

LAPORAN

TUGAS 1

DATA WAREHOUSE DAN BUSINESS INTELLIGENCE



OLEH :

Kristina Ronalita Nainggolan

181402135

KOM C

TEKNOLOGI INFORMASI

FAKULTAS ILMU KOMPUTER DAN TEKNOLOGI INFORMASI

UNIBERSITAS SUMATERA UTARA

MEDAN

2021

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).

```
CREATE TABLE Customer(  
    custno CHAR (11) primary key not null,  
    custname VARCHAR(50) not null,  
    address VARCHAR(50) not null,  
    internal BOOLEAN not null,  
    contact VARCHAR(50) not null,  
    phone VARCHAR(50) not null,  
    city VARCHAR(50) not null,  
    state CHAR(10) not null,  
    zip CHAR(10) not null  
);
```

2. 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).

```
CREATE TABLE Facility(  
    facno CHAR(10) primary key not null,  
    facname VARCHAR(50) not null  
);
```

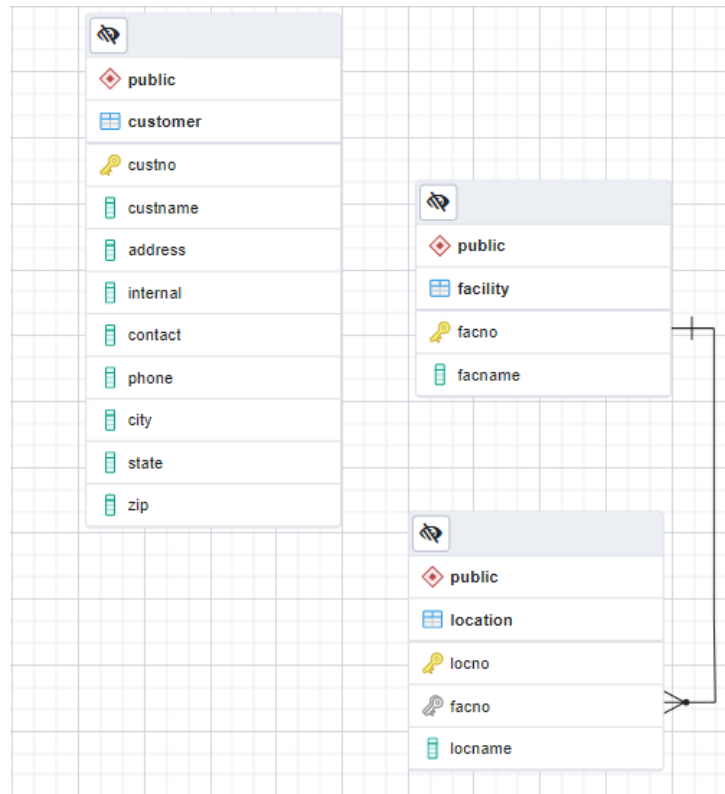
3. Write a CREATE TABLE statement for the Location table. Choose data types appropriate for the DBMS used in your course. LocName column is required (not null).

```
CREATE TABLE Location(  
    locno CHAR(10) primary key not null,  
    facno CHAR(10) not null,  
    locname VARCHAR(50) not null,  
    foreign key (facno) references Facility (facno)  
);
```

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.

- Facility - Location adalah **1-Many relationship**

Dengan tabel Facility sebagai parent table dan tabel Location sebagai child table.

