**Using SQL Create a source table for data warehouse.**

CREATE TABLE autoxyz(

id serial PRIMARY KEY

item\_name varchar(255),

brand varchar(255),

sold\_by varchar(255),

category varchar(255),

day int,

month varchar(255),

quarter varchar(255),

year int,

location\_name varchar(255),

state varchar(255),

pin\_code int,

driver\_name varchar(255)

duty\_time varchar(255)

qty\_sold int,

amt\_sold int

);

INSERT INTO autoxyz(item\_name,

brand,

sold\_by,

category,

day,

month,

quarter,

year,

location\_name,

state,

pin\_code,

driver\_name,

duty\_time,

qty\_sold,

amt\_sold)

VALUES('Car','Model X','Tesla','Four wheeler',13,'June','Q2',2024,'New Baneshwor','Bagmati','123','Jack','Evening',2,13000),

('Car','Model Y','Tesla','Four wheeler',21,'November','Q4',2024,'Koteshwor','Bagmati','123','Candace','Morning',1,8000);

SELECT \* FROM autoxyz;

**Using SQL Create time dimension table for data warehouse.**

CREATE TABLE timedim (

t\_id serial PRIMARY KEY,

day int,

month varchar(255),

quarter varchar(255),

year int

);

INSERT INTO timedim(

day,

month,

quarter,

year

)

SELECT day,month,quarter,year FROM autoxyz;

SELECT \* FROM timedim;

**Using SQL Create location dimension table for data warehouse.**

CREATE TABLE locationdim (

l\_id serial PRIMARY KEY,

location\_name varchar(255),

state varchar(255),

pin\_code int

);

INSERT INTO locationdim(

location\_name,

state,

pin\_code

)

SELECT location\_name,state,pin\_code FROM autoxyz;

SELECT \* FROM locationdim;

**Using SQL Create item dimension table for data warehouse.**

CREATE TABLE itemdim (

i\_id serial PRIMARY KEY,

item\_name varchar(255),

brand varchar(255),

sold\_by varchar(255),

category varchar(255)

);

INSERT INTO itemdim(

item\_name,

brand,

sold\_by,

category

)

SELECT item\_name,brand,sold\_by,category FROM autoxyz;

SELECT \* FROM itemdim;

**Using SQL Create vehicle dimension table for data warehouse.**

CREATE TABLE vehicledim(

vehicle\_id serial PRIMARY KEY,

driver\_name varchar(255),

duty\_time varchar(255)

);

INSERT INTO vehicledim(

driver\_name,

duty\_time

)

SELECT driver\_name,duty\_time FROM autoxyz;

SELECT \* FROM vehicledim;

**Using SQL Create sales fact table for data warehouse.**

CREATE TABLE salesfact(

item\_id int REFERENCES itemdim(i\_id),

time\_id int REFERENCES timedim(t\_id),

location\_id int REFERENCES locationdim(l\_id),

qty\_sold int

);

INSERT INTO salesFact(

item\_id,

time\_id,

location\_id,

qty\_sold

)

SELECT i\_id,t\_id,l\_id,qty\_sold FROM autoxyz c

LEFT OUTER JOIN timedim t ON t.day = c.day AND t.month = c.month AND t.quarter = c.quarter AND t.year = c.year

LEFT OUTER JOIN itemdim i ON i.item\_name = c.item\_name AND i.brand = c.brand AND i.sold\_by = c.sold\_by AND i.category = c.category

LEFT OUTER JOIN locationdim l ON l.location\_name = c.location\_name AND l.state = c.state AND l.pin\_code = c.pin\_code;

SELECT \* FROM salesfact;

**Using SQL Create delivery fact table for data warehouse.**

CREATE TABLE deliveryfact(

item\_id int REFERENCES itemdim(i\_id),

location\_id int REFERENCES locationdim(l\_id),

vehicle\_id int REFERENCES vehicledim(vehicle\_id)

);

