

Praktikum 2 Sistem Basis Data 2023

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Kelas : IUP
RDBMS : PostgreSQL
Link Script SQL : [Script](#)
Kode Asdos : SBDO02
Sesi : Modul Pendahuluan

Nomor 1s

Sintaks:

```
1 CREATE TABLE Customer(  
2     ID_customer char(6) PRIMARY KEY NOT NULL,  
3     Nama_customer varchar(100) NOT NULL  
4 );  
5  
6 CREATE TABLE Pegawai(  
7     NIK char(16) PRIMARY KEY NOT NULL,  
8     Nama_pegawai varchar(100) NOT NULL,  
9     Jenis_kelamin char(1),  
10    Email varchar(50),  
11    Umur int NOT NULL  
12 );  
13  
14 CREATE TABLE Transaksi (  
15     ID_transaksi char(10) PRIMARY KEY NOT NULL,  
16     Tanggal_transaksi DATE NOT NULL,  
17     Metode_pembayaran varchar(15) NOT NULL,  
18     Customer_ID_customer char(16) NOT NULL,  
19     Pegawai_NIK char(16) NOT NULL,  
20     FOREIGN KEY (Customer_ID_customer) REFERENCES Customer(ID_customer),  
21     FOREIGN KEY (Pegawai_NIK) REFERENCES Pegawai(NIK)  
22 );  
23  
24 CREATE TABLE Telepon(  
25     No_telp_pegawai varchar(15) PRIMARY KEY NOT NULL,  
26     Pegawai_NIK char(16) NOT NULL,  
27     FOREIGN KEY (Pegawai_NIK) REFERENCES Pegawai(NIK)  
28 );  
29  
30 CREATE TABLE Menu_minuman(  
31     ID_minuman char(6) PRIMARY KEY NOT NULL,  
32     Nama_minuman varchar(50) NOT NULL,  
33     Harga_minuman float(2)  
34 );  
35  
36 CREATE TABLE Transaksi_minuman(  
37     TM_Menu_Minuman_ID char(6) NOT NULL,  
38     TM_transaksi_ID char(10) NOT NULL,  
39     Jumlah_cup int NOT NULL,  
40     CONSTRAINT PK_Transaksi_minuman  
41         PRIMARY KEY(TM_Menu_Minuman_ID, TM_transaksi_ID),  
42     FOREIGN KEY (TM_Menu_Minuman_ID) REFERENCES Menu_minuman(ID_minuman),  
43     FOREIGN KEY (TM_transaksi_ID) REFERENCES Transaksi(ID_transaksi)  
44 );  
..
```

Data Output Messages Notifications

CREATE TABLE

Query returned successfully in 92 msec.

Hasil:

Tables (6)

- > customer
- > menu_minuman
- > pegawai
- > telepon CREATE TABLE
- > transaksi Query returned successfully in 92 msec.
- > transaksi_minuman

Nomor 2

Sintaks:









```
48 --2--
49 CREATE TABLE Membership(
50     ID_membership CHAR(6) NOT NULL,
51     No_telepon_customer varchar(15) NOT NULL,
52     alamat_customer VARCHAR(100) NOT NULL,
53     Tanggal_pembuatan_kartu_membership DATE NOT NULL,
54     Tanggal_kedaluwarsa_kartu_membership DATE,
55     Total_point int NOT NULL,
56     Customer_ID_customer CHAR(6)
57 );
58
59 --2A--
60 ALTER TABLE Membership
61 ADD CONSTRAINT p_key PRIMARY KEY (ID_membership);
62
63 --2B & 2C--
64 ALTER TABLE Membership
65 ADD CONSTRAINT f_key FOREIGN KEY (Customer_ID_customer) REFERENCES Customer(ID_customer)
66 ON DELETE CASCADE
67 ON UPDATE CASCADE;
68
69 --2D--
70 ALTER TABLE Membership
71 ALTER COLUMN Tanggal_pembuatan_kartu_membership SET DEFAULT CURRENT_DATE;
72
73 --2E--
74 ALTER TABLE Membership
75 ADD CHECK (membership.total_point>=0);
76
77 --2F--
78 ALTER TABLE Membership
79 ALTER COLUMN alamat_customer TYPE varchar(150);
80
81
```

Data Output Messages Notifications

ALTER TABLE

Query returned successfully in 38 msec.

Hasil:

- ▼  Tables (7)
- >  customer
 - >  membership
 - >  menu_minuman
 - >  pegawai
 - >  telepon
 - >  transaksi
 - >  transaksi_minuman

Nomor 3

Sintaks:

```
82  --3--
83  DROP TABLE telepon;
84
85  ALTER TABLE pegawai
86  ADD COLUMN no_telepon_pegawai varchar(15);
```

Data Output Messages Notifications

ALTER TABLE

Query returned successfully in 46 msec.

