

Nama : Fikri Fadhlillah

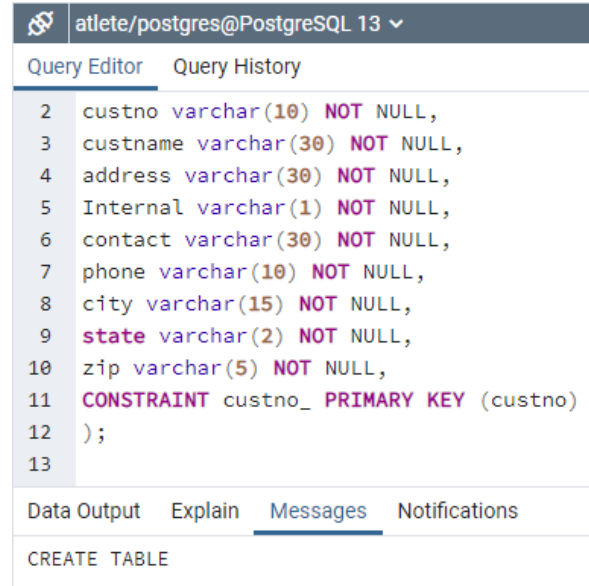
Nim : 181402117

Kom : C

Mata Kuliah : Data Warehouse dan Bisnis Intelligence

1.

```
CREATE TABLE customer ( custno
varchar(10) NOT NULL, custname
varchar(30) NOT NULL, address
varchar(30) NOT NULL, Internal
varchar(1) NOT NULL, contact
varchar(30) NOT NULL, phone
varchar(10) NOT NULL, city
varchar(15) NOT NULL,
state varchar(2) NOT NULL,
zip varchar(5) NOT NULL,
CONSTRAINT custno_ PRIMARY KEY (custno)
);
```



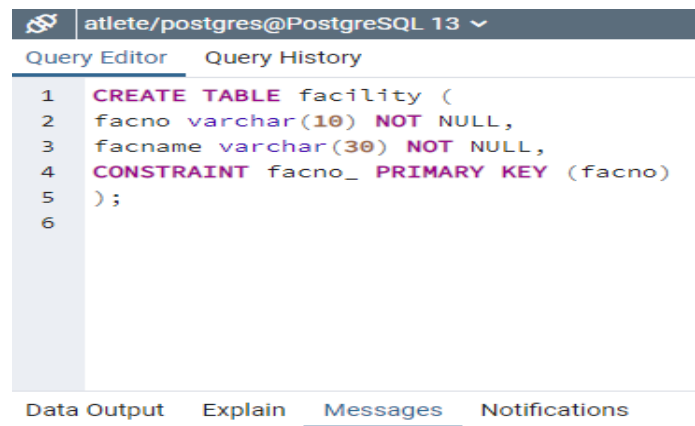
The screenshot shows a PostgreSQL Query Editor interface. The title bar indicates the user is 'atlete/postgres@PostgreSQL 13'. The 'Query Editor' tab is active, displaying the SQL code for creating a table named 'customer'. The code defines columns: 'custno' (varchar(10) NOT NULL), 'custname' (varchar(30) NOT NULL), 'address' (varchar(30) NOT NULL), 'Internal' (varchar(1) NOT NULL), 'contact' (varchar(30) NOT NULL), 'phone' (varchar(10) NOT NULL), 'city' (varchar(15) NOT NULL), 'state' (varchar(2) NOT NULL), and 'zip' (varchar(5) NOT NULL). A primary key constraint is defined on the 'custno' column. The 'Messages' tab is also visible at the bottom, showing the execution of the 'CREATE TABLE' statement.

```
2  custno varchar(10) NOT NULL,
3  custname varchar(30) NOT NULL,
4  address varchar(30) NOT NULL,
5  Internal varchar(1) NOT NULL,
6  contact varchar(30) NOT NULL,
7  phone varchar(10) NOT NULL,
8  city varchar(15) NOT NULL,
9  state varchar(2) NOT NULL,
10 zip varchar(5) NOT NULL,
11 CONSTRAINT custno_ PRIMARY KEY (custno)
12 );
13
```

<input type="checkbox"/>	Name	Owner	Partitioned table?	Comment
<input type="checkbox"/>	customer	postgres	<input type="checkbox"/> False	

2.

```
CREATE TABLE facility ( facno
varchar(10) NOT NULL, facname
varchar(30) NOT NULL,
CONSTRAINT facno_ PRIMARY KEY (facno)
);
```