INSERT INTO deliveryfact(

item\_id,

location\_id,

vehicle\_id

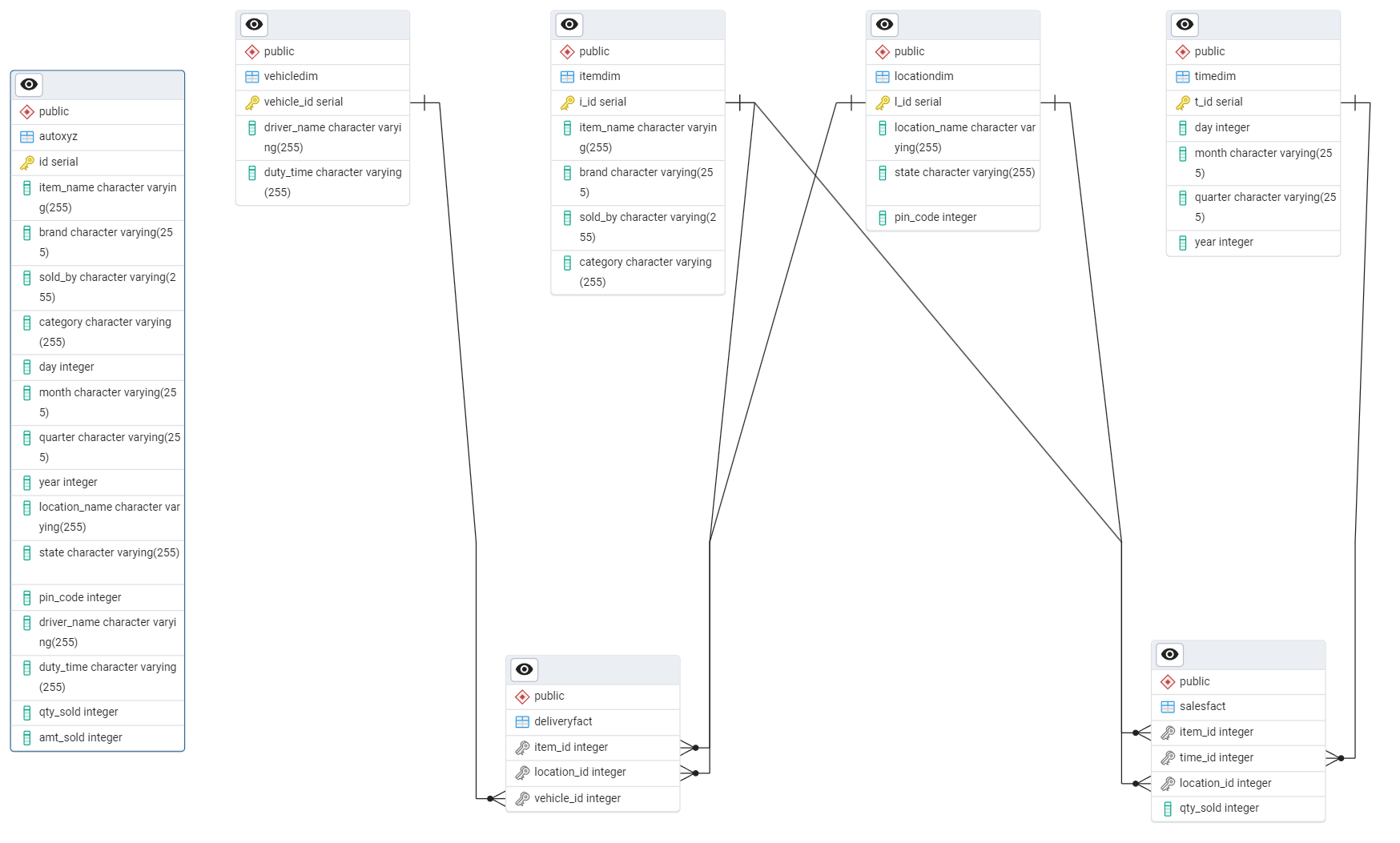
)

SELECT i\_id, l\_id, vehicle\_id FROM autoxyz c

LEFT OUTER JOIN itemdim i ON i.item\_name = c.item\_name AND i.brand = c.brand AND i.sold\_by = c.sold\_by AND i.category = c.category

LEFT OUTER JOIN locationdim l ON l.location\_name = c.location\_name AND l.state = c.state AND l.pin\_code = c.pin\_code

LEFT OUTER JOIN vehicledim v ON v.driver\_name = c. driver\_name AND v.duty\_time = c. duty\_time;

SELECT \* FROM deliveryfact;

**Query to select item\_id, location\_id, vehicle\_id, driver\_name, duty\_time records where duty time = morning**

SELECT d.item\_id, d.location\_id, v.vehicle\_id, driver\_name, duty\_time FROM deliveryfact d LEFT OUTER JOIN vehicledim v ON d.vehicle\_id = v.vehicle\_id WHERE duty\_time='Morning';