VARCHAR (100) NOT NULL,
    deskripsi TEXT, slogan VARCHAR(100),
    email_penjual VARCHAR(50) NOT NULL,
    PRIMARY KEY (nama),
    FOREIGN KEY (email_penjual) REFERENCES PELANGGAN(email) ON UPDATE CASCADE ON DELETE RESTRICT);
```

```
d04=# CREATE TABLE TOKO (nama VARCHAR (100) NOT NULL, deskripsi TEXT, slogan VARCHAR(100), email_penjual VARCHAR(50) NOT
NULL, PRIMARY KEY (nama), FOREIGN KEY (email_penjual) REFERENCES PELANGGAN(email) ON UPDATE CASCADE ON DELETE RESTRICT)
;
CREATE TABLE
```

6. Membuat tabel JASA\_KIRIM dengan perintah

```
CREATE TABLE JASA_KIRIM (
    nama VARCHAR(100) NOT NULL,
    lama_kirim VARCHAR(10) NOT NULL,
    tarif NUMERIC(10, 2) NOT NULL,
    PRIMARY KEY (nama));
```

```
d04=# CREATE TABLE JASA_KIRIM (nama VARCHAR(100) NOT NULL, lama_kirim VARCHAR(10) NOT NULL, tarif NUMERIC(10, 2) NOT NUL
L, PRIMARY KEY (nama));
CREATE TABLE
```

7. Membuat tabel TOKO\_JASA\_KIRIM dengan perintah

```
CREATE TABLE TOKO_JASA_KIRIM (
    nama_toko VARCHAR(100) NOT NULL,
    jasa_kirim VARCHAR(100) NOT NULL,
    PRIMARY KEY (nama_toko, jasa_kirim),
    FOREIGN KEY (nama_toko) REFERENCES TOKO(nama) ON UPDATE CASCADE ON DELETE RESTRICT,
    FOREIGN KEY (jasa_kirim) REFERENCES JASA_KIRIM(nama) ON UPDATE CASCADE ON DELETE RESTRICT);
```

```
CREATE TABLE
d04=# CREATE TABLE TOKO_JASA_KIRIM (nama_toko VARCHAR(100) NOT NULL, jasa_kirim VARCHAR(100) NOT NULL, PRIMARY KEY (nama
_toko, jasa_kirim), FOREIGN KEY (nama_toko) REFERENCES TOKO(nama) ON UPDATE CASCADE ON DELETE RESTRICT, FOREIGN KEY (jas
a_kirim) REFERENCES JASA_KIRIM(nama) ON UPDATE CASCADE ON DELETE RESTRICT);
CREATE TABLE
```

8. Membuat tabel KATEGORI\_UTAMA dengan perintah

```
CREATE TABLE KATEGORI_UTAMA (
kode CHAR(3) NOT NULL,
nama VARCHAR(100) NOT NULL,
PRIMARY KEY (kode));
```

```
d04=# CREATE TABLE KATEGORI_UTAMA (kode CHAR(3) NOT NULL, nama VARCHAR(100) NOT NULL, PRIMARY KEY (kode));
CREATE TABLE
```

9. Membuat tabel SUB\_KATEGORI dengan perintah

```
CREATE TABLE SUB_KATEGORI (
kode CHAR(5) NOT NULL,
kode_kategori CHAR(3) NOT NULL,
nama VARCHAR(100) NOT NULL,
PRIMARY KEY (kode),
FOREIGN KEY (kode_kategori) REFERENCES KATEGORI_UTAMA(kode) ON UPDATE CASCADE ON
DELETE RESTRICT);
```

```
d04=# CREATE TABLE SUB_KATEGORI (kode CHAR(5) NOT NULL, kode_kategori CHAR(3) NOT NULL, nama VARCHAR(100) NOT NULL, PRIM
ARY KEY (kode), FOREIGN KEY (kode_kategori) REFERENCES KATEGORI_UTAMA(kode) ON UPDATE CASCADE ON DELETE RESTRICT);
CREATE TABLE
```

10. Membuat tabel PRODUK dengan perintah

```
CREATE TABLE PRODUK (
kode_produk CHAR(8) NOT NULL,
nama VARCHAR(100) NOT NULL,
harga NUMERIC(10, 2) NOT NULL,
deskripsi TEXT,
PRIMARY KEY (kode_produk));
```

```
d04=# CREATE TABLE PRODUK (kode_produk CHAR(8) NOT NULL, nama VARCHAR(100) NOT NULL, harga NUMERIC(10, 2) NOT NULL, desk
ripsi TEXT, PRIMARY KEY (kode_produk));
CREATE TABLE
```

11. Membuat tabel PRODUK\_PULSA dengan perintah

```
CREATE TABLE PRODUK_PULSA (
kode_produk CHAR(8) NOT NULL,
nominal INT NOT NULL, PRIMARY KEY (kode_produk),
FOREIGN KEY (kode_produk) REFERENCES PRODUK(kode_produk) ON UPDATE CASCADE ON
DELETE RESTRICT);
```

```
d04=# CREATE TABLE PRODUK_PULSA (kode_produk CHAR(8) NOT NULL, nominal INT NOT NULL, PRIMARY KEY (kode_produk), FOREIGN
KEY (kode_produk) REFERENCES PRODUK(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT);
CREATE TABLE
```

12. Membuat tabel SHIPPED\_PRODUK dengan perintah

```
CREATE TABLE SHIPPED_PRODUK (
    kode_produk CHAR(8) NOT NULL,
    kategori CHAR(5) NOT NULL,
    nama_toko VARCHAR(100) NOT NULL,
    is_asuransi BOOLEAN NOT NULL, stok INT NOT NULL,
    is_baru BOOLEAN NOT NULL,
    min_order INT NOT NULL,
    min_grosir INT NOT NULL,
    max_grosir INT NOT NULL,
    harga_grosir NUMERIC(10,2) NOT NULL,
    foto VARCHAR(100) NOT NULL,
    PRIMARY KEY(kode_produk),
    FOREIGN KEY(kode_produk) REFERENCES PRODUK(kode_produk) ON UPDATE CASCADE ON
    DELETE RESTRICT,
    FOREIGN KEY(kategori) REFERENCES SUB_KATEGORI(kode) ON UPDATE CASCADE ON DELETE
    RESTRICT,
    FOREIGN KEY(nama_toko) REFERENCES TOKO(nama) ON UPDATE CASCADE ON DELETE
    RESTRICT);
```

```
d04=# CREATE TABLE SHIPPED_PRODUK (kode_produk CHAR(8) NOT NULL, kategori CHAR(5) NOT NULL, nama_toko VARCHAR(100) NOT N
ULL, is_asuransi BOOLEAN NOT NULL, stok INT NOT NULL, is_baru BOOLEAN NOT NULL, min_order INT NOT NULL, min_grosir INT N
OT NULL, max_grosir INT NOT NULL, harga_grosir NUMERIC(10,2) NOT NULL, foto VARCHAR(100) NOT NULL, PRIMARY KEY(kode_produ
uk), FOREIGN KEY(kode_produk) REFERENCES PRODUK(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT, FOREIGN KEY(kategori)
 REFERENCES SUB_KATEGORI(kode) ON UPDATE CASCADE ON DELETE RESTRICT, FOREIGN KEY(nama_toko) REFERENCES TOKO(nama) ON UPD
ATE CASCADE ON DELETE RESTRICT);
CREATE TABLE
```

13. Membuat tabel TRANSAKSI\_SHIPPED dengan perintah

```
CREATE TABLE TRANSAKSI_SHIPPED (
    no_invoice CHAR(10) NOT NULL,
    tanggal DATE NOT NULL,
    waktu_bayar TIMESTAMP,
    status SMALLINT NOT NULL,
    total_bayar NUMERIC(10, 2) NOT NULL,
    email_pembeli VARCHAR(50) NOT NULL,
    nama_toko VARCHAR(100) NOT NULL,
    alamat_kirim TEXT NOT NULL,
    biaya_kirim NUMERIC(10, 2) NOT NULL,
    no_resi CHAR(16),
    nama_jasa_kirim VARCHAR(16) NOT NULL,
    PRIMARY KEY (no_invoice),
    FOREIGN KEY (email_pembeli) REFERENCES PELANGGAN(email) ON UPDATE CASCADE ON
    DELETE RESTRICT,
    FOREIGN KEY (nama_toko, nama_jasa_kirim) REFERENCES TOKO_JASA_KIRIM(nama_toko,
```

```
jasa_kirim) ON UPDATE CASCADE ON DELETE RESTRICT,
CONSTRAINT status_chk CHECK (status IN('1','2','3','4')));
```

```
d04=# CREATE TABLE TRANSAKSI_SHIPPED (no_invoice CHAR(10) NOT NULL, tanggal DATE NOT NULL, waktu_bayar TIMESTAMP, status SMALLINT NOT NULL, total_bayar NUMERIC(10, 2) NOT NULL, email_pembeli VARCHAR(50) NOT NULL, nama_toko VARCHAR(100) NOT NULL, alamat_kirim TEXT NOT NULL, biaya_kirim NUMERIC(10, 2) NOT NULL, no_resi CHAR(16), nama_jasa_kirim VARCHAR(16) NOT NULL, PRIMARY KEY (no_invoice), FOREIGN KEY (email_pembeli) REFERENCES PELANGGAN(email) ON UPDATE CASCADE ON DELETE RESTRICT, FOREIGN KEY (nama_toko, nama_jasa_kirim) REFERENCES TOKO_JASA_KIRIM(nama_toko, jasa_kirim) ON UPDATE CASCADE ON DELETE RESTRICT, CONSTRAINT status_chk CHECK (status IN('1','2','3','4')));
CREATE TABLE
```

14. Membuat tabel TRANSAKSI\_PULSA dengan perintah

```
CREATE TABLE TRANSAKSI_PULSA (
no_invoice CHAR(10) NOT NULL,
tanggal DATE NOT NULL,
waktu_bayar TIMESTAMP,
status SMALLINT,
total_bayar NUMERIC(10,2) NOT NULL,
email_pembeli VARCHAR(50) NOT NULL,
nominal INT NOT NULL,
nomor VARCHAR(20) NOT NULL,
kode_produk CHAR(8) NOT NULL,
PRIMARY KEY (no_invoice),
FOREIGN KEY (email_pembeli) REFERENCES PELANGGAN(email) ON UPDATE CASCADE ON DELETE RESTRICT,
FOREIGN KEY (kode_produk) REFERENCES PRODUK_PULSA(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT,
CONSTRAINT status_pulsa_chk CHECK (status IN ('1','2')));
```

```
d04=# CREATE TABLE TRANSAKSI_PULSA (no_invoice CHAR(10) NOT NULL, tanggal DATE NOT NULL, waktu_bayar TIMESTAMP, status SMALLINT, total_bayar NUMERIC(10,2) NOT NULL, email_pembeli VARCHAR(50) NOT NULL, nominal INT NOT NULL, nomor VARCHAR(20) NOT NULL, kode_produk CHAR(8) NOT NULL, PRIMARY KEY (no_invoice), FOREIGN KEY (email_pembeli) REFERENCES PELANGGAN(email) ON UPDATE CASCADE ON DELETE RESTRICT, FOREIGN KEY (kode_produk) REFERENCES PRODUK_PULSA(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT, CONSTRAINT status_pulsa_chk CHECK (status IN ('1','2'))
d04(# );
CREATE TABLE
```

15. Membuat tabel PROMO dengan perintah

```
CREATE TABLE PROMO (
id CHAR(6) NOT NULL,
deskripsi TEXT NOT NULL,
periode_awal DATE NOT NULL,
periode_akhir DATE NOT NULL,
```

```
kode VARCHAR(20) NOT NULL,  
PRIMARY KEY (id));
```

```
d04=# CREATE TABLE PROMO (id CHAR(6) NOT NULL, deskripsi TEXT NOT NULL, periode_awal DATE NOT NULL, periode_akhir DATE NOT NULL, kode VARCHAR(20) NOT NULL, PRIMARY KEY (id));  
CREATE TABLE  
d04=#
```

16. Membuat tabel PROMO\_PRODUK dengan perintah

```
CREATE TABLE PROMO_PRODUK (  
id_promo CHAR(6) NOT NULL,  
kode_produk CHAR(8) NOT NULL,  
PRIMARY KEY (id_promo, kode_produk),  
FOREIGN KEY (id_promo) REFERENCES PROMO(id) ON UPDATE CASCADE ON DELETE RESTRICT,  
FOREIGN KEY (kode_produk) REFERENCES PRODUK(kode_produk) ON UPDATE CASCADE ON  
DELETE RESTRICT);
```

```
d04=# CREATE TABLE PROMO_PRODUK (id_promo CHAR(6) NOT NULL, kode_produk CHAR(8) NOT  
NULL, PRIMARY KEY (id_promo, kode_produk), FOREIGN KEY (id_promo) REFERENCES PROMO  
(id) ON UPDATE CASCADE ON DELETE RESTRICT, FOREIGN KEY (kode_produk) REFERENCES PRO  
DUK(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT);  
CREATE TABLE
```

17. Membuat tabel ULASAN dengan perintah

```
CREATE TABLE ULASAN (  
email_pembeli VARCHAR(50) NOT NULL,  
kode_produk CHAR(8) NOT NULL,  
tanggal DATE NOT NULL,  
rating INT NOT NULL,  
komentar TEXT,  
PRIMARY KEY (email_pembeli, kode_produk),  
FOREIGN KEY (email_pembeli) REFERENCES PELANGGAN(email) ON UPDATE CASCADE ON  
DELETE RESTRICT,  
FOREIGN KEY (kode_produk) REFERENCES SHIPPED_PRODUK(kode_produk) ON UPDATE  
CASCADE ON DELETE RESTRICT);
```

```
d04=# CREATE TABLE ULASAN (email_pembeli VARCHAR(50) NOT NULL, kode_produk CHAR(8)  
NOT NULL, tanggal DATE NOT NULL, rating INT NOT NULL, komentar TEXT, PRIMARY KEY (e  
mail_pembeli, kode_produk), FOREIGN KEY (email_pembeli) REFERENCES PELANGGAN(email)  
ON UPDATE CASCADE ON DELETE RESTRICT, FOREIGN KEY (kode_produk) REFERENCES SHIPPED  
_PRODUK(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT);  
CREATE TABLE
```

18. Membuat tabel KOMENTAR\_DISKUSI dengan perintah