The screenshot shows a PostgreSQL Query Editor window with the title bar 'atele/postgres@PostgreSQL 13'. The 'Query Editor' tab is active, displaying the following SQL code:

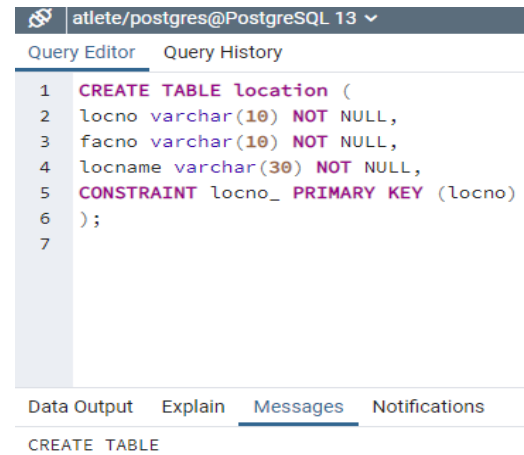
```
1 CREATE TABLE facility (
2   facno varchar(10) NOT NULL,
3   facname varchar(30) NOT NULL,
4   CONSTRAINT facno_ PRIMARY KEY (facno)
5 );
6
```

Below the query editor, the 'Messages' tab is selected, showing a successful execution message: 'CREATE TABLE'.

<input type="checkbox"/>	Name	Owner	Partitioned table?	Comment
<input type="checkbox"/>	customer	postgres	<input type="button" value="False"/>	
<input checked="" type="checkbox"/>	facility	postgres	<input type="button" value="False"/>	

3.

```
CREATE TABLE location (  
  locno varchar(10) NOT NULL,  
  facno varchar(10) NOT NULL,  
  locname varchar(30) NOT NULL,  
  CONSTRAINT locno_ PRIMARY KEY (locno)  
);
```



The screenshot shows a PostgreSQL Query Editor window with the title 'atlete/postgres@PostgreSQL 13'. The 'Query Editor' tab is active, displaying the following SQL code:

```
1 CREATE TABLE location (  
2   locno varchar(10) NOT NULL,  
3   facno varchar(10) NOT NULL,  
4   locname varchar(30) NOT NULL,  
5   CONSTRAINT locno_ PRIMARY KEY (locno)  
6 );  
7
```

Below the query editor, the 'Messages' tab is active, showing a single message: 'CREATE TABLE'.

<input type="checkbox"/>	Name	Owner	Partitioned table?	Comment
<input type="checkbox"/>	customer	postgres	<input type="button" value="False"/>	
<input type="checkbox"/>	facility	postgres	<input type="button" value="False"/>	
<input checked="" type="checkbox"/>	location	postgres	<input type="button" value="False"/>	

4. Hanya ada satu tabel yang saling berhubungan. Table yang berhubungan adalah tabel facility dengan tabel location dimana table facility merupakan parent dari tabel location, karna tabel location mengambil data dari tabel facility.

5.

alter table location

add constraint \_locno

foreign key (facno) references facility (facno);



```
1 alter table location
2 add constraint _locno
3 foreign key (facno) references facility (facno);
```

ALTER TABLE

6. Null tidak boleh digunakan dalam foreign key. Disini saya ingin menjelaskan mengapa foreign key mungkin perlu nol atau mungkin perlu unik atau tidak unik. Pertama, ingat foreign key hanya mengharuskan nilai di bidang itu harus ada terlebih dahulu di tabel yang berbeda (tabel induk). Itu semua adalah definisi FK. Null menurut definisi bukanlah nilai. Null artinya kita belum tahu berapa nilainya.

7.

alter table facility

add constraint facilityname

unique (facname);



```
1 alter table facility
2 add constraint facilityname
3 unique (facname);
```

ALTER TABLE

# Pengisian Data Customer

atlete/postgres@PostgreSQL 13

Query Editor   Query History

```
1 INSERT INTO customer
2   (custno, custname, address, Internal, contact, phone, city, state, zip)
3   VALUES ('C100','Football','Box352200','Y','Mary Manager','6857100','Boulder','CO','
4
5 INSERT INTO customer
6   (custno, custname, address, Internal, contact, phone, city, state, zip)
7   VALUES ('C101','Men s Basketball','Box352400','Y','Sally Supervisor','5413700','Bou
8
9 INSERT INTO customer
10  (custno, custname, address, Internal, contact, phone, city, state, zip)
11  VALUES ('C103','Basebal','Box352020','Y','Bill Baseball','5431234','Boulder','CO','
12
```

