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Prodi : DIII Manajemen Informatika

KUIS 2 PRAKTIKUM BASIS DATA

STRUK PEMBAYARAN TAGIHAN LISTRIK

ID PELANGGAN	: 511810935121	BL/TH	: JAN2012
NAMA	: SLAMET WIBISONO	STAND METER	: 01514800-01521900
TARIF/DAYA	: R1/900	NON SUBSIDI	: Rp.0,00
RP. TAGIHAN	: Rp.50.485,00	RP. BK	: Rp.0,00
MKM REF	: 20120101155410000000000154904550		

PLN menyatakan struk ini sebagai bukti pembayaran yang sah, mohon disimpan

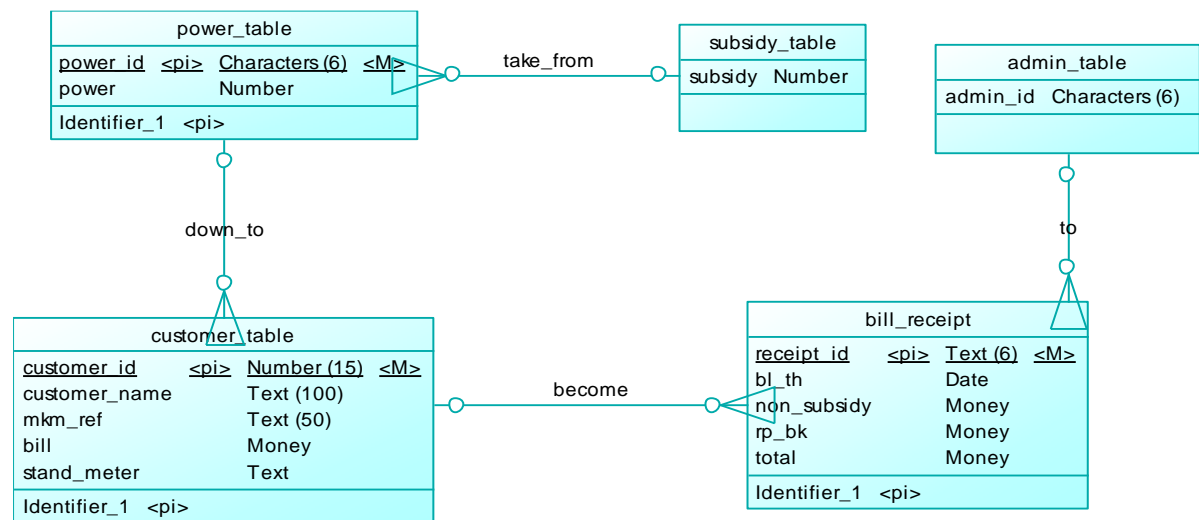
ADMIN BANK	: Rp.1.600,00
TOTAL BAYAR	: Rp.52.085,00

TERIMA KASIH

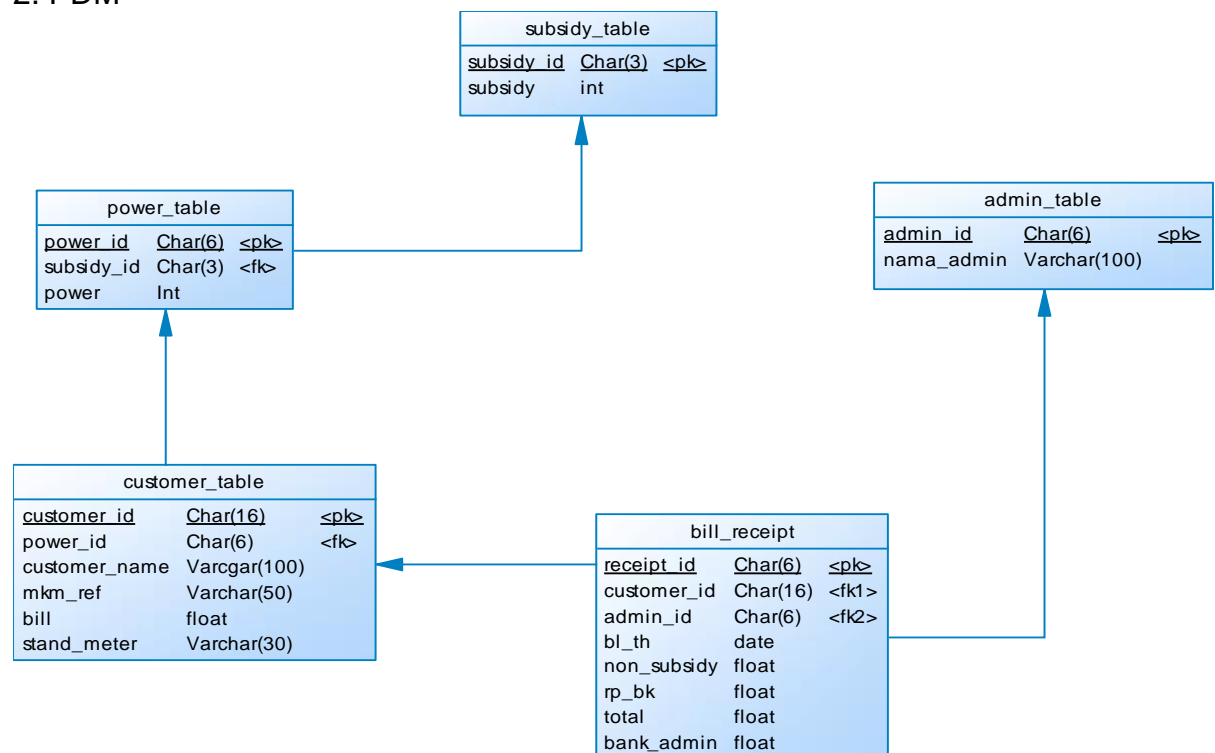
"Rincian tagihan dapat dilihat di www.pln.co.id atau PLN terdekat"
INFORMASI HUB : 123