```
CREATE TABLE KOMENTAR_DISKUSI (  
pengirim VARCHAR(50) NOT NULL,
```

```
penerima VARCHAR(50) NOT NULL,  
waktu TIMESTAMP NOT NULL,  
komentar TEXT NOT NULL,  
PRIMARY KEY (pengirim, penerima, waktu), FOREIGN KEY (pengirim) REFERENCES  
PELANGGAN(email) ON UPDATE CASCADE ON DELETE RESTRICT,  
FOREIGN KEY (penerima) REFERENCES PELANGGAN(email) ON UPDATE CASCADE ON DELETE  
RESTRICT);
```

```
d04=# CREATE TABLE KOMENTAR_DISKUSI (pengirim VARCHAR(50) NOT NULL, penerima VARCHAR(50) NOT NULL, waktu TIMESTAMP NOT NULL, komentar TEXT NOT NULL, PRIMARY KEY (pengirim, penerima, waktu), FOREIGN KEY (pengirim) REFERENCES PELANGGAN(email) ON UPDATE CASCADE ON DELETE RESTRICT, FOREIGN KEY (penerima) REFERENCES PELANGGAN(email) ON UPDATE CASCADE ON DELETE RESTRICT);  
CREATE TABLE
```

19. Membuat tabel LIST\_ITEM dengan perintah `CREATE TABLE LIST_ITEM (no_invoice CHAR(10) NOT NULL, kode_produk CHAR(8) NOT NULL, berat INT NOT NULL, kuantitas INT NOT NULL, harga NUMERIC(10,2) NOT NULL, sub_total NUMERIC(10, 2) NOT NULL, PRIMARY KEY (no_invoice, kode_produk), FOREIGN KEY (no_invoice) REFERENCES TRANSAKSI_SHIPPED(no_invoice) ON UPDATE CASCADE ON DELETE RESTRICT, FOREIGN KEY (kode_produk) REFERENCES SHIPPED_PRODUK(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT);`

```
d04=# CREATE TABLE LIST_ITEM (no_invoice CHAR(10) NOT NULL, kode_produk CHAR(8) NOT NULL, berat INT NOT NULL, kuantitas INT NOT NULL, harga NUMERIC(10,2) NOT NULL, sub_total NUMERIC(10, 2) NOT NULL, PRIMARY KEY (no_invoice, kode_produk), FOREIGN KEY (no_invoice) REFERENCES TRANSAKSI_SHIPPED(no_invoice) ON UPDATE CASCADE ON DELETE RESTRICT, FOREIGN KEY (kode_produk) REFERENCES SHIPPED_PRODUK(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT);  
CREATE TABLE
```

20. Membuat tabel KERANJANG\_BELANJA dengan perintah `CREATE TABLE KERANJANG_BELANJA (pembeli VARCHAR(50) NOT NULL, kode_produk CHAR(8) NOT NULL, berat INT NOT NULL, kuantitas INT NOT NULL, harga NUMERIC(10,2) NOT NULL, sub_total NUMERIC(10,2) NOT NULL, PRIMARY KEY (pembeli, kode_produk), FOREIGN KEY(pembeli) REFERENCES PELANGGAN(email) ON UPDATE CASCADE ON DELETE RESTRICT, FOREIGN KEY(kode_produk) REFERENCES SHIPPED_PRODUK(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT);`

```
d04=# CREATE TABLE KERANJANG_BELANJA (pembeli VARCHAR(50) NOT NULL, kode_produk CHAR(8) NOT NULL, berat INT NOT NULL, kuantitas INT NOT NULL, harga NUMERIC(10,2) NOT NULL, sub_total NUMERIC(10,2) NOT NULL, PRIMARY KEY (pembeli, kode_produk), FOREIGN KEY(pembeli) REFERENCES PELANGGAN(email) ON UPDATE CASCADE ON DELETE RESTRICT, FOREIGN KEY(kode_produk) REFERENCES SHIPPED_PRODUK(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT);
CREATE TABLE
```

21. Menampilkan struktur tabel dengan perintah `\d NAMA_TABEL;`

a. `\d PENGGUNA;`

```
d04=# \d PENGGUNA;
      Table "tokokeren.pengguna"
 Column |          Type          | Modifiers
-----+---------------------+-----+
 email  | character varying(50) | not null
 password | character varying(20) | not null
 nama   | character varying(100) | not null
 jenis_kelamin | character(1) | not null
 tgl_lahir | date | not null
 no_telp  | character varying(20) | not null
 alamat   | text | not null
Indexes:
    "pengguna_pkey" PRIMARY KEY, btree (email)
Check constraints:
    "jenis_kelamin_chk" CHECK (jenis_kelamin = ANY (ARRAY['L'::bpchar, 'P'::bpchar]))
Referenced by:
    TABLE "pelanggan" CONSTRAINT "pelanggan_email_fkey" FOREIGN KEY (email) REFERENCES pengguna(email) ON UPDATE CASCADE ON DELETE RESTRICT
```

b. `\d PELANGGAN;`

```
d04=# \d PELANGGAN;
      Table "tokokeren.pelanggan"
 Column |          Type          | Modifiers
-----+-----+-----+
 email  | character varying(50) | not null
 is_penjual | boolean | not null
 nilai_reputasi | numeric(10,1) |
 poin   | integer |
Indexes:
    "pelanggan_pkey" PRIMARY KEY, btree (email)
Foreign-key constraints:
    "pelanggan_email_fkey" FOREIGN KEY (email) REFERENCES pengguna(email) ON UPDATE CASCADE ON DELETE RESTRICT
Referenced by:
    TABLE "keranjang_belanja" CONSTRAINT "keranjang_belanja_pembeli_fkey" FOREIGN KEY (pembeli) REFERENCES pelanggan(email) ON UPDATE CASCADE ON DELETE RESTRICT
    TABLE "komentar_diskusi" CONSTRAINT "komentar_diskusi_penerima_fkey" FOREIGN KEY (penerima) REFERENCES pelanggan(email) ON UPDATE CASCADE ON DELETE RESTRICT
    TABLE "komentar_diskusi" CONSTRAINT "komentar_diskusi_pengirim_fkey" FOREIGN KEY (pengirim) REFERENCES pelanggan(email) ON UPDATE CASCADE ON DELETE RESTRICT
    TABLE "toko" CONSTRAINT "toko_email_penjual_fkey" FOREIGN KEY (email_penjual) REFERENCES pelanggan(email) ON UPDATE CASCADE ON DELETE RESTRICT
    TABLE "transaksi_pulsa" CONSTRAINT "transaksi_pulsa_email_pembeli_fkey" FOREIGN KEY (email_pembeli) REFERENCES pelanggan(email) ON UPDATE CASCADE ON DELETE RESTRICT
    TABLE "transaksi_shipped" CONSTRAINT "transaksi_shipped_email_pembeli_fkey" FOREIGN KEY (email_pembeli) REFERENCES pelanggan(email) ON UPDATE CASCADE ON DELETE RESTRICT
    TABLE "ulasan" CONSTRAINT "ulasan_email_pembeli_fkey" FOREIGN KEY (email_pembeli) REFERENCES pelanggan(email) ON UPDATE CASCADE ON DELETE RESTRICT
```

c. `\d TOKO;`

```
d04=# \d TOKO;
      Table "tokokeren.toko"
 Column |          Type          | Modifiers
-----+-----+-----+
 nama   | character varying(100) | not null
 deskripsi | text |
 slogan  | character varying(100) |
 email_penjual | character varying(50) | not null
Indexes:
    "toko_pkey" PRIMARY KEY, btree (nama)
Foreign-key constraints:
    "toko_email_penjual_fkey" FOREIGN KEY (email_penjual) REFERENCES pelanggan(email) ON UPDATE CASCADE ON DELETE RESTRICT
Referenced by:
    TABLE "shipped_produk" CONSTRAINT "shipped_produk_nama_toko_fkey" FOREIGN KEY (nama_toko) REFERENCES toko(nama) ON UPDATE CASCADE ON DELETE RESTRICT
    TABLE "toko_jasa_kirim" CONSTRAINT "toko_jasa_kirim_nama_toko_fkey" FOREIGN KEY (nama_toko) REFERENCES toko(nama) ON UPDATE CASCADE ON DELETE RESTRICT
```

d. `\d JASA_KIRIM;`

```
d04=# \d JASA_KIRIM;
      Table "tokokeren.jasa_kirim"
      Column |          Type          | Modifiers
-----+-----+-----+
  nama   | character varying(100) | not null
 lama_kirim | character varying(10) | not null
 tarif    | numeric(10,2)        | not null
Indexes:
    "jasa_kirim_pkey" PRIMARY KEY, btree (nama)
Referenced by:
    TABLE "toko_jasa_kirim" CONSTRAINT "toko_jasa_kirim_jasa_kirim_fkey" FOREIGN KEY (jasa_kirim) REFERENCES jasa_kirim(nama) ON UPDATE CASCADE ON DELETE RESTRICT
```

e. `\d TOKO_JASA_KIRIM;`

```
d04=# \d TOKO_JASA_KIRIM;
      Table "tokokeren.toko_jasa_kirim"
      Column |          Type          | Modifiers
-----+-----+-----+
  nama_toko | character varying(100) | not null
  jasa_kirim | character varying(100) | not null
Indexes:
    "toko_jasa_kirim_pkey" PRIMARY KEY, btree (nama_toko, jasa_kirim)
Foreign-key constraints:
    "toko_jasa_kirim_jasa_kirim_fkey" FOREIGN KEY (jasa_kirim) REFERENCES jasa_kirim(nama) ON UPDATE CASCADE ON DELETE RESTRICT
    "toko_jasa_kirim_nama_toko_fkey" FOREIGN KEY (nama_toko) REFERENCES toko(nama) ON UPDATE CASCADE ON DELETE RESTRICT
Referenced by:
    TABLE "transaksi_shipped" CONSTRAINT "transaksi_shipped_nama_toko_fkey" FOREIGN KEY (nama_toko, nama_jasa_kirim) REFERENCES toko_jasa_kirim(nama_toko, jasa_kirim) ON UPDATE CASCADE ON DELETE RESTRICT
```

f. `\d KATEGORI_UTAMA;`

```
d04=# \d KATEGORI_UTAMA;
      Table "tokokeren.kategori_utama"
      Column |          Type          | Modifiers
-----+-----+-----+
  kode   | character(3)         | not null
  nama   | character varying(100) | not null
Indexes:
    "kategori_utama_pkey" PRIMARY KEY, btree (kode)
Referenced by:
    TABLE "sub_kategori" CONSTRAINT "sub_kategori.kode_kategori_fkey" FOREIGN KEY (kode_kategori) REFERENCES kategori_utama(kode) ON UPDATE CASCADE ON DELETE RESTRICT
```

g. `\d SUB_KATEGORI;`

```
d04=# \d SUB_KATEGORI;
      Table "tokokeren.sub_kategori"
      Column |          Type          | Modifiers
-----+-----+-----+
  kode   | character(5)         | not null
kode_kategori | character(3)         | not null
  nama   | character varying(100) | not null
Indexes:
    "sub_kategori_pkey" PRIMARY KEY, btree (kode)
Foreign-key constraints:
    "sub_kategori.kode_kategori_fkey" FOREIGN KEY (kode_kategori) REFERENCES kategori_utama(kode) ON UPDATE CASCADE ON DELETE RESTRICT
Referenced by:
    TABLE "shipped_produk" CONSTRAINT "shipped_produk_kategori_fkey" FOREIGN KEY (kategori) REFERENCES sub_kategori(kode) ON UPDATE CASCADE ON DELETE RESTRICT
```

h. \d PRODUK;

```
d04=# \d PRODUK;
      Table "tokokeren.produk"
 Column |          Type          | Modifiers
-----+-----+-----+
 kode_produk | character(8) | not null
 nama | character varying(100) | not null
 harga | numeric(10,2) | not null
 deskripsi | text | not null
Indexes:
    "produk_pkey" PRIMARY KEY, btree (kode_produk)
Referenced by:
    TABLE "produk_pulsa" CONSTRAINT "produk_pulsa_kode_produk_fkey" FOREIGN KEY (kode_produk) REFERENCES produk(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT
    TABLE "promo_produk" CONSTRAINT "promo_produk_kode_produk_fkey" FOREIGN KEY (kode_produk) REFERENCES produk(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT
    TABLE "shipped_produk" CONSTRAINT "shipped_produk_kode_produk_fkey" FOREIGN KEY (kode_produk) REFERENCES produk(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT
```

i. \d PRODUK\_PULSA;

```
d04=# \d PRODUK_PULSA;
      Table "tokokeren.produk_pulsa"
 Column |          Type          | Modifiers
-----+-----+-----+
 kode_produk | character(8) | not null
 nominal | integer | not null
Indexes:
    "produk_pulsa_pkey" PRIMARY KEY, btree (kode_produk)
Foreign-key constraints:
    "produk_pulsa_kode_produk_fkey" FOREIGN KEY (kode_produk) REFERENCES produk(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT
Referenced by:
    TABLE "transaksi_pulsa" CONSTRAINT "transaksi_pulsa_kode_produk_fkey" FOREIGN KEY (kode_produk) REFERENCES produk_pulsa(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT
```

j. \d SHIPPED PRODUK;

