-1) Alter Table:

Add a new column linkedin\_profile to employees table to store LinkedIn URLs as varchar.

Change the linkedin\_profile column data type from VARCHAR to TEXT.

Add unique, not null constraint to linkedin\_profile

Drop column linkedin\_profile

1. ALTER TABLE employees

ADD COLUMN linkedin\_profile varchar(50);

2. ALTER TABLE employees

ALTER COLUMN linkedin\_profile TYPE text

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3. create sequence linkedin\_prof start with 1 increment by 1 ;

UPDATE employees SET linkedin\_profile = nextval('linkedin\_prof')::text

WHERE linkedin\_profile is NULL;

select \* from employees

ALTER TABLE employees

ALTER COLUMN linkedin\_profile SET NOT NULL,

ADD CONSTRAINT unique\_linkedin\_profile

UNIQUE (linkedin\_profile);

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4. ALTER TABLE employees

DROP COLUMN linkdin\_profile

--2) Querying (Select)

Retrieve the first name, last name, and title of all employees

Find all unique unit prices of products

List all customers sorted by company name in ascending order

Display product name and unit price, but rename the unit\_price column as price\_in\_usd

1. SELECT split\_part(employee\_name,' ',1)AS first\_name,

split\_part(employee\_name,' ',2)AS last\_name,

title

FROM employees

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2. SELECT distinct unitprice FROM products

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3. SELECT contact\_name,company\_name

FROM customers

ORDER BY company\_name

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4. SELECT product\_name,unitprice AS price\_in\_usd

FROM products

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--3) Filtering

Get all customers from Germany.

Find all customers from France or Spain

Retrieve all orders placed in 1997 (based on order\_date), and either have freight greater than 50 or the shipped date available (i.e., non-NULL) (Hint: EXTRACT(YEAR FROM order\_date))

select \* from orders

1. SELECT contact\_name,country

FROM customers

WHERE country = 'Germany'

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2. SELECT contact\_name,country

FROM customers

WHERE country IN ('France', 'Spain')

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3. SELECT \* FROM orders

WHERE EXTRACT(YEAR FROM order\_date)=1997 AND freight >50;

ANS-Zero results from year 1997

--4) Filtering

Retrieve the product\_id, product\_name, and unit\_price of products where the unit\_price is greater than 15.

List all employees who are located in the USA and have the title "Sales Representative".

Retrieve all products that are not discontinued and priced greater than 30.

SELECT \* FROM products

1. SELECT product\_id, product\_name,unitprice

FROM products

WHERE unitprice >15;

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2. SELECT employee\_name,title,country

FROM employees

WHERE title = 'Sales Representative' AND country='USA'

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3. SELECT product\_id,product\_name,discontinued,unitprice

FROM products

WHERE discontinued=0 AND unitprice > 30

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--5) LIMIT/FETCH

Retrieve the first 10 orders from the orders table.

Retrieve orders starting from the 11th order, fetching 10 rows (i.e., fetch rows 11-20).

SELECT \* FROM orders

1. SELECT order\_id,customer\_id

FROM orders

limit 10

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2. SELECT order\_id,customer\_id

FROM orders

limit 10

OFFSET 10

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--6) Filtering (IN, BETWEEN)

List all customers who are either Sales Representative, Owner

Retrieve orders placed between January 1, 2013, and December 31, 2013.

select \* from orders

1. SELECT contact\_name,contact\_title

FROM customers

WHERE contact\_title IN ('Sales Representative', 'Owner')

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2. SELECT \* FROM orders

WHERE order\_date BETWEEN '2013-01-01' AND '2013-12-31';

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--7) Filtering

List all products whose category\_id is not 1, 2, or 3.

Find customers whose company name starts with "A".

select \* from customers

1. SELECT \* FROM products
2. WHERE category\_id NOT IN (1,2,3);A screenshot of a computer

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2. SELECT customer\_id,contact\_name,company\_name

FROM customers

WHERE company\_name LIKE 'A%';

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--8) INSERT into orders table:

Task: Add a new order to the orders table with the following details:

Order ID: 11078

Customer ID: ALFKI

Employee ID: 5

Order Date: 2025-04-23

Required Date: 2025-04-30

Shipped Date: 2025-04-25

shipperID:2

Freight: 45.50

select \* from products order by product\_id

1. INSERT INTO orders(order\_id,customer\_id,employee\_id,order\_date,required\_date,shipped\_date,shipper\_id,freight)

VALUES(11078,'ALFKI',5,'2025-04-23','2025-04-30','2025-04-25',2,45.50);

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