1. Buatlah struktur basis data berdasarkan struk pembayaran listrik diatas berupa CDM dan PDM!
2. Buat implementasi ke basis data tersebut ke dalam MySQL! Lampirkan script sql anda!
3. Buat query untuk menampilkan data seperti pada struk tersebut! Lampirkan query dan bukti hasil querynya!

1. CDM



2. PDM



2.

The screenshot shows the MySQL Workbench interface with the 'electricityBill' schema selected. The SQL editor contains the following code:

```
1 create database db_electricitybills;
2 use db_electricitybills;
3
4 create table power_table (power_id char(6) primary key, power int);
5 select * from power_table;
6 insert into power_table(power_id, power)
7 values
8 ('VA01', '900'),
9 ('VA02', '1300'),
10 ('VA03', '2200'),
11 ('VA11', '3500'),
12 ('VA12', '3500'),
13 ('VA31', '6600');
14 select * from power_table;
15
16 create table subsidy_table (subsidy_id char(3) primary key, subsidy int);
17 insert into subsidy_table (subsidy_id, subsidy)
18 values
```

The Output window shows the following results:

#	Time	Action	Message	Duration / Fetch
1	14:49:59	use db_electricitybills	Error Code: 1049. Unknown database 'db_electricitybills'	0.016 sec
2	14:50:05	use db_electricitybills	0 row(s) affected	0.000 sec
3	14:52:17	create table customer_table (customer_id Char(16) primary key, power_id char(6), customer_na...	0 row(s) affected	0.032 sec
4	14:58:43	insert into customer_table (customer_id, power_id, customer_name, mkn_ref, stand_meter) valu...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.000 sec
5	15:01:56	create table bill_receipt (receipt_id Char(6) primary key, customer_id char(16), admin_id Char(6), ...	0 row(s) affected	0.031 sec
6	15:03:01	INSERT INTO bill_receipt (receipt_id, customer_id, admin_id, bl_th, non_subsidy, tp_bk, total, b...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.016 sec

The screenshot shows the MySQL Workbench interface with the 'electricityBill' schema selected. The SQL editor contains the following code:

```
16 create table subsidy_table (subsidy_id char(3) primary key, subsidy int);
17 insert into subsidy_table (subsidy_id, subsidy)
18 values
19 ('SB1', 'R'),
20 ('SB2', 'H'),
21 ('SB3', 'T'),
22 ('SB4', 'R1'),
23 ('SB5', 'R1T');
24
25 create table customer_table
26 (customer_id char(16) primary key, power_id char(6),
27 customer_name varchar(100), mkn_ref varchar(50), bill float, stand_meter varchar(30));
28
29 insert into customer_table (customer_id, power_id, customer_name, mkn_ref, stand_meter)
30 values
31 (1, 1001, 'John Doe', 'ABC123', 250),
32 (2, 1002, 'Jane Smith', 'DEF456', 100),
33 (3, 1003, 'Alice Johnson', 'GHI789', 300);
```

The Output window shows the following results:

#	Time	Action	Message	Duration / Fetch
1	14:49:59	use db_electricitybills	Error Code: 1049. Unknown database 'db_electricitybills'	0.016 sec
2	14:50:05	use db_electricitybills	0 row(s) affected	0.000 sec
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4	14:58:43	insert into customer_table (customer_id, power_id, customer_name, mkn_ref, stand_meter) valu...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.000 sec
5	15:01:56	create table bill_receipt (receipt_id Char(6) primary key, customer_id char(16), admin_id Char(6), ...	0 row(s) affected	0.031 sec
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MySQL Workbench