```
d04=# \d SHIPPED_PRODUK;
      Table "tokokeren.shipped_produk"
 Column |          Type          | Modifiers
-----+-----+-----+
 kode_produk | character(8) | not null
 kategori | character(5) | not null
 nama_toko | character varying(100) | not null
 is_asuransi | boolean | not null
 stok | integer | not null
 is_baru | boolean | not null
 min_order | integer | not null
 min_grosir | integer | not null
 max_grosir | integer | not null
 harga_grosir | numeric(10,2) | not null
 foto | character varying(100) | not null
Indexes:
    "shipped_produk_pkey" PRIMARY KEY, btree (kode_produk)
Foreign-key constraints:
    "shipped_produk_kategori_fkey" FOREIGN KEY (kategori) REFERENCES sub_kategori(kode) ON UPDATE CASCADE ON DELETE RESTRICT
    "shipped_produk_kode_produk_fkey" FOREIGN KEY (kode_produk) REFERENCES produk(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT
    "shipped_produk_nama_toko_fkey" FOREIGN KEY (nama_toko) REFERENCES toko(nama) ON UPDATE CASCADE ON DELETE RESTRICT
Referenced by:
    TABLE "keranjang_belanja" CONSTRAINT "keranjang_belanja_kode_produk_fkey" FOREIGN KEY (kode_produk) REFERENCES shipped_produk(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT
    TABLE "ulasan" CONSTRAINT "ulasan_kode_produk_fkey" FOREIGN KEY (kode_produk) REFERENCES shipped_produk(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT
```

k. `\d TRANSAKSI_SHIPPED;`

```
d04=# \d TRANSAKSI_SHIPPED;
      Table "tokokeren.transaksi_shipped"
 Column |          Type          | Modifiers
-----+---------------------+-----+
 no_invoice | character(10) | not null
 tanggal | date | not null
 waktubayar | timestamp without time zone | not null
 status | smallint | not null
 total_bayar | numeric(10,2) | not null
 email_pembeli | character varying(50) | not null
 nama_toko | character varying(100) | not null
 alamat_kirim | text | not null
 biaya_kirim | numeric(10,2) | not null
 no_resi | character(16) | not null
 nama_jasa_kirim | character varying(16) | not null
Indexes:
 "transaksi_shipped_pkey" PRIMARY KEY, btree (no_invoice)
Check constraints:
 "status_chk" CHECK (status = ANY (ARRAY['1'::smallint, '2'::smallint, '3'::smallint, '4'::smallint]))
Foreign-key constraints:
 "transaksi_shipped_email_pembeli_fkey" FOREIGN KEY (email_pembeli) REFERENCES pelanggan(email) ON UPDATE CASCADE ON DELETE RESTRICT
 "transaksi_shipped_nama_toko_fkey" FOREIGN KEY (nama_toko, nama_jasa_kirim) REFERENCES toko_jasa_kirim(nama_toko, jasa_kirim) ON UPDATE CASCADE ON DELETE RESTRICT
```

l. `\d TRANSAKSI_PULSA;`

```
d04=# \d TRANSAKSI_PULSA;
      Table "tokokeren.transaksi_pulsa"
 Column |          Type          | Modifiers
-----+-----+-----+
 no_invoice | character(10) | not null
 tanggal | date | not null
 waktubayar | timestamp without time zone | not null
 status | smallint | not null
 total_bayar | numeric(10,2) | not null
 email_pembeli | character varying(50) | not null
 nominal | integer | not null
 nomor | character varying(20) | not null
 kode_produk | character(8) | not null
Indexes:
 "transaksi_pulsa_pkey" PRIMARY KEY, btree (no_invoice)
Check constraints:
 "status_pulsa_chk" CHECK (status = ANY (ARRAY['1'::smallint, '2'::smallint]))
Foreign-key constraints:
 "transaksi_pulsa_email_pembeli_fkey" FOREIGN KEY (email_pembeli) REFERENCES pelanggan(email) ON UPDATE CASCADE ON DELETE RESTRICT
 "transaksi_pulsa_kode_produk_fkey" FOREIGN KEY (kode_produk) REFERENCES produk_pulsa(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT
```

m. `\d PROMO;`

```
d04=# \d PROMO;
      Table "tokokeren.promo"
 Column |          Type          | Modifiers
-----+-----+-----+
 id | character(6) | not null
 deskripsi | text | not null
 periode_awal | date | not null
 periode_akhir | date | not null
 kode | character varying(20) | not null
Indexes:
 "promo_pkey" PRIMARY KEY, btree (id)
Referenced by:
 TABLE "promo_produk" CONSTRAINT "promo_produk_id_promo_fkey" FOREIGN KEY (id_promo) REFERENCES promo(id) ON UPDATE CASCADE ON DELETE RESTRICT
```

n. `\d PROMO_PRODUK;`

```
d04=# \d PROMO_PRODUK;
      Table "tokokeren.promo_produk"
      Column |          Type          | Modifiers
-----+-----+-----+
  id_promo | character(6) | not null
  kode_produk | character(8) | not null
Indexes:
  "promo_produk_pkey" PRIMARY KEY, btree (id_promo, kode_produk)
Foreign-key constraints:
  "promo_produk_id_promo_fkey" FOREIGN KEY (id_promo) REFERENCES promo(id) ON UPDATE CASCADE ON DELETE RESTRICT
  "promo_produk_kode_produk_fkey" FOREIGN KEY (kode_produk) REFERENCES produk(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT
```

o. `\d ULASAN;`

```
d04=# \d ULASAN;
      Table "tokokeren.ulasan"
      Column |          Type          | Modifiers
-----+-----+-----+
 email_pembeli | character varying(50) | not null
  kode_produk | character(8) | not null
    tanggal | date | not null
   rating | integer | not null
 komentar | text | not null
Indexes:
  "ulasan_pkey" PRIMARY KEY, btree (email_pembeli, kode_produk)
Foreign-key constraints:
  "ulasan_email_pembeli_fkey" FOREIGN KEY (email_pembeli) REFERENCES pelanggan(email) ON UPDATE CASCADE ON DELETE RESTRICT
  "ulasan_kode_produk_fkey" FOREIGN KEY (kode_produk) REFERENCES shipped_produk(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT
```

p. `\d KOMENTAR_DISKUSI;`

```
d04=# \d KOMENTAR_DISKUSI;
      Table "tokokeren.komentar_diskusi"
      Column |          Type          | Modifiers
-----+-----+-----+
 pengirim | character varying(50) | not null
 penerima | character varying(50) | not null
    waktu | timestamp without time zone | not null
 komentar | text | not null
Indexes:
  "komentar_diskusi_pkey" PRIMARY KEY, btree (pengirim, penerima, waktu)
Foreign-key constraints:
  "komentar_diskusi_penerima_fkey" FOREIGN KEY (penerima) REFERENCES pelanggan(email) ON UPDATE CASCADE ON DELETE RESTRICT
  "komentar_diskusi_pengirim_fkey" FOREIGN KEY (pengirim) REFERENCES pelanggan(email) ON UPDATE CASCADE ON DELETE RESTRICT
```

q. `\d KERANJANG_BELANJA;`

```
d04=# \d KERANJANG_BELANJA;
      Table "tokokeren.keranjang_belanja"
      Column |          Type          | Modifiers
-----+-----+-----+
  pembeli | character varying(50) | not null
  kode_produk | character(8) | not null
    berat | integer | not null
  kuantitas | integer | not null
    harga | numeric(10,2) | not null
 sub_total | numeric(10,2) | not null
Indexes:
  "keranjang_belanja_pkey" PRIMARY KEY, btree (pembeli, kode_produk)
Foreign-key constraints:
  "keranjang_belanja_kode_produk_fkey" FOREIGN KEY (kode_produk) REFERENCES shipped_produk(kode_produk) ON UPDATE CASCADE ON DELETE RESTRICT
  "keranjang_belanja_pembeli_fkey" FOREIGN KEY (pembeli) REFERENCES pelanggan(email) ON UPDATE CASCADE ON DELETE RESTRICT
```

## MENAMPILKAN ISI TABEL

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Random Data Generation menggunakan bantuan bahasa pemrograman Python, Mockaroo.com serta bahasa pemrograman Ruby

Menampilkan isi dalam setiap tabel yang telah dimasukkan data dengan perintah : [SELECT \\* FROM NAMA\\_TABLE;](#)

### 1. PENGGUNA

d04=# SELECT * FROM PENGGUNA;	email	password	alamat	nama	jenis_kelamin	tgl_lahir	no_telp
fpavie0@irs.gov	So4tBqn0t7kc	Flossy Pavie	ansons no. 10, San Salvador	P	1983-08-01	85887517620	Jl. H
fcrone1@addtoany.com	7AnDJTV	Foster Crone	evada no. 748, Warudoyong	L	1964-05-14	89429355210	Jl. N
mbompas2@netvibes.com	JjhOWmrIbOz3	Meredith Bompas	apple no. 247, Pasrur	L	1950-09-13	80559691121	Jl. M
droyce3@vinaora.com	hhC6JbWUzUW	Dalis Royce	ivision no. 203, Batakte	L	1991-04-30	85164747642	Jl. D
utternut no. 865, Fangtang	oPuB4wm	Aura Binnes	abinnes6o@pcworld.com	P	1934-03-17	84313290763	Jl. L
akewood no. 42, Avarua	WGGMjBz6	Lowell Eason	leason6p@wufoo.com	P	1976-10-22	86042741789	Jl. N
elson no. 708, Rumelange L-3755	9Vn14dLw4la	Meade Steggals	msteggals6q@ox.ac.uk	P	1991-06-24	80200637897	Jl. C
rowley no. 687, Suicheng	gT9MSyrPD	Pauline McCague	pmccague6r@a8.net	L	1976-09-01	88066108729	Jl. C
rtarbert1@posterous.com	YDdW7mGuMV1	Robinetta Tarbert	ayridge no. 482, Zuitou	L	2004-09-12	82915347409	Jl. W
rbrandenburg2@apple.com	QyDSasnQj	Ranee Brandenburg	rbrandenburg2@apple.com	P	1953-12-31	81148042572	Jl. L
akeland no. 507, Korczyna 38-420	bHl0eDl35n	Ringo Deere	rdeere3@deviantart.com	L	1947-02-07	86530039085	Jl. W
arbler no. 773, Suraabad	XqriRmiFm08	Mariele Maraga	mmaraga4@timesonline.co.uk	L	1950-10-18	82388377984	Jl. A
lgoma no. 306, Örnsköldsvik 891 30	(355 rows)						

### 2. PELANGGAN

```
d04=# SELECT * FROM PELANGGAN;
      email      | is_penjual | nilai_reputasi | poin
-----+-----+-----+-----+
atitterrell0@pagesperso-orange.fr | f          | 922
gcopes1@earthlink.net | f          | 572
bfalshaw2@about.me | f          | 565
gjanning3@opensource.org | f          | 87
dhurne4@nydailynews.com | f          | 831
mgarric5@amazon.de | f          | 946
amardling6@typepad.com | f          | 882
cbeaman7@instagram.com | f          | 249
hbornn8@sakura.ne.jp | f          | 542
oernshaw9@ycombinator.com | f          | 522
castlesa@paginegialle.it | f          | 205
ebridgwoodb@fotki.com | f          | 5
-----+-----+-----+-----+
wnotman6v@istockphoto.com | f          | 76
zbaybutt6w@cafepress.com | f          | 244
olindeboom6x@adobe.com | f          | 16
fpavie0@irs.gov | t          | 4.5
fcrone1@addtoany.com | t          | 4.6
mbompas2@netvibes.com | t          | 2.9
droyce3@vinaora.com | t          | 1.0
krubberts4@jiathis.com | t          | 3.7
dshowering5@elegantthemes.com | t          | 1.4
ltootin6@livejournal.com | t          | 2.3
ssinnatt7@narod.ru | t          | 2.8
smaiden8@forbes.com | t          | 4.5
vback9@tamu.edu | t          | 1.4
-----+-----+-----+-----+
sjobern2j@mozilla.org | t          | 4.3
jeakley2k@yolasite.com | t          | 3.6
jadamsky2l@constantcontact.com | t          | 0.7
acheetam2m@is.gd | t          | 4.9
dbeddoes2n@alibaba.com | t          | 4.3
dswansborough2o@harvard.edu | t          | 3.1
hfoley2p@istockphoto.com | t          | 3.0
rboffey2q@ebay.co.uk | t          | 2.6
mskaife2r@ca.gov | t          | 2.9
-----+-----+-----+-----+
(350 rows)
```

### 3. TOKO

nama	deskripsi	slogan	
email_penjual	lokasi		
Customer-focused Kids nsborough2@harvard.edu	Phased systemic capability   Jl. Parkside no. 24, Marieville J3M   Enterprise-wide context-sensitive workforce	engage wireless partnerships	dswa
installation Computers lum26@jiathis.com	Jl. South no. 545, Pontevedra 1761   Cross-group methodical infrastructure	exploit killer metrics	acal
non-volatile Games ne1@addtoany.com	Jl. Steensland no. 685, Cercany 257 22	enhance virtual relationships	fcro
Customizable Shoes 17@mozilla.com	Secured 3rd generation function   Oxford no. 464, Maintang	morph distributed methodologies	oben
yard18@springer.com			
Compatible Outdoors ringtonq@bbb.org	Jl. Texas no. 850, Raduzhnyy 601380   Virtual attitude-oriented system engine	brand clicks-and-mortar vortals	cfar
grid-enabled Music ore1w@ucoz.ru	Jl. Loomis no. 979, Rennes 35033 CEDEX 9   Visionary encompassing paradigm	recontextualize value-added e-markets	cduf
Robust Home istoforo@house.gov	Jl. Prentice no. 979, Lae 96970   Persistent foreground parallelism	cultivate e-business solutions	lchr
Ameliorated Movies canson2@mayoclinic.com	Jl. Sycamore no. 749, Mogi Guacu 13840-000   Stand-alone tertiary open architecture	seize e-business bandwidth	cdun
Business-focused Jewelry sope2@yellowpages.com	Jl. Di Loreto no. 486, Bila   Streamlined encompassing archive	scale one-to-one applications	djes
Quality-focused Music derin@ucoz.ru	Jl. Vidon no. 987, Santa Maria Chiquimula 08006   Public-key radical projection	strategize interactive synergies	vpow
ey2p@istockphoto.com			
asymmetric Baby chke22@java.com	Jl. Arkansas no. 962, Nong Khae 18140   Secured analyzing Graphical User Interface	enhance web-enabled platforms	jpas
emulation Sports derin@fotki.com	Jl. Hoepker no. 557, Malasila 5507   Down-sized intermediate emulation	syndicate vertical infomediaries	tmea
software Garden ley2b@dagondesign.com	Jl. Maple no. 955, Hudson Bay K2J   Customizable multimedia collaboration	reintermediate plug-and-play e-tailers	hsea
project Computers tin6@livejournal.com	Jl. Shasta no. 531, Vilque   Universal value-added complexity	streamline B2B e-tailers	ltoo
national Outdoors ore1w@ucoz.ru	Jl. Eggendart no. 421, Belyye Berega 241902   Phased contextually-based middleware	aggregate B2B action-items	cduf
mission-critical Baby isletq@mayoclinic.com	Jl. Melody no. 550, Cinangka   Re-engineered object-oriented protocol	whiteboard innovative synergies	skle
frame Beauty ckhill27@skyrock.com	Jl. O'Neill no. 893, Savannakht   Adaptive fresh-thinking standardization	morph sticky e-business	cbri
(100 rows)	Jl. Hermina no. 612, Aby 616 32		

### 4. JASA\_KIRIM

nama	lama_kirim	tarif
JNE REGULER	1-3	8000.00
JNE YES	1	15000.00
JNE OKE	2-4	5000.00
TIKI REGULER	1-3	9000.00
POS PAKET BIASA	1-3	7000.00
POS PAKET KILAT	1-2	12000.00
WAHANA	1-3	8000.00
J&T EXPRESS	1-2	14000.00
PAHALA	2-3	7000.00
LION PARCEL	1-3	10000.00
(10 rows)		

### 5. TOKO\_JASA\_KIRIM

nama_toko	jasa_kirim
mission-critical Baby	WAHANA
Customer-focused Kids	POS PAKET BIASA
installation Computers	POS PAKET BIASA
non-volatile Games	TIKI REGULER
Customizable Shoes	JNE YES
holistic Shoes	JNE YES
bottom-line Computers	J&T EXPRESS
Re-contextualized Automotive	WAHANA
Future-proofed Toys	TIKI REGULER
instruction set Beauty	POS PAKET KILAT
reciprocal Health	JNE YES
actuating Outdoors	LION PARCEL
frame Beauty	POS PAKET BIASA
conglomeration Jewelery	WAHANA
empowering Beauty	JNE REGULER
client-driven Garden	WAHANA
national Garden	WAHANA
analyzer Computer	JNE REGULER
bottom-line Games	TIKI REGULER
Stand-alone Music	JNE YES
capacity Electronics	JNE REGULER
asymmetric Baby	WAHANA
emulation Sports	JNE OKE
software Garden	JNE OKE
project Computers	J&T EXPRESS
national Outdoors	POS PAKET KILAT
(100 rows)	

## 6. KATEGORI\_UTAMA

