TASK 5.

**TASK 6:**

Sales Trend Analysis Using Aggregations

**Objective:** Analyze monthly revenue and order volume.

Tools: PostgreSQL / MySQL / SQLite

**Deliverables:** SQL script + results table

**Hints/Mini Guide:**

Use EXTRACT(MONTH FROM order\_date) for month.

GROUP BY year/month.

Use SUM() for revenue.

COUNT(DISTINCT order\_id) for volume.

Use ORDER BY for sorting.

Limit results for specific time periods.

**Solution**

CREATE TABLE products (

product\_id SERIAL PRIMARY KEY,

product\_name VARCHAR(100),

category VARCHAR(50),

price NUMERIC(10, 2),

quantity INT,

added\_date DATE,

discount\_rate NUMERIC(5, 2)

);

INSERT INTO products (product\_name, category, price, quantity, added\_date, discount\_rate) VALUES

('Laptop', 'Electronics', 75000.50, 10, '2024-01-15', 10.00),

('Smartphone', 'Electronics', 45000.99, 25, '2024-02-20', 5.00),

('Headphones', 'Accessories', 1500.75, 50, '2024-03-05', 15.00),

('Office Chair', 'Furniture', 5500.00, 20, '2023-12-01', 20.00),

('Desk', 'Furniture', 8000.00, 15, '2023-11-20', 12.00),

('Monitor', 'Electronics', 12000.00, 8, '2024-01-10', 8.00),

('Printer', 'Electronics', 9500.50, 5, '2024-02-01', 7.50),

('Mouse', 'Accessories', 750.00, 40, '2024-03-18', 10.00),

('Keyboard', 'Accessories', 1250.00, 35, '2024-03-18', 10.00),

('Tablet', 'Electronics', 30000.00, 12, '2024-02-28', 5.00);

select \* from products;

--Use EXTRACT(MONTH FROM order\_date) for month.

select product\_name,added\_date,

extract(month from added\_date) as month\_

from products;

--GROUP BY year/month.

SELECT

date\_trunc('month', added\_date) AS year\_month,

-- Add other columns you want to select or aggregate

COUNT(\*) AS record\_count

FROM

products

GROUP BY

year\_month

ORDER BY

year\_month;

--Use SUM() for revenue.

SELECT SUM(price) AS total\_price

FROM products;

--COUNT(DISTINCT order\_id) for volume.

select count(product\_id) as total\_volume

from products;

--Use ORDER BY for sorting.

SELECT price,quantityFROM productsORDER BY product\_id desc;

**output**

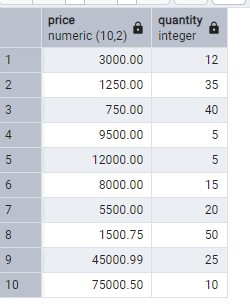
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