

Compose SQL queries based on the following questions using the data provided in the accompanying table

#### Data Retrieval, Filtering and Joins

- Write a query to select all customers from the customers table who live in a state with a name that starts with "C" and ends with "A".
- Find all Orders which have out of stock products
- Find all customer name and their customer id who have a pending or shipped order

#### Data Aggregation and Grouping:

- Calculate the total number of products and total discounts in each product category from the products table
- Total customer counts and total revenue of each state
- What are the top 2 product by revenue after the discount
- What is first order date of each customer.

#### Data Manipulation:

- Update the price of all products in the "electronics" category by a 10% discount in the products table.
- Delete all duplicate rows from the customers table (ensure proper logic to handle duplicates).
- Create a new field in Order line item table for total price ( unit price x quantity )

Table1: Customer

Field	Description
customer_id	Unique identifier for the customer
first_name	Customer's first name
last_name	Customer's last name
address	Customer's address
state	State where the customer resides

customer_id	first_name	last_name	address	state
1	John	Snow	123 Main St, Anytown, CA 90210	CAA
2	Subham	Smith	456 Elm St, Springfield, CL 62704	CLI
3	Yash	Williams	789 Maple Ave, Miami, FL 33133	FLO
4	David	Warner	100 Oak St, Austin, TX 78704	MTX
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Table2: Product

Field	Description
product_id	Unique identifier for the product
name	Product name
category	Category the product belongs to
price	Price of the product (including decimal places)
stock_quantity	Current quantity of the product in stock
discount_per	Discounts of product in percentage

product_id	name	category	price	stock_quantity	discount_per
1	Laptop	Electronics	129	10	0
2	Headphones	Electronics	79.99	0	10
3	T-Shirt	Clothing	19.99	50	0
4	Jeans	Clothing	39.99	30	30
5	Book	Books	14.99	15	0

**Table3: Order**

Field	Description
order_id	Unique identifier for the order
customer_id	ID of the customer who placed the order
order_date	Date the order was placed
status	Current status of the order (e.g., "pending", "shipped", "completed")
total_amount	Total amount of the order (including tax, shipping, etc.)

order_id	customer_id	order_date	status	total_amount
1	1	2024-04-15	pending	209.98
2	3	2024-04-12	shipped	49.99
3	2	2024-04-10	completed	179.95

**Table4: Order line item**

Field	Description
line_item_id	Unique identifier for the line item

order\_id

product\_id

quantity

Unit price

discount

Order ID associated with the line item

Product ID of the item in the order

Quantity of the product ordered

Price of the product at the time the order was placed

Discount applied to the product (optional)

line_item_id	order_id	product_id	quantity	Unit price	discount
1	1	1	1	129	0.00
2	1	2	2	79.99	7.90
3	2	3	1	19.99	0.00
4	3	4	5	39.99	15.90