```
d04=# SELECT * FROM KATEGORI_UTAMA;
kode |          nama
-----+-----
K01  | Fashion Wanita
K02  | Fashion Pria
K03  | Fashion Muslim
K04  | Fashion Anak
K05  | Kecantikan
K06  | Kesehatan
K07  | Ibu & Bayi
K08  | Rumah Tangga
K09  | Handphone & Tablet
K10  | Laptop & Aksesoris
K11  | Komputer & Aksesoris
K12  | Elektronik
K13  | Kamera, Foto & Video
K14  | Otomotif
K15  | Olahraga
K16  | Film, Musik & Game
K17  | Dapur
K18  | Office & Stationery
K19  | Souvenir, Kado & Hadiah
K20  | Mainan & Hobi
K21  | Makanan & Minuman
K22  | Buku
(22 rows)
```

## 7. SUB\_KATEGORI

```
d04=# SELECT * FROM SUB_KATEGORI;
kode | kode_kategori |          nama
-----+-----+-----
SK001 | K01          | Atasan
SK002 | K01          | Celana
SK003 | K01          | Dress
SK004 | K01          | Outerwear
SK005 | K01          | Setelan
SK006 | K01          | Batik Wanita
SK007 | K01          | Pakaian Dalam Wanita
SK008 | K01          | Tas
SK009 | K01          | Sepatu
SK010 | K01          | Jam Tangan
SK011 | K01          | Perhiasan
SK012 | K01          | Aksesoris
SK013 | K01          | Aksesoris Rambut
SK014 | K01          | Perlengkapan Couple
SK015 | K01          | Baju Tidur
SK016 | K01          | Perlengkapan Jahit
SK017 | K02          | Jam Tangan
SK018 | K02          | Baju Tidur
SK019 | K02          | Pakaian Dalam Pria
SK020 | K02          | Outerwear
```

SK038	K04	Sepatu Anak Perempuan
SK039	K04	Aksesoris Rambut Anak
SK040	K04	Aksesoris Anak
SK041	K04	Tas Anak
SK042	K04	Sepatu Anak Laki-laki
SK043	K04	Pakaian Anak Perempuan
SK044	K04	Pakaian Anak Laki-Laki
SK045	K05	Kosmetik
SK046	K05	Perawatan Wajah
SK047	K05	Perawatan Tangan, Kaki
SK048	K05	Perawatan Rambut
SK049	K05	Perawatan Mata
SK050	K05	Styling Rambut
SK051	K05	Peralatan Make Up
SK052	K05	Grooming
SK053	K05	Mandi & Perawatan Tubuh
SK054	K06	Telinga
SK055	K06	Kesehatan Wanita
SK056	K06	Obat & Alat Kesehatan
SK057	K06	Health Products
SK058	K06	Kesehatan Gigi & Mulut
SK059	K06	Diet & Vitamin
SK060	K06	Kesehatan Mata
SK068	K12	TV
SK069	K13	Kamera
SK070	K14	Aksesoris Mobil
SK071	K15	Basket
SK072	K16	Musik
SK073	K17	Peralatan Dapur
SK074	K18	Alat Tulis
SK075	K19	Boneka
SK076	K20	Figure
SK077	K21	Makanan
SK078	K21	Minuman
SK079	K22	Buku Sekolah
SK080	K22	Novel Sastra
(80 rows)		

## 8. PRODUK

d04=# SELECT * FROM PRODUK;	kode_produk	nama	harga	deskripsi
P00001	Pulsa Simpati kuota 3 GB malam	7000.00   Pulsa Simpati kuota 3 GB malam		
P00002	Pulsa Bolt kuota 3 GB	12000.00   Pulsa Bolt kuota 3 GB		
P00003	Pulsa Bolt	27000.00   Pulsa Bolt		
P00004	Pulsa Three	52000.00   Pulsa Three		
P00005	Pulsa Three	102000.00   Pulsa Three bonus kuota 3 GB		
P00006	Pulsa Telkomsel	152000.00   Pulsa Telkomsel		
P00007	Pulsa Axis	202000.00   Pulsa Axis		
P00008	Pulsa Telkomsel paket WiFi	7000.00   Pulsa Telkomsel paket WiFi		
P00009	Pulsa Axis paket SMS sesama	12000.00   Pulsa Axis paket SMS sesama		
P000010	Pulsa Simpati	27000.00   Pulsa Simpati		
P000011	Pulsa Telkomsel kuota 5 GB	52000.00   Pulsa Telkomsel kuota 5 GB		
P000012	Pulsa Simpati	102000.00   Pulsa Simpati bonus kuota 4 GB malam		
P000013	Pulsa Smart Fren kuota 5 GB	152000.00   Pulsa Smart Fren kuota 5 GB		
P000014	Pulsa Simpati paket nelpon sesama	202000.00   Pulsa Simpati paket nelpon sesama		
P000015	Pulsa Bolt paket nelpon puas	7000.00   Pulsa Bolt paket nelpon puas		

m. Nulla tellus.		Duis bibendum. Morbi non quam nec dui luctus	
S0000218	multimedia Bawahan Yellow	3209000.00   multimedia Bawahan Yellow Nullam sit amet t	
ementum ligula vehicula consequat. Morbi a ipsum. Integer a nibh.			
S0000147	multimedia Kamera Goldenrod	785000.00   multimedia Kamera Goldenrod Mauris enim leo	
cus sed, vestibulum sit amet, cursus id, tuis. Integer aliquet, massa id lobortis convallis, tortor risus dapibus augue, vel accu			
ellus nisi eu orci. Mauris lacinia sapien quis libero.			
	+		
e erat eros, viverra eget, congue eget, semper rutrum, nulla. Nunc purus.		Quisque porta volutpat erat. Quisqu	
	+		
		+	
(450 rows)			

## 9. PRODUK\_PULSA

d04=# SELECT * FROM PRODUK_PULSA;	kode_produk   nominal
P00001	5
P00002	10
P00003	25
P00004	50
P00005	100
P00006	150
P00007	200
P00008	5
P00009	10
P000010	25
P000011	50
P000012	100
P000013	150
P000014	200
P000015	5
P000016	10
P000017	25
P000018	50
P000019	100
P000020	150
P000099	5
P0000100	10
P0000101	25
P0000102	50
P0000103	100
P0000104	150
P0000105	200
P0000106	5
P0000107	10
P0000108	25
P0000109	50
P0000110	100
P0000111	150
P0000112	200

P0000185	25
P0000186	50
P0000187	100
P0000188	150
P0000189	200
P0000190	5
P0000191	10
P0000192	25
P0000193	50
P0000194	100
P0000195	150
P0000196	200
P0000197	5
P0000198	10
P0000199	25
P0000200	50
(200 rows)	

## 10. SHIPPED\_PRODUK

d04=# SELECT * FROM SHIPPED_PRODUK;		kode_produk   kategori	nama_toko	foto	is_asuransi	stok	is_baru	min_order	min_grosir	max_grosir
S00001	SK056	explicit Clothing	f	342   t		5		48		
65	889230.00	Sapien.png								
S00002	SK040	analyzer Computer	t	521   t		3		24		
98	369089.00	NecSemDuis.png								
S00003	SK050	asynchronous Industrial	t	406   t		10		41		
96	421035.00	EtUltrices.gif								
S00004	SK068	Robust Garden	t	943   t		15		38		
84	791828.00	NonMattis.gif								
S00005	SK022	Organic Electronics	t	864   t		6		21		
67	499721.00	UtNullaSed.tiff								
S00006	SK040	Future-proofed Toys	f	517   f		20		23		
52	959614.00	InEst.tiff								
S00007	SK017	empowering Books	f	666   f		9		21		
82	833877.00	Vel.tiff								
S00008	SK059	tertiary Home	t	195   t		7		43		
97	781899.00	FaucibusOrci.gif								
S00009	SK073	empowering Electronics	f	102   t		9		24		
74	619377.00	AccumsanDio.png								
S000010	SK062	frame Computers	f	366   f		17		26		
93	781012.00	PurusPhasellus.png								
(250 rows)										
S0000243	SK004	radical Movies	t	754   f		9		32		
52	944615.00	Nascentur.jpeg								
S0000244	SK042	national Garden	f	374   f		8		24		
81	188148.00	Malesuada.jpeg								
S0000245	SK023	Advanced Baby	f	175   t		14		45		
68	671059.00	SedLacusMorbi.jpeg								
S0000246	SK040	software Books	f	472   t		18		20		
81	980685.00	EratVestibulumSed.tiff								
S0000247	SK009	Stand-alone Outdoors	f	622   t		4		42		
53	527345.00	Vulputate.tiff								
S0000248	SK046	Organic Electronics	f	663   f		15		28		
53	917828.00	VestibulumEgetVulputate.jpeg								
S0000249	SK060	software Garden	t	430   t		9		43		
54	564002.00	NonInterdum.jpeg								
S0000250	SK012	empowering Beauty	t	186   f		12		48		
60	250075.00	UltricesPosuereCubilia.gif								
(250 rows)										

## 11. TRANSAKSI\_SHIPPED

no_invoice	tanggal	waktu_bayar	status	total_bayar	email_pembeli	nama_toko	
		alamat_kirim			biaya_kirim	no_resi	nama_jasa_kirim
V0000334	2017-02-27	2017-03-03 08:22:00	2	9191000.00	hluney5c@bloglovin.com	Advanced Baby	
	Jl. Mayfield no. 17, Zurich 8023			68.00	ZRHZHG63738188416	LION PARCEL	
V000001	2016-08-14	2016-08-17 03:29:00	4	4074000.00	bbr Bryant56@bbc.co.uk	solution-oriented Electr	
onics	Jl. West no. 25, Kitango 6407			20.00	KTG5535411741553	J&T EXPRESS	
V000002	2016-05-08	2016-05-12 08:08:00	2	6690000.00	mpietasch5y@nsw.gov.au	analyzing Computers	
	Jl. Oxford no. 828, Huangzhan			40.00	HAZ3394962641339	PAHALA	
V000003	2016-03-22	2016-03-25 10:32:00	2	1123000.00	mcrichmer58@mac.com	Future-proofed Toys	
	Jl. Reindahl no. 346, Villa Nueva 5903			63.00	VL 8672468541867	WAHANA	
V000004	2016-01-01	2016-01-03 02:57:00	4	3756000.00	bcradick3t@quidoo.com	installation Computers	
	Jl. Sloan no. 507, Pajak			45.00	PJ43071615414307	PAHALA	
V000005	2016-09-06	2016-09-09 16:06:00	4	6938000.00	mpowney2s@over-blog.com	project Tools	
	Jl. Dahle no. 585, Shengmi			78.00	SEM389713741389	TIKI REGULER	
V000006	2017-03-28	2017-03-30 17:23:00	3	7286000.00	mquittonden51@acquirethisname.com	project Computers	
	Jl. Little Fleur no. 463, Komes			51.00	KM1181209411181	JNE YES	
V000007	2016-08-27	2016-08-31 17:36:00	3	5267000.00	nwemme2e@meetup.com	reciprocal Health	
	Jl. 5th no. 464, Pôsto Fiscal Rolim de Moura 97755-000			51.00	PS 4149132741414	TIKI REGULER	
V000008	2016-04-28	2016-04-30 07:31:00	2	9458000.00	rexley2@barnesandnoble.com	Centralized Home	
	Jl. Hallows no. 71, Cabcaben 2133			62.00	CBB4968281641496	POS PAKET BIASA	
V000009	2016-04-25	2016-04-29 01:14:00	2	5860000.00	jhaggerstone6n@cisco.com	monitoring Books	
	Jl. Loftsgordon no. 111, Kandun			11.00	KNN3486451641348	TIKI REGULER	
V000010	2016-06-03	2016-06-05 14:20:00	4	2078000.00	lfendley@amazon.co.uk	functionalities Toys	
	Jl. Village Green no. 474, Donggaocun			10.00	DNA5563694641556	POS PAKET KILAT	
V0000243	2016-01-04	2016-01-06 03:15:00	3	6147000.00	agatrell149@slate.com	Customizable Shoes	
	Jl. Mendota no. 527, Anyar			46.00	AY24377815412437	WAHANA	
V0000244	2016-09-16	2016-09-18 12:53:00	2	3351000.00	pmccague6r@as.net	Diverse Movies	
	Jl. Upham no. 346, Pervomayske			85.00	PRM08303804741083	POS PAKET KILAT	
V0000245	2017-02-15	2017-02-19 20:02:00	4	4462000.00	kde3g@ebay.co.uk	algorithm Music	
	Jl. Kropf no. 471, Yanshi			77.00	YNI3698817841369	JNE REGULER	
V0000246	2016-04-27	2016-05-01 15:04:00	2	9209000.00	dbeagin5d@barnesandnoble.com	task-force Movies	
	Jl. Blaine no. 658, Longlou			27.00	LN09949671641994	TIKI REGULER	
V0000247	2016-05-05	2016-05-08 10:48:00	3	8290000.00	ffarncomebe5@theguardian.com	system engine Computers	
	Jl. Onsgard no. 257, Doña Remedios Trinidad 3009			5.00	DñR8035442641803	JNE REGULER	
V0000248	2016-05-13	2016-05-16 08:39:00	4	3984000.00	lbottom1b@blinklist.com	Implemented Games	
	Jl. Briar Crest no. 782, Pingyang			24.00	PNA1778213641177	J&T EXPRESS	
V0000249	2016-09-23	2016-09-27 08:17:00	3	8988000.00	eduddle34@redcross.org	circuit Automotive	
	Jl. Transport no. 975, San Fernando 8711			51.00	SNE2468164741246	POS PAKET KILAT	
V0000250	2016-09-22	2016-09-24 23:33:00	4	2446000.00	lcrichley19@noaa.gov	Stand-alone Outdoors	
	Jl. Hauk no. 724, Kurnmuk			49.00	KRK8817854741881	PAHALA	
V0000251	2016-01-15	2016-01-17 00:13:00	4	4695000.00	rdamettixz@narod.ru	software Garden	
	Jl. Holmberg no. 847, Xiumei			15.00	XUI198162541918	JNE YES	
V0000252	2016-10-28		1	9552000.00	md3c@about.com	software Garden	
	Jl. Aberg no. 591, Jega			31.00	JG70298677417029	PAHALA	
V0000253	2017-03-25	2017-03-28 09:48:00	2	8655000.00	rmullin19@google.co.uk	Implemented Games	
	Jl. Browning no. 304, Port Elizabeth			1.00	PRE3925340941392	WAHANA	
V0000254	2016-09-24		1	9799000.00	sokeenan23@csmonitor.com	tertiary Home	
	Jl. Grayhawk no. 507, Lees Summit 64082			99.00	LESM052482747415	TIKI REGULER	
V0000255	2017-02-14	2017-02-17 08:16:00	2	8396000.00	evinasif@stanford.edu	analyzing Computers	
	Jl. Onsgard no. 668, Jilong			88.00	JLG1020607841102	POS PAKET BIASA	
V0000256	2016-05-28	2016-05-31 05:20:00	3	8990000.00	mpietasch5y@nsw.gov.au	software Books	
V0000489	2016-09-07	2016-09-11 23:58:00	3	5097000.00	mhallagan3m@psu.edu	Face to face Electronics	
	Jl. 5th no. 299, Hidalgo 96980			76.00	HDGVER2172923741	TIKI REGULER	
V0000490	2016-07-25	2016-07-29 07:34:00	2	3437000.00	fxerollz@squarespace.com	Stand-alone Music	
	Jl. Fisk no. 952, Shangpai			29.00	SAP0702349641070	POS PAKET BIASA	
V0000491	2016-08-23		1	2335000.00	rharcarse54@buzzfeed.com	groupware Books	
	Jl. 8th no. 793, Milwaukee 53234			62.00	MLUWI34327917413	POS PAKET BIASA	
V0000492	2016-06-02	2016-06-04 05:57:00	3	9215000.00	mcrichmer58@mac.com	radical Movies	
	Jl. Oak no. 894, Vikbolandet 610 25			82.00	VKLE240748464124	PAHALA	
V0000493	2016-09-17	2016-09-19 01:03:00	3	7903000.00	uguiducci43@istockphoto.com	instruction set Beauty	
	Jl. Ryan no. 706, Yuanjue			6.00	YAU4024704741402	LION PARCEL	
V0000494	2016-08-28	2016-09-01 04:18:00	2	4106000.00	mvedikhov31@linkedin.com	installation Computers	
	Jl. Heffernan no. 353, Alepoú			69.00	AEU4297532741429	J&T EXPRESS	
V0000495	2017-01-13	2017-01-16 04:19:00	2	4247000.00	blemasney2w@elp.com	frame Beauty	
	Jl. Fisk no. 965, Magallanes 8604			23.00	MGL3711824841371	JNE YES	
V0000496	2017-03-20	2017-03-23 01:16:00	3	17000.00	ggamesonx@webs.com	Organic Electronics	
	Jl. Sommers no. 687, Petrolina de Goiás 75480-000			8.00	PTL6952799841695	TIKI REGULER	
V0000497	2016-04-07	2016-04-10 06:23:00	4	2792000.00	fxerollz@squarespace.com	reciprocal Health	
	Jl. Kennedy no. 744, Ocala 34479			73.00	OAFL712010064171	J&T EXPRESS	
V0000498	2016-06-23	2016-06-25 03:51:00	2	551000.00	ggamesonx@webs.com	functionalities Home	
	Jl. Becker no. 48, LaPij			5.00	L96835666419683	POS PAKET KILAT	
V0000499	2016-10-26	2016-10-28 23:18:00	3	570000.00	mquittonden51@acquirethisname.com	approach Kids	
	Jl. Morning no. 422, Shishan			75.00	SIA1393257741139	J&T EXPRESS	
V0000500	2016-06-09	2016-06-13 12:41:00	4	5351000.00	bbryant56@bbc.co.uk	non-volatile Games	
	Jl. Roxbury no. 786, Dipayal			28.00	DPA1016745641101	J&T EXPRESS	

(500 rows)

## 12. TRANSAKSI\_PULSA

no_invoice	tanggal	waktu_bayar	status	total_bayar	email_pembeli	nominal
nomor	kode_produk					
V00001	2017-01-11	2017-01-14 23:04:00	2	7000.00	hgisborne28@slashdot.org	5   88
627968524	P00008					
V00002	2016-05-22	2016-05-24 16:13:00	2	102000.00	rosesnanes@nationalgeographic.com	100   87
738354516	P000082					
V00003	2016-07-03		1	202000.00	hstapleton38@geocities.com	200   87
348158563	P000063					
V00004	2016-10-23		1	152000.00	bweaver4f@ebay.com	150   83
831936485	P0000111					
V00005	2016-11-12		1	12000.00	jsedgeman20@sourceforge.net	10   89
119013144	P000058					
V00006	2017-03-23		1	27000.00	rreeson1y@cnet.com	25   80
474700107	P000045					
V00007	2016-11-28	2016-12-02 17:57:00	2	52000.00	lbambrick2p@sfgate.com	50   85
947800537	P00004					
V00008	2016-02-20	2016-02-23 21:28:00	2	12000.00	zheaton29@va.gov	10   84
560686482	P0000142					
V00009	2016-07-25	2016-07-27 23:29:00	2	102000.00	hcastanaga1j@fda.gov	100   87
520960388	P000033					
V000010	2016-03-01	2016-03-03 06:04:00	2	52000.00	cabby4b@cyberchimps.com	50   88
272662800	P0000200					
V000011	2016-03-18	2016-03-21 00:00:00	2	7000.00	erihanek66@surveymonkey.com	5   81
(1000 rows)						
V0000501	2017-01-16		1	7000.00	awinchurst5v@cloudflare.com	5   80
762142879	P0000148					
V0000502	2016-11-17		1	52000.00	rreeson1y@cnet.com	50   80
474700107	P0000151					
V0000503	2016-11-16		1	152000.00	agrimestone5s@jimdo.com	150   84
943331218	P0000139					
V0000504	2016-06-14		1	52000.00	vcarlton4x@jimdo.com	50   88
221014231	P0000193					
V0000505	2016-07-03	2016-07-06 18:06:00	2	7000.00	msteggals6q@ox.ac.uk	5   80
200637897	P000043					
V0000506	2017-02-11	2017-02-13 23:04:00	2	7000.00	cdrysdale4z@dell.com	5   83
852348392	P0000162					
V0000507	2016-11-21	2016-11-25 09:55:00	2	102000.00	nrentoll14q@nytimes.com	100   89
382029723	P0000159					
V0000508	2016-12-02	2016-12-05 15:51:00	2	52000.00	pgrollmann1k@posterous.com	50   81
306220495	P0000144					
V0000509	2016-05-25		1	12000.00	mquittonden51@acquirethisname.com	10   86
972171639	P0000198					
V0000510	2016-11-25		1	52000.00	fportinari2r@cdc.gov	50   82
745997636	P0000165					
V0000991	2016-05-20		1	152000.00	vkippie2n@google.ru	150   85
350853366	P0000160					
V0000992	2017-01-11		1	52000.00	lshillingford37@godaddy.com	50   84
580644402	P000011					
V0000993	2016-02-12	2016-02-16 00:47:00	2	27000.00	mthebeau1v@ed.gov	25   82
171202428	P0000101					
V0000994	2016-11-05	2016-11-08 04:23:00	2	7000.00	zbaybutt6w@cafepress.com	5   88
056138111	P000029					
V0000995	2017-02-23	2017-02-25 23:20:00	2	102000.00	jdinesen2y@vimeo.com	100   83
915236091	P000047					
V0000996	2016-07-12	2016-07-14 16:25:00	2	27000.00	rjodrelle1c@latimes.com	25   85
817344632	P0000157					
V0000997	2016-11-25	2016-11-29 15:01:00	2	152000.00	gtovanfan@ustream.tv	150   81
614595122	P0000174					
V0000998	2016-08-13	2016-08-16 01:29:00	2	102000.00	adwelly3u@open.io	100   89
480378270	P000033					
V0000999	2016-06-26	2016-06-30 12:17:00	2	7000.00	dbeagin5d@barnesandnoble.com	5   82
407112188	P0000176					
V00001000	2016-10-23		1	12000.00	bfalshaw2@about.me	10   89
250859186	P0000184					

### 13. PROMO