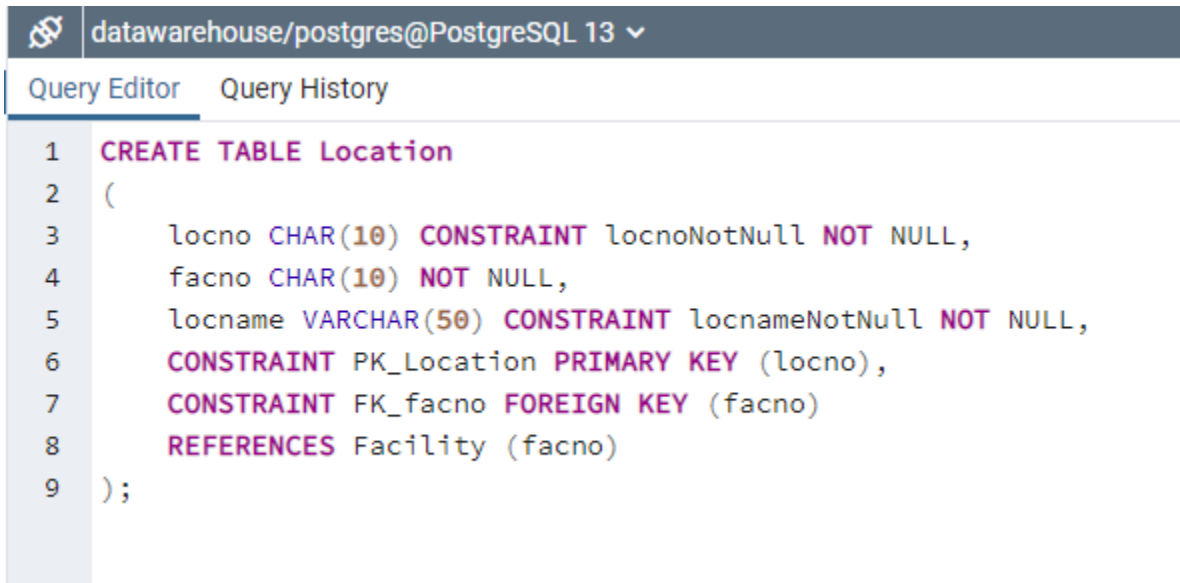


5. Extend your CREATE TABLE statement from problem (3) with referential integrity constraints.

```

datawarehouse/postgres@PostgreSQL 13
Query Editor Query History
1 CREATE TABLE Location
2 (
3     locno CHAR(10) CONSTRAINT locnoNotNull NOT NULL,
4     facno CHAR(10),
5     locname VARCHAR(50) CONSTRAINT locnameNotNull NOT NULL,
6     CONSTRAINT PK_Location PRIMARY KEY (locno),
7     CONSTRAINT FK_facno FOREIGN KEY (facno)
8     REFERENCES Facility (facno)
9 );
  
```

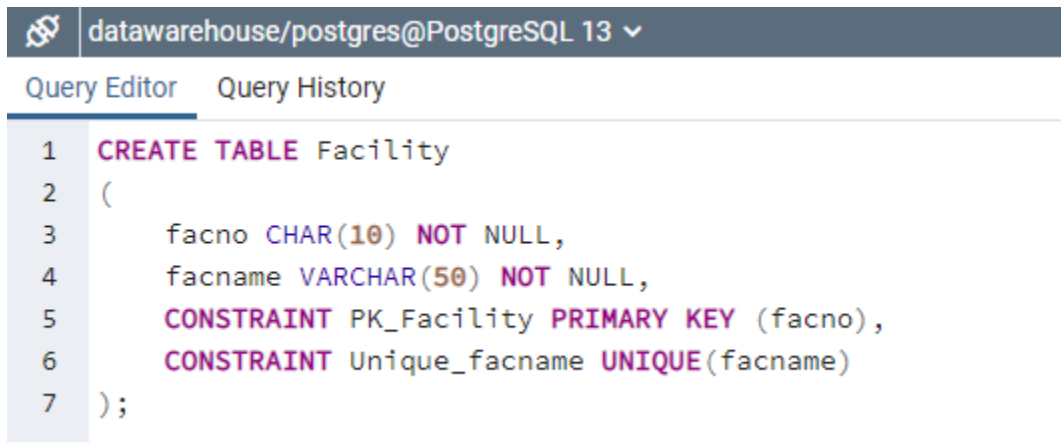
6. From examination of the sample data and your common understanding of scheduling and operation of events, are null values allowed for the foreign key in the Location table? Why or why not? Extend the CREATE TABLE statement in problem (5) to enforce the null value restrictions if any.



The image shows a PostgreSQL Query Editor window with a dark header bar containing a database icon and the text "datawarehouse/postgres@PostgreSQL 13". Below the header are two tabs: "Query Editor" (selected) and "Query History". The main area displays a SQL statement for creating a table named "Location".

```
1 CREATE TABLE Location
2 (
3     locno CHAR(10) CONSTRAINT locnoNotNull NOT NULL,
4     facno CHAR(10) NOT NULL,
5     locname VARCHAR(50) CONSTRAINT locnameNotNull NOT NULL,
6     CONSTRAINT PK_Location PRIMARY KEY (locno),
7     CONSTRAINT FK_facno FOREIGN KEY (facno)
8     REFERENCES Facility (facno)
9 );
```

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.



The image shows a PostgreSQL Query Editor window with a dark header bar containing a database icon and the text "datawarehouse/postgres@PostgreSQL 13". Below the header are two tabs: "Query Editor" (selected) and "Query History". The main area displays a SQL statement for creating a table named "Facility".

```
1 CREATE TABLE Facility
2 (
3     facno CHAR(10) NOT NULL,
4     facname VARCHAR(50) NOT NULL,
5     CONSTRAINT PK_Facility PRIMARY KEY (facno),
6     CONSTRAINT Unique_facname UNIQUE(facname)
7 );
```