Data Output   Explain   Messages   Notifications

INSERT 0 1

Query returned successfully in 51 msec.

pgAdmin 4

pgAdmin   File   Object   Tools   Help

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atlete/postgres@PostgreSQL 13

Query Editor   Query History

```
1 select * from customer;
```

Scratch Pad

Data Output   Explain   Messages   Notifications

custno	custname	address	internal	contact	phone	city	state
C100	Football	Box352200	Y	Mary Manager	6857100	Boulder	CO
C101	Men s Basketball	Box352400	Y	Sally Supervisor	5413700	Boulder	CO
C103	Basebal	Box352020	Y	Bill Baseball	5431234	Boulder	CO
C104	Women s Softball	Box351200	Y	Sue Softball	5434321	Boulder	CO
C105	High School Football	123 AnyStreet	N	Coach Bob	4441234	Louisville	CO

## Pengisian Data Facility

atlete/postgres@PostgreSQL 13 ▾

Query Editor   Query History

```
1 INSERT INTO facility
2     (facno, facname)
3     VALUES ('F100','Football stadium');
4
5
6 INSERT INTO facility
7     (facno, facname)
8     VALUES ('F101','Basketball arena');
9
10 INSERT INTO facility
11     (facno, facname)
12     VALUES ('F102','Basketball field');
```

Data Output   Explain   Messages   Notifications

INSERT 0 1

Query returned successfully in 43 msec.

pgAdmin 4

pgAdmin File Object Tools Help

Browser

- Database (4)
  - atlete
    - Casts
    - Catalogs
    - Event Triggers
    - Extensions
    - Foreign Data Wrappers
    - Languages
    - Publications
    - Schemas (1)
      - public
        - Collations
        - Domains
        - FTS Configurations
        - FTS Dictionaries
        - FTS Parsers
        - FTS Templates
        - Foreign Tables
        - Functions
        - Materialized Views
        - Procedures
        - Sequences
        - Tables**
        - Trigger Functions
        - Types
        - Views
  - postgres
  - Login/Group Roles
  - Tablespaces

Dashboard Properties SQL Statistics Dependencies Dependents atlete/postgres... atlete/postgres... atlete/postgres... a < > | Pre

atlete/postgres@PostgreSQL 13 ▾

Query Editor   Query History   Scratch Pad

```
1 select * from facility
```

Data Output   Explain   Messages   Notifications

	facno [PK] character varying (10)	facname character varying (30)
1	F100	Football stadium
2	F101	Basketball arena
3	F102	Basketball field
4	F103	Recreation room

## Pengisian Data Location

atlete/postgres@PostgreSQL 13 ▾

Query Editor Query History

```
22      (locno, facno, locname)
23      VALUES ('L104', 'F100', 'Ticket Booth');
24
25
26  INSERT INTO location
27      (locno, facno, locname)
28      VALUES ('L105', 'F101', 'Gate');
29
30
31  INSERT INTO location
32      (locno, facno, locname)
33      VALUES ('L106', 'F100', 'Pedestrian gate');
```

Data Output Explain Messages Notifications

INSERT 0 1

Query returned successfully in 48 msec.

pgAdmin 4

File Object Tools Help

Browser

- Databases (2)
  - atlete
    - Casts
    - Catalogs
    - Event Triggers
    - Extensions
    - Foreign Data Wrappers
    - Languages
    - Publications
    - Schemas (1)
      - public
        - Collations
        - Domains
        - FTS Configurations
        - FTS Dictionaries
        - FTS Parsers
        - FTS Templates
        - Foreign Tables
        - Functions
        - Materialized Views
        - Procedures
        - Sequences
        - Tables
        - Trigger Functions
        - Types
        - Views
  - postgres
    - Login/Group Roles
    - Tablespaces

Dashboard Properties SQL Statistics Dependencies Dependents atlete/postgres... atlete/postgres... atlete/postgres... a < > |

atlete/postgres@PostgreSQL 13 ▾

Query Editor Query History Scratch Pad

```
1 select * from location
```

Data Output Explain Messages Notifications

	locno [PK] character varying (10)	facno character varying (10)	locname character varying (30)
1	L100	F100	Locker room
2	L101	F100	Plaza
3	L102	F100	Vehicle gate
4	L103	F101	Locker room
5	L104	F100	Ticket Booth
6	L105	F101	Gate
7	L106	F100	Pedestrian gate