Hasil:

Tables (6)

customer

membership

menu_minuman

pegawai

transaksi

transaksi_minuman

Data Output Messages Notifications

nik [PK] character	nama_pegawai character varying (100)	jenis_kelamin character	email character varying (50)	umur integer	no_telepon_pegawai character varying (15)
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Nomor 4

Sintaks:

```
89  --4--
90  INSERT INTO customer(id_customer, nama_customer)
91  VALUES
92  ('CTR001', 'Dwi! Santosa'),
93  ('CTR002', 'Dwi! Triana'),
94  ('CTR003', 'Dwi! Lia'),
95  ('CTR004', 'Dwi! Tan'),
96  ('CTR005', 'Dwi! Asta');
97
98  INSERT INTO membership(id_membership, no_telepon_customer, alamat_customer, tanggal_pembuatan_kartu_membership, tanggal_kedaluwarsa_kartu_membership, total_point, customer_id_customer)
99  VALUES
100 ('M0001', '08123456789', 'Jl. Sawi Benjol', '24-10-2023', '30-11-2023', 0, 'CTR001'),
101 ('M0002', '08123456789', 'Jl. Kalinci', '24-10-2023', '30-11-2023', 3, 'CTR002'),
102 ('M0003', '08123456789', 'Jl. Alam Jaya', '24-10-2023', '30-11-2023', 4, 'CTR003'),
103 ('M0004', '08887654321', 'Jl. Kawangan', '26-10-2023', '12-12-2023', 6, 'CTR005');
104
105  INSERT INTO pegawai(nik, nama_pegawai, jenis_kelamin, email, umur, no_telepon_pegawai)
106  VALUES
107 ('1234567890123456', 'Muhammad', 'L', 'muhammad@gmail.com', 25, '08123456789'),
108 ('2345678901234567', 'Surtinela', 'P', 'surtinela@gmail.com', 24, '08123456789'),
109 ('3456789012345678', 'Ben John', 'L', 'benjohn@gmail.com', 22, '08123456789');
110
111  INSERT INTO transaksi(id_transaksi, tanggal_transaksi, metode_pembayaran, customer_id_customer, pegawai_nik)
112  VALUES
113 ('T000000001', '2023-10-01', 'Kartu kredit', 'CTR002', '2345678901234567'),
114 ('T000000002', '2023-10-03', 'Transfer bank', 'CTR004', '2345678901234567'),
115 ('T000000003', '2023-10-05', 'Tunai', 'CTR001', '2345678901234567'),
116 ('T000000004', '2023-10-10', 'Kartu debit', 'CTR003', '2345678901234567'),
117 ('T000000005', '2023-10-15', 'E-wallet', 'CTR004', '2345678901234567'),
118 ('T000000006', '2023-10-20', 'Tunai', 'CTR001', '2345678901234567');
119
120  INSERT INTO menu_minuman(id_minuman, nama_minuman, harga_minuman)
121  VALUES
122 ('M0001', 'Espresso', 18000),
123 ('M0002', 'Cappuccino', 20000),
124 ('M0003', 'Latte', 21000),
125 ('M0004', 'Americano', 19000),
126 ('M0005', 'Mocha', 22000),
127 ('M0006', 'Macchiato', 20000),
128 ('M0007', 'Cold Brew', 21000),
129 ('M0008', 'Iced Coffee', 18000);
```

Data Output Messages Notifications

INSERT 0 12

Query returned successfully in 55 msec.

Hasil:

	id_transaksi [PK] character	tanggal_transaksi date	metode_pembayaran character varying (15)	customer_id_customer character	pegawai_nik character
1	TRX0000001	2023-10-01	Kartu kredit	CTR002	2345678901234561
2	TRX0000002	2023-10-03	Transfer bank	CTRo04	3456789012345612
3	TRX0000003	2023-10-05	Tunai	CTR001	3456789012345612
4	TRX0000004	2023-10-15	Kartu debit	CTR003	1234567890123456
5	TRX0000005	2023-10-15	E-wallet	CTRo04	1234567890123456
6	TRX0000006	2023-10-21	Tunai	CTR001	2345678901234561

INSERT 0 12

Query returned successfully in 33 msec.

Nomor 5

Sintaks:

```
149 --5--
150 INSERT INTO transaksi(id_transaksi, tanggal_transaksi, metode_pembayaran, customer_id_customer, pegawai_nik)
151 VALUES
152 ('TRX0000007', '3-10-2023', 'Transfer bank', 'CTRo04', '2345678901234561');
153
154 INSERT INTO transaksi_minuman(TM_transaksi_id, TM_Menu_Minuman_ID, jumlah_cup)
155 VALUES
156 ('TRX0000007', 'MNM005', 1);
157
158 --6--
159 INSERT INTO pegawai(nik, nama_pegawai, umur)
160 VALUES
```

Data Output Messages Notifications

INSERT 0 1

Query returned successfully in 36 msec.