```
d04=# SELECT * FROM PROMO;
+-----+-----+-----+-----+
| id | periode_awal | periode_akhir | kode | deskripsi | pe |
+-----+-----+-----+-----+
| R00001 | Donec posuere metus vitae ipsum. Aliquam non mauris. | 20 |
| 16-06-12 | 2016-06-16 | Veribet |
| R00002 | Duis at velit eu est congue elementum. In hac habitasse platea dictumst. Morbi vestibulum, velit id pretium iaculis, diam erat fermentum justo, nec condimentum neque sapien placerat ante. | 20 |
| 16-11-19 | 2016-12-09 | Tripledex |
| R00003 | In hac habitasse platea dictumst. Maecenas ut massa quis augue luctus tincidunt. Nulla mollis molestie lorem. Quisque ut erat. Curabitur gravida nisi at nibh. In hac habitasse platea dictumst. Aliquam augue quam, sollicitudin vitae, consectetur eget, rutrum at, lorem. Integer tincidunt ante vel ipsum. Praesent blandit lacinia erat. Vestibulum sed magna at nunc commodo placerat. | 20 |
| 16-09-03 | 2016-11-05 | Tresom |
| R00004 | In eleifend quam a odio. In hac habitasse platea dictumst. Maecenas ut massa quis augue luctus tincidunt. Nulla mollis molestie lorem. Quisque ut erat. Curabitur gravida nisi at nibh. In hac habitasse platea dictumst. | 20 |
| 16-09-03 | 2016-11-05 | Tresom |
| R00004 | In eleifend quam a odio. In hac habitasse platea dictumst. Maecenas ut massa quis augue luctus tincidunt. Nulla mollis molestie lorem. Quisque ut erat. Curabitur gravida nisi at nibh. In hac habitasse platea dictumst. | 20 |
| 17-07-02 | 2017-08-07 | Aerified |
| R00005 | Suspendisse accumsan tortor quis turpis. Sed ante. Vivamus tortor. Duis mattis egestas metus. Aenean fermentum. Donec ut mauris eget massa tempor convallis. Nulla neque libero, convallis eget, eleifend luctus, ultricies eu, nibh. | 20 |
| 2017-10-30 | 2017-12-15 | Fintone |
+-----+
(5 rows)
```

### 14. PROMO\_PRODUK

```
d04=# SELECT * FROM PROMO_PRODUK;
+-----+-----+
| id_promo | kode_produk |
+-----+-----+
| R00002 | P00007 |
| R00002 | S000093 |
| R00004 | S000039 |
| R00004 | P0000158 |
| R00003 | S0000222 |
| R00001 | P000018 |
| R00001 | S0000178 |
| R00004 | S0000159 |
| R00001 | S0000179 |
| R00005 | S0000175 |
| R00003 | P000083 |
| R00002 | P0000150 |
| R00003 | S000082 |
| R00004 | S000080 |
| R00004 | P0000166 |
| R00002 | P0000111 |
| R00003 | S000045 |
| R00004 | S000011 |
| R00002 | S000055 |
| R00005 | P000031 |
| R00005 | S000063 |
| R00004 | S0000155 |
| R00003 | S0000101 |
| R00004 | P0000114 |
| R00002 | P0000126 |
| R00003 | P0000146 |
| R00002 | S000031 |
| R00001 | S000073 |
```

R00004	P000094
R00001	P0000121
R00003	S0000114
R00004	P0000161
R00005	P0000100
R00002	S0000222
R00003	S00009
R00003	P000087
R00003	P0000190
R00005	S000018
R00002	P0000132
R00003	S0000221
R00001	S0000138
R00002	S0000190
(75 rows)	

## 15. ULASAN

