

LAPORAN TUGAS 1 DATA WAREHOUSE DAN BISNIS INTELLIGENCE



OLEH:

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1. Write a CREATE TABLE statement for the *Customer* table. Choose data types appropriate for the DBMS used in your course. All columns are required (not null).

Jawaban :

```
Intercollegiate_Athletic /postgres@PostgreSQL 13
Query Editor  Query History
11 CREATE TABLE Customer (
12   stdcustno char(11) not null,
13   stdcustname varchar(30) not null,
14   stdaddress varchar(30) not null,
15   stdinternal varchar(30) not null,
16   stdcontact varchar(30) not null,
17   stdphone INTEGER not null,
18   stdcity varchar(30) not null,
19   stdstate char(30) not null,
20   stdZip char(10) not null,
21   CONSTRAINT CustomerPk PRIMARY KEY (StdcustNo) );
```

2. Write a CREATE TABLE statement for the *Facility* table. Choose data types appropriate for the DBMS used in your course. All columns are required (not null).

Jawaban :

```
----- Facility -----
CREATE TABLE Facility(
Facno   char(6) not null,
Facname varchar(30) not null,
CONSTRAINT FacilityPK PRIMARY KEY (FacNo) );
```

3. Write a CREATE TABLE statement for the *Location* table. Choose data types appropriate for the DBMS used in your course. *LocName* column is required (not null).

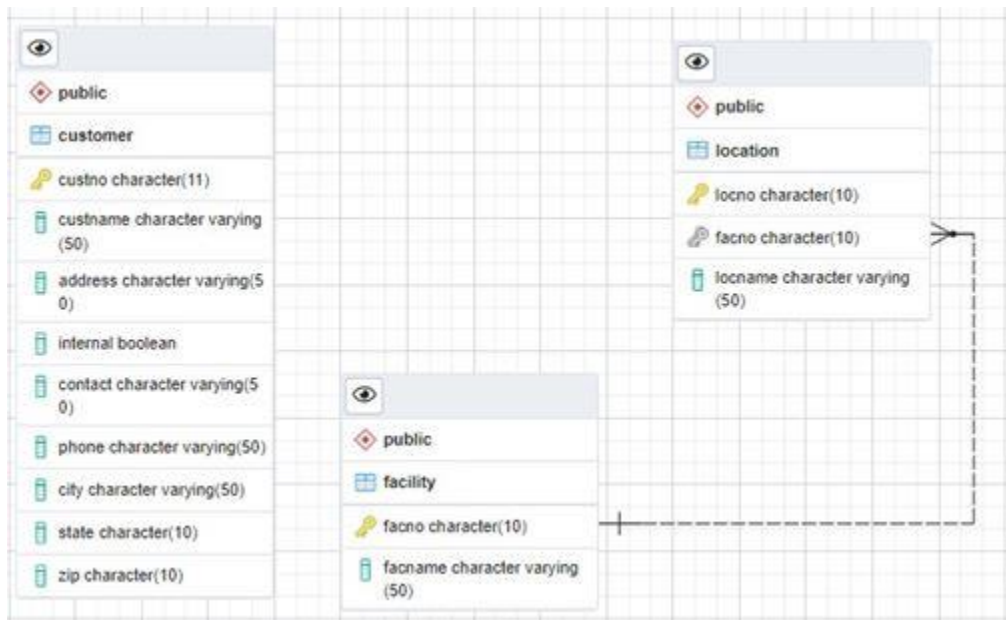
Jawaban :

```
----- Location -----
CREATE TABLE Location(
Locno      char(11) not null,
Facno      char(6) not null,
Locname     varchar(30) not null);
```

4. Identify the foreign key(s) and 1-M relationship(s) among the *Customer*, *Facility*, and *Location* tables. For each relationship, identify the parent table and the child table.

Jawaban :

Facility – Location(1-1 relationship dengan tabel Facility sebagai parent tabel dan tabel Location sebagai child table. Tabel customer tidak memiliki foreign key didalamnya namun tabel Customer bertindak sebagai parent tabel.



5. Extend your CREATE TABLE statement from problem (3) with referential integrity constraints.

Jawaban :

Terdapat foreign key yaitu atribut facno dari table Facility di dalam table Location.

```
Query Editor  Query History
1  CREATE TABLE Location
2  (Locno VARCHAR(8) not null,
3   FacNo VARCHAR(8),
4   locname VARCHAR(30) not null,
5   CONSTRAINT PK_Location PRIMARY KEY(Locno),
6   CONSTRAINT PK_FACNO FOREIGN KEY(Facno)
7   REFERENCES FACILITY (Facno));
```

6. From examination of the sample data and your common understanding of scheduling and operation of events, are null values allowed for the foreign key in the *Location* table? Why or why not? Extend the CREATE TABLE statement in problem (5) to enforce the null value restrictions if any.

Jawaban :

Nilai null tidak diperbolehkan untuk foreign key di table Location, Foreign key yang berisi nilai null tidak dapat cocok dengan nilai parent key, karena parent key tidak boleh memiliki nilai null. Namun, nilai foreign key null selalu valid, terlepas dari nilai bagian mana pun yang bukan null.

```
----- Location -----  
  
CREATE TABLE Location(  
  Locno          char(11) not null,  
  Facno          char(6)  not null,  
  Locname        varchar(30) not null,  
  CONSTRAINT locationPK PRIMARY KEY (Locno),  
  CONSTRAINT FacnoPK FOREIGN KEY (Facno)  
    REFERENCER Facility (Facno));
```

7. Extend your CREATE TABLE statement for the *Facility* table (problem 2) with a unique constraint for *FacName*. Use an external named constraint clause for the unique constraint.

Jawaban :

Menambahkand batasan constraints unique di kolom FacName pada pembuatan table Facility.

```
----- Facility -----  
  
CREATE TABLE Facility(  
  Facno          char(6)  not null,  
  Facname        varchar(30) not null,  
  CONSTRAINT FacilityPK PRIMARY KEY (FacNo),  
  CONSTRAINT unique_facname UNIQUE (FacName));
```