Hasil:

7	TRX0000007	2023-10-03	Transfer bank	CTRo04	2345678901234561
13	MNM010	TRX0000004	1		

Nomor 6

Sintaks:

```
158 --6--
159 INSERT INTO pegawai(nik, nama_pegawai, umur)
160 VALUES
161 ('1111222233334444', 'Maimunah', 25);
162
```

Data Output Messages Notifications

INSERT 0 1

Query returned successfully in 36 msec.

Hasil:

	nik [PK] character	nama_pegawai character varying (100)	jenis_kelamin character	email character varying (50)	umur integer	no_telepon_pegawai character varying (15)
1	1111222233334444	Maimunah	[null]	[null]	25	[null]

Nomor 7

Sintaks:

```
163 --7--
164 ALTER TABLE transaksi_minuman
165 DROP CONSTRAINT transaksi_minuman_tm_transaksi_id_fkey;
166
167 ALTER TABLE transaksi_minuman
168 ADD CONSTRAINT fkey_id_minuman FOREIGN KEY (TM_Menu_Minuman_ID) REFERENCES Menu_minuman(ID_minuman) ON UPDATE CASCADE ON DELETE CASCADE;
169 ADD CONSTRAINT fkey_id_transaksi FOREIGN KEY (TM_transaksi_id) REFERENCES Transaksi(ID_transaksi) ON UPDATE CASCADE ON DELETE CASCADE;
170
171 ALTER TABLE transaksi
172 DROP CONSTRAINT transaksi_customer_id_customer_fkey;
173
174 ALTER TABLE transaksi
175 ADD CONSTRAINT fkey_id_customer FOREIGN KEY (customer_ID_customer) REFERENCES customer(id_customer) ON UPDATE CASCADE ON DELETE CASCADE;
176
177 UPDATE customer
178 SET id_customer = 'CTR004'
179 WHERE nama_customer = 'Sutris Ten An';
```

Data Output Messages Notifications

UPDATE 1

Query returned successfully in 36 msec.

Hasil:

4	CTR004	Sutris Ten An
---	--------	---------------

Nomor 8

Sintaks:

```
181 --8--
182 UPDATE pegawai
183 SET jenis_kelamin = 'P', no_telepon_pegawai = '621234567', email = 'maimunah@gmail.com'
184 WHERE nama_pegawai = 'Maimunah';
185
```

Data Output Messages Notifications

UPDATE 1

Query returned successfully in 31 msec.

Hasil:

	nik [PK] character	nama_pegawai character varying (100)	jenis_kelamin character	email character varying (50)	umur integer	no_telepon_pegawai character varying (15)
1	1111222233334444	Maimunah	P	maimunah@gmail.com	25	621234567

Nomor 9

Sintaks:

```
186  --9--
187  UPDATE membership
188  SET total_point = 0
189  WHERE tanggal_kedaluwarsa_kartu_membership <'1-12-2023'::date;
190
```

Data Output Messages Notifications

UPDATE 3

Query returned successfully in 36 msec.

Hasil:

	id_membership [PK] character	no_telepon_customer character varying (15)	alamat_customer character varying (150)	tanggal_pembuatan_kartu_membership date	tanggal_kedaluwarsa_kartu_membership date	total_point integer	customer_id_customer character
1	MBR001	08123456789	Jl. Imam Bonjol	2023-10-24	2023-11-30	0	CTR001
2	MBR002	0812345678	Jl. Kelinci	2023-10-24	2023-11-30	0	CTR002
3	MBR003	081234567890	Jl. Abah Ojak	2023-10-25	2023-10-01	0	CTR003
4	MBR004	08987654321	Jl. Kenangan	2023-10-26	2023-12-02	6	CTR005

Nomor 10

Sintaks:

```
191  --10--
192  DELETE FROM membership;
193
```

Data Output Messages Notifications

DELETE 4

Query returned successfully in 31 msec.

Hasil:

	id_membership [PK] character	no_telepon_customer character varying (15)	alamat_customer character varying (150)	tanggal_pembuatan_kartu_membership date	tanggal_kedaluwarsa_kartu_membership date	total_point integer	customer_id_customer character
--	---------------------------------	---	--	--	--	------------------------	-----------------------------------

Nomor 11

Sintaks:

```
194  --11--
195  DELETE FROM pegawai
196  WHERE nama_pegawai = 'Maimunah';
```

Data Output Messages Notifications

DELETE 1

Query returned successfully in 31 msec.

Hasil:

	nik [PK] character	nama_pegawai character varying (100)	jenis_kelamin character	email character varying (50)	umur integer	no_telepon_pegawai character varying (15)
1	1234567890123456	Naufal Raf	L	nuafal@gmail.com	19	62123456789
2	2345678901234561	Surinala	P	surinala@gmail.com	24	621234567890
3	3456789012345612	Ben John	L	benjohn@gmail.com	22	6212345678