```
d04=# SELECT * FROM ULASAN;
      email_pembeli | kode_produk | tanggal | rating | komentar
+-----+-----+-----+-----+
| rosesnanes@nationalgeographic.com | S0000199 | 2016-10-30 | 1 | Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Proin risus. Praesent lectus. Vestibulum quam sapien, varius ut, blandit non, interdum in, ante. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Duis faucibus accumsan odio. Curabitur convallis. vcarlton4x@jimdo.com | S000049 | 2016-09-26 | 2 | Suspendisse accumsan tortor quis turpis. Sed ante. Vivamus tortor. Duis mattis egestas metus. Aenean fermentum. Donec ut mauris eget massa tempor convallis. Nulla neque libero, convallis eget, eleifend luctus, ultricies eu, nibh. Quisque id justo sit amet sapien dignissim vestibulum. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Nulla dapibus dolor vel est. csaladine6a@businesswire.com | S000054 | 2016-09-18 | 2 | Proin risus. Praesent lectus. ggamesonx@webs.com | S000075 | 2016-07-10 | 4 | Aliquam sit amet diam in magna bibendum imperdiet. Nullam orci pede, venenatis non, sodales sed, tincidunt eu, felis. Fusce posuere felis sed lacus. Morbi sem mauris, laoreet ut, rhoncus aliquet, pulvinar sed, nisl. Nunc rhoncus dui vel sem. Sed sagittis. Nam congue, risus semper porta volutpat, quam pede lobortis ligula, sit amet eleifend pede libero quis orci. Nullam molestie nibh in lectus. Pellentesque at nulla. Suspendisse potenti. bbyrant56@bbc.co.uk | S000083 | 2016-06-25 | 4 | Aliquam augue quam, sollicitudin vitae, consectetuer eget, rutrum at, lorem. Integer tincidunt ante vel ipsum. Praesent blandit lacinia erat. Vestibulum sed magna at nunc commodo placerat. Praesent blandit. Nam nulla. Integer pede justo, lacinia eget, tincidunt eget, tempus vel, pede. Morbi porttitor lorem id ligula. gtofanon@ustream.tv | S0000219 | 2016-09-19 | 1 | Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Donec pharetra, magna vestibulum aliquet ultrices, erat tortor sollicitudin mi, sit amet lobortis sapiens. ebridgewoodb@fotki.com | S00005 | 2016-08-19 | 5 | Ut at dolor quis odio consequat varius. Integer ac leo. evinas1f@stanford.edu | S00002 | 2017-01-02 | 1 | Maecenas tincidunt lacus at velit. Vivamus vel nulla eget eros elementum pellentesque. Quisque porta volutpat erat. Quisque erat eros, viverra eget, congue eget, semper rutrum, nulla. Nunc purus. Phasellus in felis. Donec semper sapien a libero. jjeffcoat5e@npr.org | S0000225 | 2016-11-21 | 5 | Ut at dolor quis odio consequat varius. Integer ac leo. Pelentesque ultrices mattis odio. Donec vitae nisi. Nam ultrices, libero non mattis pulvinar, nulla pede ullamcorper augue, a suscipit nulla elit ac nulla. Sed vel enim sit amet nunc viverra dapibus. Nulla suscipit ligula in lacus. Curabitur at ipsum ac tellus semper interdum. Mauris ullamcorper purus sit amet nulla. Quisque arcu libero, rutrum ac, lobortis vel, dapibus at, diam. dhurne4@nydailynews.com | S0000157 | 2016-01-02 | 3 | Donec semper sapien a libero. Nam dui. Proin leo odio, porttitor id, consequat in, consequat ut, nulla. Sed accumsan felis. Ut at dolor quis odio consequat varius. Integer ac leo. Pellentesque ultrices mattis odio. Donec vitae nisi. Nam ultrices, libero non mattis pulvinar, nulla pede ullamcorper augue, a suscipit nulla elit ac nulla. Sed vel enim sit amet nunc viverra dapibus. (100 rows)
```

## 16. KOMENTAR\_DISKUSI

```
d04=# SELECT * FROM KOMENTAR_DISKUSI;
    pengirim          |      penerima          |      waktu          |      komentar
-----+-----+-----+-----+
tjohnsson35@gizmodo.com | sjobern2j@mozilla.org | 2017-03-03 07:37:58 | Nulla justo. Aliquam quis turpis eget eli
t sodales scelerisque. Mauris sit amet eros. Suspendisse accumsan tortor quis turpis. Sed ante.
ebridgwoodb@fotki.com | rhallick2d@shutterfly.com | 2015-06-29 10:29:09 | Proin interdum mauris non ligula pellente
sque ultrices. Phasellus id sapien in sapien iaculis congue. Vivamus metus arcu, adipiscing molestie, hendrerit at, vulputate vitae,
nisl. Aenean lectus.
erihane66@surveymonkey.com | kkilmister3q@indiatimes.com | 2017-03-26 11:36:20 | Morbi non lectus. Aliquam sit amet diam i
n magna bibendum imperdiet. Nullam orci pede, venenatis non, sodales sed, tincidunt eu, felis. Fusce posuere felis sed lacus. Morbi
sem mauris, laoreet ut, rhoncus aliquet, pulvinar sed, nisl.
ebridgwoodb@fotki.com | rtrevain2c@posterus.com | 2017-04-10 03:59:01 | Integer tincidunt ante vel ipsum. Praesent
blandit lacinia erat. Vestibulum sed magna at nunc commodo placerat.
mbompas2@netvibes.com | cmiddler2g@flickr.com | 2015-04-15 22:59:27 | Mauris sit amet eros. Suspendisse accumsa
n tortor quis turpis. Sed ante. Vivamus tortor.
lgreenig18@loc.gov | mheildsi@yahoo.co.jp | 2016-05-14 17:26:11 | Donec semper sapien a libero. Nam dui. Pr
oin leo odio, porttitor id, consequat in, consequat ut, nulla. Sed accumsan felis.
cvigars47@irs.gov | rdiaball53@webs.com | 2016-05-16 09:50:35 | In congue. Etiam justo. Etiam pretium iac
ulis justo. In hac habitasse platea dictumst. Etiam faucibus cursus urna. Ut tellus.
rinesont@wikipedia.org | vgissing12@google.fr | 2015-10-14 00:03:04 | Sed accumsan felis. Ut at dolor quis odio
consequat varius. Integer ac leo. Pellentesque ultrices mattis odio. Donec vitae nisi. Nam ultrices, libero non mattis pulvinar, nu
lla pede ullamcorper augue, a suscipit nulla elit ac nulla. Sed vel enim sit amet nunc viverra dapibus. Nulla suscipit ligula in lac
us.
uguiducci43@istockphoto.com | bbisseker4m@g.co | 2016-08-03 06:56:11 | Nulla neque libero, convallis eget, eleif
end luctus, ultricies eu, nibh. Quisque id justo sit amet sapien dignissim vestibulum. Vestibulum ante ipsum primis in faucibus orci
luctus et ultrices posuere cubilia Curae; Nulla dapibus dolor vel est. Donec odio justo, sollicitudin ut, suscipit a, feugiat et, e
ros. Vestibulum ac est lacinia nisi venenatis tristique. Fusce congue, diam id ornare imperdiet, sapien urna pretium nisl, ut volutp
at sapien arcu sed augue. Aliquam erat volutpat. In congue. Etiam justo.
amilstead5i@umich.edu | ahinkley16@quantcast.com | 2016-12-03 07:44:00 | In est risus, auctor sed, tristique in, t
empus sit amet, sem. Fusce consequat. Nulla nisl. Nunc nisl. Duis bibendum, felis sed interdum venenatis, turpis enim blandit mi, in
porttitor pede justo eu massa. Donec dapibus. Duis at velit eu est congue elementum.
habrahamovitzb@ameblo.jp | tmeader1n@fotki.com | 2016-05-24 00:31:45 | Cum sociis natoque penatibus et magnis di
s parturient montes, nascetur ridiculus mus. Vivamus vestibulum sagittis sapien. Cum sociis natoque penatibus et magnis dis parturie
nt montes, nascetur ridiculus mus.
cmiddler2g@flickr.com | pworsfold3n@chron.com | 2015-05-11 05:35:35 | Fusce posuere felis sed lacus. Morbi sem
mauris, laoreet ut, rhoncus aliquet, pulvinar sed, nisl. Nunc rhoncus dui vel sem. Sed sagittis. Nam congue, risus semper porta volu
tpat, quam pede lobortis ligula, sit amet eleifend pede libero quis orci. Nullam molestie nibh in lectus. Pellentesque at nulla. Sus
pendisse potenti. Cras in purus eu magna vulputate luctus.
agatrell49@slate.com | kdawdary1t@springer.com | 2015-11-13 00:03:05 | Mauris enim leo, rhoncus sed, vestibulum
sit amet, cursus id, turpis. Integer aliquet, massa id lobortis convallis, tortor risus dapibus augue, vel accumsan tellus nisi eu o
rci. Mauris lacinia sapien quis libero. Nullam sit amet turpis elementum ligula vehicula consequat. Morbi a ipsum. Integer a nibh. I
n quis justo. Maecenas rhoncus aliquam lacus. Morbi quis tortor id nulla ultrices aliquet.
rjodrelle1c@latimes.com | bambersonv@wp.com | 2015-09-24 14:20:41 | Suspendisse accumsan tortor quis turpis.
Sed ante.
dajsikp@yale.edu | fboheao@baidu.com | 2015-11-02 18:52:20 | Cras mi pede, malesuada in, imperdiet et,
commodo vulputate, justo. In blandit ultrices enim. Lorem ipsum dolor sit amet, consecetuer adipiscing elit. Proin interdum mauris
non ligula pellentesque ultrices.
(50 rows)
```

17. LIST\_ITEM

d04=# SELECT * FROM LIST_ITEM;						
no_invoice	kode_produk	berat	kuantitas	harga	sub_total	
V0000339	S000075	9	4	210648.00	3549000.00	
V0000182	S0000117	2	2	595375.00	4578000.00	
V0000298	S0000176	3	9	588149.00	3447000.00	
V0000463	S000056	1	8	793166.00	2375000.00	
V000014	S00007	8	7	825127.00	6551000.00	
V0000339	S0000160	6	6	150634.00	3549000.00	
V000043	S000078	3	1	292372.00	6063000.00	
V000046	S000085	8	6	966700.00	6498000.00	
V0000306	S000040	10	10	451419.00	653000.00	
V0000492	S000050	5	6	611213.00	9215000.00	
V0000111	S000043	9	1	917810.00	2155000.00	
V0000403	S0000164	6	10	247144.00	5479000.00	
V0000213	S0000102	2	2	6416.00	7111000.00	
V0000313	S000037	4	3	104770.00	3688000.00	
V0000130	S000086	3	8	301903.00	4243000.00	
V0000259	S0000242	5	9	474150.00	9011000.00	
V000044	S0000144	9	9	90059.00	2965000.00	
V0000172	S0000135	7	3	826060.00	421000.00	
V0000291	S0000106	6	3	835538.00	8414000.00	
V0000427	S000031	5	9	359577.00	9396000.00	
V0000468	S0000224	1	4	242642.00	9301000.00	
V0000279	S0000191	10	2	273435.00	5334000.00	
V0000239	S000080	3	6	167442.00	8314000.00	
V0000259	S000048	1	3	544664.00	9011000.00	
V0000282	S0000170	6	7	140729.00	8184000.00	
V0000251	S000027	7	8	508865.00	4695000.00	
V0000354	S000073	10	8	418512.00	7383000.00	
V0000124	S000077	3	4	939216.00	5336000.00	
V000045	S0000250	2	4	744079.00	1849000.00	
V0000374	S00006	3	8	807568.00	5024000.00	
V0000495	S0000242	3	6	474150.00	4247000.00	
V0000151	S000074	1	3	859771.00	6519000.00	
V0000243	S000027	5	5	508865.00	6147000.00	
V0000431	S0000109	6	2	23674.00	9824000.00	
V0000255	S000041	6	4	198252.00	8396000.00	
V0000396	S0000246	5	1	791706.00	5229000.00	
V0000384	S000010	4	6	523225.00	3247000.00	
V0000361	S0000136	9	9	304282.00	7922000.00	
V0000326	S00005	3	2	16020.00	8510000.00	
V0000377	S0000173	3	1	277515.00	1971000.00	
V0000427	S000068	10	1	583853.00	9396000.00	

V0000297	S000085	2	9	966700.00	3446000.00
V0000190	S000028	4	8	193935.00	1947000.00
V0000247	S0000186	10	9	516523.00	8290000.00
V0000167	S000016	10	8	218377.00	9234000.00
V000071	S0000182	5	5	256560.00	2718000.00
V0000112	S0000242	8	10	474150.00	1934000.00
V00004	S0000155	6	4	208067.00	3756000.00
V0000260	S0000129	7	9	950593.00	4924000.00
V0000130	S0000250	2	1	744079.00	4243000.00
V0000225	S0000240	5	8	583093.00	4622000.00
V0000314	S0000227	8	9	947455.00	5433000.00
V0000170	S000089	1	8	869651.00	4960000.00
V0000134	S0000102	3	5	6416.00	2495000.00
V0000478	S000082	5	3	735757.00	6226000.00
V000039	S0000218	8	5	732825.00	3885000.00
V0000134	S0000106	2	4	835538.00	2495000.00
V0000463	S0000202	2	10	381269.00	2375000.00
V0000189	S0000239	7	1	67372.00	3873000.00
V0000184	S000032	10	2	92195.00	2337000.00
V0000405	S0000242	4	6	782966.00	2629000.00
V0000245	S000020	9	4	271392.00	4462000.00
V0000110	S000042	6	8	470694.00	4462000.00
V0000235	S0000120	4	3	313830.00	8564000.00

(1000 rows)

#### 18. KERANJANG\_BELANJA

d04=# SELECT * FROM KERANJANG_BELANJA;					
pembeli	kode_produk	berat	kuantitas	harga	sub_total
ggamesonx@webs.com	S000010	16	44	781012.00	34364528.00
pnursey4r@myspace.com	S0000154	67	17	279604.00	4753268.00
mdraysay5z@weibo.com	S000062	78	32	273085.00	8738720.00
pworsfold3n@chron.com	S0000131	37	4	443611.00	1774444.00
erihanek66@surveymonkey.com	S0000148	51	2	244846.00	489692.00
mvern3p@godaddy.com	S00009	55	34	619377.00	21058818.00
fburkman2b@twitpic.com	S000090	23	19	163657.00	3109483.00
vgissing12@google.fr	S000028	93	31	901110.00	27934410.00
jsedgeman20@sourceforge.net	S000054	53	2	342024.00	684048.00
astandell6g@washington.edu	S0000106	10	45	766156.00	34477020.00
mtooley1s@storify.com	S0000234	72	14	659869.00	9238166.00
abinnes6o@pcworld.com	S0000186	2	10	178087.00	1780870.00
awestphalen3s@desdev.cn	S0000201	67	18	882763.00	15889734.00
gzapata4o@slideshare.net	S0000154	84	11	279604.00	3075644.00
umordacai5g@last.fm	S0000172	51	13	863981.00	11231753.00
kde3g@ebay.co.uk	S0000247	96	27	527345.00	14238315.00
gzapata4o@slideshare.net	S00004	100	40	791828.00	31673120.00
adorton1@nytimes.com	S0000111	74	34	951890.00	32364260.00
ldoore32@loc.gov	S000093	32	50	729715.00	36485750.00
yseago4v@geocities.com	S000058	98	27	317767.00	8579709.00
csaladine6a@businesswire.com	S0000239	97	6	454345.00	2726070.00
bbryant56@bbc.co.uk	S0000192	29	1	783450.00	783450.00
gcopes1@earthlink.net	S0000106	73	44	766156.00	33710864.00
agatrell49@slate.com	S0000185	29	39	945514.00	36875046.00
rhallick2d@shutterfly.com	S0000194	77	25	448878.00	11221950.00
lcolicot4d@behance.net	S0000198	63	28	149065.00	4173820.00
cchastenet44@jiathis.com	S0000223	47	11	157071.00	1727781.00
epotte5n@redcross.org	S000073	45	4	261010.00	1044040.00
elamcken27@hud.gov	S000083	58	23	476827.00	10967021.00
jradage21@blogtalkradio.com	S000040	88	17	954150.00	16220550.00
tjohnsson35@gizmodo.com	S0000124	46	7	751784.00	5262488.00
(50 rows)					
ptesh5a@salon.com	S000096	33	41	369672.00	15156552.00
lgreenig18@loc.gov	S0000143	32	3	270766.00	812298.00
elamcken27@hud.gov	S000061	33	20	132579.00	2651580.00
mvern3p@godaddy.com	S0000144	61	48	889488.00	42695424.00
boxtoby2f@zdnet.com	S0000119	15	8	976015.00	7808120.00
awinchurst5v@cloudflare.com	S0000173	30	3	702073.00	2106219.00
nleither16@google.it	S0000163	79	25	386749.00	9668725.00
adorton1@nytimes.com	S000070	81	8	209745.00	1677960.00
cseamans2c@indiatimes.com	S000053	22	39	988733.00	38560587.00
fburkman2b@twitpic.com	S000068	22	46	398594.00	18335324.00
jradage21@blogtalkradio.com	S0000178	17	6	110984.00	665904.00
claraway11@parallels.com	S0000229	35	27	115579.00	3120633.00
jalenshev31@sciencedaily.com	S0000242	1	31	340815.00	10565265.00
mdraysay5z@weibo.com	S000063	80	49	273085.00	13381165.00

## MENAMPILKAN JUMLAH DATA

---

Menampilkan jumlah isi baris dari data yang telah dimasukkan dengan perintah : [SELECT COUNT\(\\*\) FROM NAMA\\_TABLE;](#)

1. PENGGUNA