File Edit View Query Database Server Tools Scripting Help

Navigator: electricityBill

SCHEMAS

Filter objects

db_electricitybills

Tables

power_table

Columns

Indexes

Foreign Keys

Triggers

subsidy_table

Columns

subsidy_id

subsidy

Indexes

PRIMARY

Foreign Keys

Triggers

Administration

Schemas

Information

Index: PRIMARY

Definition:

Type B-TREE

Unique Yes

Visible Yes

Columns subsidy_id

Object Info Session

```
26 (customer_id char(16) primary key, power_id char(6),
27 customer_name varchar(100), mkn_ref varchar(50), bill float, stand_meter varchar(30));
28
29 insert into customer_table (customer_id, power_id, customer_name, mkn_ref, stand_meter)
30 values
31 (1, 1001, 'John Doe', 'ABC123', 250),
32 (2, 1002, 'Jane Smith', 'DEF456', 180),
33 (3, 1003, 'Alice Johnson', 'GHI789', 300);
34
35 create table bill_receipt (receipt_id char(6) primary key, customer_id char(16), admin_id char(6), bl_th date, non_subsidy float, tp_bk fl
36 INSERT INTO bill_receipt (receipt_id, customer_id, admin_id, bl_th, non_subsidy, tp_bk, total, bank_admin)
37 VALUES
38 ('RE1234', 'John Doe', 'ADM001', '2023-05-01', 150.25, 50.75, 201.00, 2.50),
39 ('RE5678', 'Jane Smith', 'ADM002', '2023-05-01', 250.50, 75.25, 325.75, 3.75),
40 ('RE9101', 'Alice Johnson', 'ADM003', '2023-05-01', 180.75, 45.50, 226.25, 2.25);
41
42
43
```

SQL Additions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	14:49:59	use db_electricitybills	Error Code: 1049 Unknown database 'db_electricitybills'	0.016 sec
2	14:50:05	use db_electricitybills	0 row(s) affected	0.000 sec
3	14:52:17	create table customer_table (customer_id Char(16) primary key, power_id char(6), customer_name...	0 row(s) affected	0.032 sec
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15:10 22/05/2023

3.

-- Create power_table

```
CREATE TABLE power_table (  
    power_id CHAR(6) PRIMARY KEY,  
    power INT  
);
```

-- Select all data from power_table

```
SELECT * FROM power_table;
```

-- Insert data into power_table

```
INSERT INTO power_table (power_id, power)  
VALUES  
    ('VA01', 900),  
    ('VA02', 1300),  
    ('VA03', 2200),  
    ('VA11', 3500),  
    ('VA12', 3500),  
    ('VA31', 6600);
```

-- Select all data from power_table

```
SELECT * FROM power_table;
```

-- Create subsidy_table

```
CREATE TABLE subsidy_table (  
    subsidy_id CHAR(3) PRIMARY KEY,  
    subsidy INT  
);
```

-- Insert data into subsidy_table

```
INSERT INTO subsidy_table (subsidy_id, subsidy)  
VALUES  
    ('SB1', 'R'),  
    ('SB2', 'M'),  
    ('SB3', 'T'),  
    ('SB4', 'R1'),  
    ('SB5', 'R1T');
```

-- Create customer_table

```
CREATE TABLE customer_table (  
    customer_id CHAR(16) PRIMARY KEY,  
    power_id CHAR(6),  
    customer_name VARCHAR(100),  
    mkm_ref VARCHAR(50),  
    bill FLOAT,  
    stand_meter VARCHAR(30)  
);
```

-- Insert data into customer_table

```
INSERT INTO customer_table (customer_id, power_id, customer_name, mkm_ref,
stand_meter)
VALUES
('1', 'VA01', 'John Doe', 'ABC123', 250),
('2', 'VA02', 'Jane Smith', 'DEF456', 180),
('3', 'VA03', 'Alice Johnson', 'GHI789', 300);
```

-- Create bill_receipt

```
CREATE TABLE bill_receipt (
receipt_id CHAR(6) PRIMARY KEY,
customer_id CHAR(16),
admin_id CHAR(6),
bl_th DATE,
non_subsidy FLOAT,
tp_bk FLOAT,
total FLOAT,
bank_admin FLOAT
);
```

-- Insert data into bill_receipt

```
INSERT INTO bill_receipt (receipt_id, customer_id, admin_id, bl_th, non_subsidy,
tp_bk, total, bank_admin)
VALUES
('RE1234', '1', 'ADM001', '2023-05-01', 150.25, 50.75, 201.00, 2.50),
('RE5678', '2', 'ADM002', '2023-05-01', 250.50, 75.25, 325.75, 3.75),
('RE9101', '3', 'ADM003', '2023-05-01', 180.75, 45.50, 226.25, 2.25);
```