```
d04=# SELECT COUNT(*) FROM PENGGUNA;
count
-----
 355
(1 row)
```

2. PELANGGAN

```
d04=# SELECT COUNT(*) FROM PELANGGAN;
count
-----
 350
(1 row)
```

3. TOKO

```
d04=# SELECT COUNT(*) FROM TOKO;
count
-----
 100
(1 row)
```

4. JASA\_KIRIM

```
d04=# SELECT COUNT(*) FROM JASA_KIRIM;
count
-----
 10
(1 row)
```

5. TOKO\_JASA\_KIRIM

```
d04=# SELECT COUNT(*) FROM TOKO_JASA_KIRIM;
count
-----
 100
(1 row)
```

6. KATEGORI\_UTAMA

```
d04=# SELECT COUNT(*) FROM KATEGORI_UTAMA;
  count
-----
   22
(1 row)
```

7. SUB\_KATEGORI

```
d04=# SELECT COUNT(*) FROM SUB_KATEGORI;
  count
-----
   80
(1 row)
```

8. PRODUK

```
d04=# SELECT COUNT(*) FROM PRODUK;
  count
-----
  450
(1 row)
```

9. PRODUK\_PULSA

```
d04=# SELECT COUNT(*) FROM PRODUK_PULSA;
  count
-----
   200
(1 row)
```

10. SHIPPED\_PRODUK

```
d04=# SELECT COUNT(*) FROM SHIPPED_PRODUK;
  count
-----
   250
(1 row)
```

11. TRANSAKSI\_SHIPPED

```
d04=# SELECT COUNT(*) FROM TRANSAKSI_SHIPPED;
  count
-----
   500
(1 row)
```

12. TRANSAKSI\_PULSA

```
d04=# SELECT COUNT(*) FROM TRANSAKSI_PULSA;
  count
-----
  1000
(1 row)
```

13. PROMO

```
d04=# SELECT COUNT(*) FROM PROMO;
  count
-----
    5
(1 row)
```

14. PROMO\_PRODUK

```
d04=# SELECT COUNT(*) FROM PROMO_PRODUK;
  count
-----
   75
(1 row)
```

15. ULASAN

```
d04=# SELECT COUNT(*) FROM ULASAN;
  count
-----
  100
(1 row)
```

16. KOMENTAR\_DISKUSI

```
d04=# SELECT COUNT(*) FROM KOMENTAR_DISKUSI;
  count
-----
   50
(1 row)
```

17. LIST\_ITEM

```
d04=# SELECT COUNT(*) FROM LIST_ITEM;
  count
-----
  1000
(1 row)
```

18. KERANJANG\_BELANJA

```
d04=# SELECT COUNT(*) FROM KERANJANG_BELANJA;
count
-----
      50
(1 row)
```

## STORED PROCEDURE

---

Melihat daftar stored procedure yang ada di skema, gunakan perintah berikut : [\df](#)

```
d04=# \df
                                         List of functions
 Schema |     Name      | Result data type | Argument data types |  Type
-----+---------------+-----------------+--------------------+-----
 tokokeren | hitung_poin | trigger          |                   | trigger
 tokokeren | upd_stok    | trigger          |                   | trigger
(2 rows)
```

a. Pada table SHIPPED\_PRODUK terdapat kolom “stok”. Kolom ini akan di-update secara otomatis oleh stored procedure setiap kali ada INSERT/UPDATE/DELETE terhadap tabel LIST\_ITEM menggunakan trigger.

```
CREATE OR REPLACE FUNCTION upd_stok()
RETURNS TRIGGER AS
$$
BEGIN
IF(TG_OP = 'INSERT') THEN
UPDATE SHIPPED_PRODUK SP SET stok = stok - NEW.kuantitas
WHERE SP.kode_produk = NEW.kode_produk;
RETURN NEW;
END IF;

IF(TG_OP = 'UPDATE') THEN
IF(NEW.kode_produk IS NOT NULL) THEN
UPDATE SHIPPED_PRODUK SP SET stok = stok + NEW.kuantitas
WHERE SP.kode_produk = OLD.kode_produk;

UPDATE SHIPPED_PRODUK SP SET stok = stok - NEW.kuantitas
WHERE SP.kode_produk = NEW.kode_produk;
END IF;

IF(NEW.kuantitas IS NOT NULL) THEN
IF(NEW.kuantitas < OLD.kuantitas) THEN
UPDATE SHIPPED_PRODUK SP SET stok = stok + (OLD.kuantitas - NEW.kuantitas)
```

```
WHERE SP.kode_produk = OLD.kode_produk;
END IF;
IF(NEW.kuantitas > OLD.kuantitas) THEN
    UPDATE SHIPPED_PRODUK SP SET stok = stok - (NEW.kuantitas - OLD.kuantitas)
    WHERE SP.kode_produk = OLD.kode_produk;
END IF;
END IF;
RETURN NEW;
END IF;

IF(TG_OP = 'DELETE') THEN
    UPDATE SHIPPED_PRODUK SP SET stok = stok + OLD.kuantitas
    WHERE SP.kode_produk = OLD.kode_produk;
END IF;
RETURN OLD;
END;
$$
LANGUAGE plpgsql;

CREATE TRIGGER upd_stok_trigger
AFTER INSERT OR UPDATE OR DELETE
ON LIST_ITEM FOR EACH ROW
EXECUTE PROCEDURE upd_stok();
```

```

d04=# CREATE OR REPLACE FUNCTION upd_stok()
d04-# RETURNS TRIGGER AS
d04-$# $$
d04$# BEGIN
d04$# IF(TG_OP = 'INSERT') THEN
d04$#   UPDATE SHIPPED_PRODUK SP SET stok = stok - NEW.kuantitas
d04$#   WHERE SP.kode_produk = NEW.kode_produk;
d04$#   RETURN NEW;
d04$# END IF;
d04$#
d04$# IF(TG_OP = 'UPDATE') THEN
d04$#   IF(NEW.kode_produk IS NOT NULL) THEN
d04$#     UPDATE SHIPPED_PRODUK SP SET stok = stok + NEW.kuantitas
d04$#     WHERE SP.kode_produk = OLD.kode_produk;
d04$#
d04$#   UPDATE SHIPPED_PRODUK SP SET stok = stok - NEW.kuantitas
d04$#   WHERE SP.kode_produk = NEW.kode_produk;
d04$# END IF;
d04$# IF(NEW.kuantitas IS NOT NULL) THEN
d04$#   IF(NEW.kuantitas < OLD.kuantitas) THEN
d04$#     UPDATE SHIPPED_PRODUK SP SET stok = stok + (OLD.kuantitas - NEW.kuantitas)
d04$#     WHERE SP.kode_produk = OLD.kode_produk;
d04$# END IF;
d04$# IF(NEW.kuantitas > OLD.kuantitas) THEN
d04$#   UPDATE SHIPPED_PRODUK SP SET stok = stok - (NEW.kuantitas - OLD.kuantitas)
d04$#   WHERE SP.kode_produk = OLD.kode_produk;
d04$# END IF;
d04$# END IF;
d04$# RETURN NEW;
d04$# END IF;
d04$#
d04$# IF(TG_OP = 'DELETE') THEN
d04$#   UPDATE SHIPPED_PRODUK SP SET stok = stok + OLD.kuantitas
d04$#   WHERE SP.kode_produk = OLD.kode_produk;
d04$# END IF;
d04$# RETURN OLD;
d04$# END;
d04$# $$
d04-# LANGUAGE plpgsql;
CREATE FUNCTION

```

```

d04=# CREATE TRIGGER upd_stok_trigger
d04-# AFTER INSERT OR UPDATE OR DELETE
d04-# ON LIST_ITEM FOR EACH ROW
d04-# EXECUTE PROCEDURE upd_stok();
CREATE TRIGGER

```

#### TEST STORED PROCEDURE A

Menambah produk ke tabel PRODUK

INSERT INTO PRODUK(kode\_produk,nama,harga,deskripsi) VALUES ('S0000251','Streamlined Pakaian Anak Perempuan Fuscia','821000','Streamlined Pakaian Anak Perempuan Fuscia Sed sagittis. Nam congue, risus semper porta volutpat, quam pede lobortis ligula, sit amet eleifend pede libero quis orci. Nullam molestie nibh in lectus.');

```

d04=# INSERT INTO PRODUK(kode_produk,nama,harga,deskripsi) VALUES ('S0000251','Streamlined Pakaian Anak Perempuan Fuscia','821000','Streamlined Pakaian Anak Perempuan Fuscia Sed sagittis. Nam congue, risus semper porta volutpat, quam pede lobortis ligula, sit amet eleifend pede libero quis orci. Nullam molestie nibh in lectus.');
INSERT 0 1

```

Menambah produk ke tabel SHIPPED\_PRODUK

```
INSERT INTO
SHIPPED_PRODUK(kode_produk,kategori,nama_toko,is_asuransi,stok,is_baru,min_order,min_grosir,ma
x_grosir,harga_grosir,foto)

VALUES ('S0000251','SK001','explicit
Clothing','false',10000,'true',1,12,500,3500000,'explicitClothing.png');

d04=# INSERT INTO SHIPPED_PRODUK(kode_produk,kategori,nama_toko,is_asuransi,stok,is_baru,min_order,m
in_grosir,max_grosir,harga_grosir,foto)
d04-# VALUES ('S0000251','SK001','explicit Clothing','false',10000,'true',1,12,500,3500000,'explicit
Clothing.png');
INSERT 0 1
```

Melihat stok produk dari tabel SHIPPED\_PRODUK

```
SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
```

```
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
+-----+-----+-----+-----+-----+-----+-----+
| kode_produk | kategori | nama_toko | is_asuransi | stok | is_baru | min_order |
| max_grosir | harga_grosir | foto      |
+-----+-----+-----+-----+-----+-----+-----+
| S0000251   | SK001    | explicit Clothing | f       | 10000 | t     | 1         |
|           | 500      | 3500000.00  | explicitClothing.png |
+-----+-----+-----+-----+-----+-----+-----+
(1 row)
```

Menambah pembelian produk ke tabel LIST\_ITEM

```
INSERT INTO LIST_ITEM(no_invoice,kode_produk,berat,kuantitas,harga,sub_total)

VALUES ('V0000501','S0000251',9,2,3500000,7137000);
```

```
d04=# INSERT INTO LIST_ITEM(no_invoice,kode_produk,berat,kuantitas,harga,sub_total)
d04-# VALUES ('V0000501','S0000251',9,2,3500000,7137000);
INSERT 0 1
```

Melihat stok produk, jika benar maka stok akan berkurang

```
SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
```

```
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
+-----+-----+-----+-----+-----+-----+-----+
| kode_produk | kategori | nama_toko | is_asuransi | stok | is_baru | min_order |
| max_grosir | harga_grosir | foto      |
+-----+-----+-----+-----+-----+-----+-----+
| S0000251   | SK001    | explicit Clothing | f       | 9998  | t     | 1         |
|           | 500      | 3500000.00  | explicitClothing.png |
+-----+-----+-----+-----+-----+-----+-----+
(1 row)
```

```
SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000250';
```

```
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000250';
kode_produk | kategori | nama_toko | is_asuransi | stok | is_baru | min_order | min_grosir
| max_grosir | harga_grosir | foto
-----+-----+-----+-----+-----+-----+-----+-----+
50000250 | SK012 | empowering Beauty | t | 184 | f | 12 | 48
| 60 | 250075.00 | UltricesPosuereCubilia.gif
(1 row)
```

Update kode produk dan melihat stok BARANG AWAL dan stok BARANG DIUBAH dalam tabel SHIPPED\_PRODUK lalu mengembalikan seperti semula

```
UPDATE LIST_ITEM SET kode_produk = 'S0000250' WHERE kode_produk = 'S0000251' AND no_invoice = 'V0000501';
```

```
d04=# UPDATE LIST_ITEM SET kode_produk = 'S0000250' WHERE kode_produk = 'S0000251' AND no_invoice = 'V0000501';
UPDATE 1
```

```
SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
```

```
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
kode_produk | kategori | nama_toko | is_asuransi | stok | is_baru | min_order | min_grosir
| max_grosir | harga_grosir | foto
-----+-----+-----+-----+-----+-----+-----+-----+
50000251 | SK001 | explicit Clothing | f | 10000 | t | 1 | 12
| 500 | 3500000.00 | explicitClothing.png
(1 row)
```

```
SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000250';
```

```
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000250';
kode_produk | kategori | nama_toko | is_asuransi | stok | is_baru | min_order | min_grosir
| max_grosir | harga_grosir | foto
-----+-----+-----+-----+-----+-----+-----+-----+
50000250 | SK012 | empowering Beauty | t | 184 | f | 12 | 48
| 60 | 250075.00 | UltricesPosuereCubilia.gif
(1 row)
```

Mengubah kembali ke awal

```
UPDATE LIST_ITEM SET kode_produk = 'S0000251' WHERE kode_produk = 'S0000250' AND no_invoice = 'V0000501';
```

```
d04=#
d04=# UPDATE LIST_ITEM SET kode_produk = 'S0000251' WHERE kode_produk = 'S0000250' AND no_invoice = 'V0000501';
UPDATE 1
```

```
SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
```

```
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
kode_produk | kategori | nama_toko | is_asuransi | stok | is_baru | min_order | min_grosir
| max_grosir | harga_grosir | foto
+-----+-----+-----+-----+-----+-----+-----+
| S0000251 | SK001 | explicit Clothing | f | 9998 | t | 1 | 12
| 500 | 3500000.00 | explicitClothing.png
(1 row)
```

```
SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000250';
```

```
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000250';
kode_produk | kategori | nama_toko | is_asuransi | stok | is_baru | min_order | min_grosir
| max_grosir | harga_grosir | foto
+-----+-----+-----+-----+-----+-----+-----+
| S0000250 | SK012 | empowering Beauty | t | 186 | f | 12 | 48
| 60 | 250075.00 | UltricesPosuereCubilia.gif
(1 row)
```

Mengubah kode produk

```
d04=#
d04=# UPDATE LIST_ITEM SET kode_produk = 'S0000251' WHERE kode_produk = 'S0000250' AND no_invoice =
'V0000501';
UPDATE 1
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
kode_produk | kategori | nama_toko | is_asuransi | stok | is_baru | min_order | min_grosir
| max_grosir | harga_grosir | foto
+-----+-----+-----+-----+-----+-----+-----+
| S0000251 | SK001 | explicit Clothing | f | 9998 | t | 1 | 12
| 500 | 3500000.00 | explicitClothing.png
(1 row)
```

```
d04=#
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000250';
kode_produk | kategori | nama_toko | is_asuransi | stok | is_baru | min_order | min_grosir
| max_grosir | harga_grosir | foto
+-----+-----+-----+-----+-----+-----+-----+
| S0000250 | SK012 | empowering Beauty | t | 186 | f | 12 | 48
| 60 | 250075.00 | UltricesPosuereCubilia.gif
(1 row)
```

```
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
kode_produk | kategori | nama_toko | is_asuransi | stok | is_baru | min_order | min_grosir
| max_grosir | harga_grosir | foto
+-----+-----+-----+-----+-----+-----+-----+
| S0000251 | SK001 | explicit Clothing | f | 9998 | t | 1 | 12
| 500 | 3500000.00 | explicitClothing.png
(1 row)
```

Mengubah kuantitas jika lebih dari kuantitas sebelumnya, maka stok dikurangi

```
d04=# UPDATE LIST_ITEM SET kuantitas = 5 WHERE kode_produk = 'S0000251' AND no_invoice = 'V0000501';
UPDATE 1
```

```
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
kode_produk | kategori | nama_toko | is_asuransi | stok | is_baru | min_order | min_grosir
| max_grosir | harga_grosir | foto
-----+-----+-----+-----+-----+-----+-----+-----+
| S0000251 | SK001 | explicit Clothing | f | 9995 | t | 1 | 12
| 500 | 3500000.00 | explicitClothing.png
(1 row)
```

Mengubah kuantitas jika kurang dari kuantitas sebelumnya, maka stok ditambah

```
d04=# UPDATE LIST_ITEM SET kuantitas = 1 WHERE kode_produk = 'S0000251' AND no_invoice = 'V0000501';
UPDATE 1
```

Melihat stok dari tabel SHIPPED\_PRODUK

```
SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
```

```
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
kode_produk | kategori | nama_toko | is_asuransi | stok | is_baru | min_order | min_grosir
| max_grosir | harga_grosir | foto
-----+-----+-----+-----+-----+-----+-----+-----+
| S0000251 | SK001 | explicit Clothing | f | 9999 | t | 1 | 12
| 500 | 3500000.00 | explicitClothing.png
(1 row)
```

Menghapus item, sehingga stok akan otomatis bertambah

```
DELETE FROM LIST_ITEM WHERE kode_produk = 'S0000251' AND no_invoice = 'V0000501';
```

```
d04=# DELETE FROM LIST_ITEM WHERE kode_produk = 'S0000251' AND no_invoice = 'V0000501';
DELETE 1
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251' AND no_invoice = 'V0000501';
ERROR: column "no_invoice" does not exist
LINE 1: ...SHIPPED_PRODUK WHERE kode_produk = 'S0000251' AND no_invoice...
^
d04=#
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
kode_produk | kategori | nama_toko | is_asuransi | stok | is_baru | min_order | min_grosir
| max_grosir | harga_grosir | foto
-----+-----+-----+-----+-----+-----+-----+-----+
| S0000251 | SK001 | explicit Clothing | f | 10000 | t | 1 | 12
| 500 | 3500000.00 | explicitClothing.png
(1 row)
```

Melihat stok produk dari tabel SHIPPED\_PRODUK

```
SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
```

```
d04=# SELECT * FROM SHIPPED_PRODUK WHERE kode_produk = 'S0000251';
kode_produk | kategori | nama_toko | is_asuransi | stok | is_baru | min_order | min_grosir
| max_grosir | harga_grosir | foto
-----+-----+-----+-----+-----+-----+-----+-----+
50000251 | SK001 | explicit Clothing | f | 10000 | t | 1 | 12
| 500 | 3500000.00 | explicitClothing.png
(1 row)
```

b. Pada table PELANGGAN terdapat kolom “poin”. Kolom ini akan di-update secara otomatis oleh stored procedure setiap kali ada UPDATE terhadap tabel TRANSAKSI\_SHIPPED untuk kolom status apabila status = 4 menggunakan trigger dimana poin merupakan 1% dari total\_bayar.

```
CREATE OR REPLACE FUNCTION hitung_poin ()
RETURNS "trigger" AS
$$
BEGIN
IF(TG_OP = 'UPDATE') THEN
  IF(NEW.status = 4) THEN
    UPDATE PELANGGAN SET poin = NEW.total_bayar * 0.01
    WHERE PELANGGAN.email = NEW.email_pembeli;
  END IF;
END IF;
RETURN NEW;
END;
$$
LANGUAGE plpgsql;
```

```
CREATE TRIGGER poin_trigger AFTER UPDATE ON TRANSAKSI_SHIPPED FOR EACH ROW EXECUTE
PROCEDURE hitung_poin();
```

```
d04=# CREATE OR REPLACE FUNCTION hitung_poin ()
d04-# RETURNS "trigger" AS
d04-# $$
d04$# BEGIN
d04$# IF(TG_OP = 'UPDATE') THEN
d04$#   IF(NEW.status = 4) THEN
d04$#     UPDATE PELANGGAN SET poin = NEW.total_bayar * 0.01
d04$#     WHERE PELANGGAN.email = NEW.email_pembeli;
d04$#   END IF;
d04$# END IF;
d04$# RETURN NEW;
d04$# END;
d04$# $$
d04-# LANGUAGE plpgsql;
CREATE FUNCTION
d04=#
d04-# CREATE TRIGGER poin_trigger AFTER UPDATE ON TRANSAKSI_SHIPPED FOR EACH ROW EXECUTE PROCEDURE h
itung_poin();
CREATE TRIGGER
d04=#
d04-#
```

## TEST STORED PROCEDURE B

Membuat pengguna dan pembeli baru

```
INSERT INTO PENGGUNA(email,password,nama,jenis_kelamin,tgl_lahir,no_telp,alamat)
VALUES ('emilystephens@dayrep.com','test1234','Emily Stephens','P','8/6/1997',086472637243,'Jl.
Anggrek no. 666, Jakarta 16241');
```

```
INSERT INTO PELANGGAN(email,is_penjual,nilai_reputasi,poin) VALUES
('emilystephens@dayrep.com',false,NULL,0);
```

```
d04=# INSERT INTO PENGGUNA(email,password,nama,jenis_kelamin,tgl_lahir,no_telp,alamat)
d04-# VALUES ('emilystephens@dayrep.com','test1234','Emily Stephens','P','8/6/1997',086472637243,'Jl.
Anggrek no. 666, Jakarta 16241');
INSERT 0 1
d04=#
d04=# INSERT INTO PELANGGAN(email,is_penjual,nilai_reputasi,poin) VALUES ('emilystephens@dayrep.com',
, false, NULL, 0);
INSERT 0 1
```

Melihat poin pelanggan = 0

```
SELECT * FROM PELANGGAN WHERE PELANGGAN.email = 'emilystephens@dayrep.com';
```

```
d04=# SELECT * FROM PELANGGAN WHERE PELANGGAN.email = 'emilystephens@dayrep.com';
      email          | is_penjual | nilai_reputasi | poin
-----+-----+-----+
emilystephens@dayrep.com | f           |                 | 0
(1 row)
```

Memperbarui status pelanggan baru setelah menambahkan transaksi

```
INSERT INTO
TRANSAKSI_SHIPPED(no_invoice,tanggal,waktu_bayar,status,total_bayar,email_pembeli,nama_toko,ala
mat_kirim,biaya_kirim,no_resi,nama_jasa_kirim) VALUES ('V0000501','25/2/2017','22/02/2017
07:21',2,7137000,'emilystephens@dayrep.com','solution-oriented Electronics','Jl. Anggrek no. 666,
Jakarta 16241',43000,'CGK8236508841823','J&T EXPRESS');
```

```
d04=# INSERT INTO TRANSAKSI_SHIPPED(no_invoice,tanggal,waktu_bayar,status,total_bayar,email_pembeli,
nama_toko,alamat_kirim,biaya_kirim,no_resi,nama_jasa_kirim)
d04-# VALUES ('V0000501','25/2/2017','22/02/2017 07:21',2,7137000,'emilystephens@dayrep.com','soluti
on-oriented Electronics','Jl. Anggrek no. 666, Jakarta 16241',43000,'CGK8236508841823','J&T EXPRESS'
);
INSERT 0 1
```

```
UPDATE TRANSAKSI_SHIPPED SET status = 4 WHERE no_invoice = 'V0000501';
```

```
CREATE TRIGGER
d04=# UPDATE TRANSAKSI_SHIPPED SET status = 4 WHERE no_invoice = 'V0000501';
UPDATE 1
```

Melihat poin pelanggan bertambah

```
SELECT * FROM PELANGGAN WHERE PELANGGAN.email = 'emilystephens@dayrep.com';
```

```

d04=# UPDATE TRANSAKSI_SHIPPED SET status = 4 WHERE no_invoice = 'V0000501';
UPDATE 1
d04=# SELECT * FROM PELANGGAN WHERE PELANGGAN.email = 'emilystephens@dayrep.com';
      email      | is_penjual | nilai_reputasi | poin
-----+-----+-----+-----+
emilystephens@dayrep.com | f          |                 | 71370
(1 row)

```

NPM	NAMA	DESKRIPSI	KONTRIBUSI
1506726183	Felicia	Membuat program untuk generate data acak (18 table), test case untuk 2 stored procedure	33.33%
1506689534	Irena Gita Lestari	Membuat script DDL untuk create domain,create table (9 table) dan membuat stored procedure bagian A	33.33%
1506721863	Safitri Difa Kaluza	Membuat script DDL untuk create domain,create table (9 table) dan membuat stored procedure bagian B	33.33%

### COPY OF CONDUCT - DIA

Kami menyatakan bahwa tugas ini kami kerjakan dengan usaha sendiri. Kami tidak pernah menyalin jawaban dari sumber manapun. Kami bertanggung jawab agar jawaban tugas kami tidak disalin oleh peserta lainnya.



Felicia  
1506726183



Irena Gita  
1506689534



Safitri Difa  
1506721863