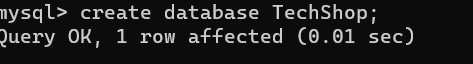
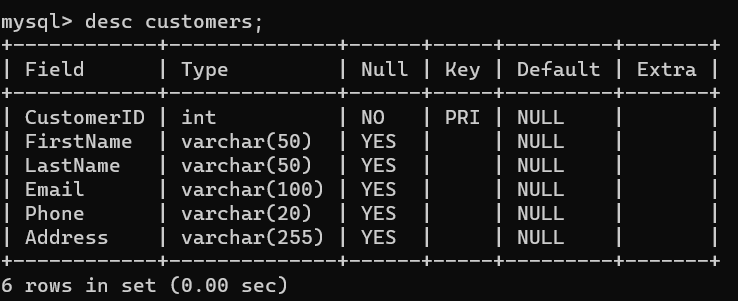
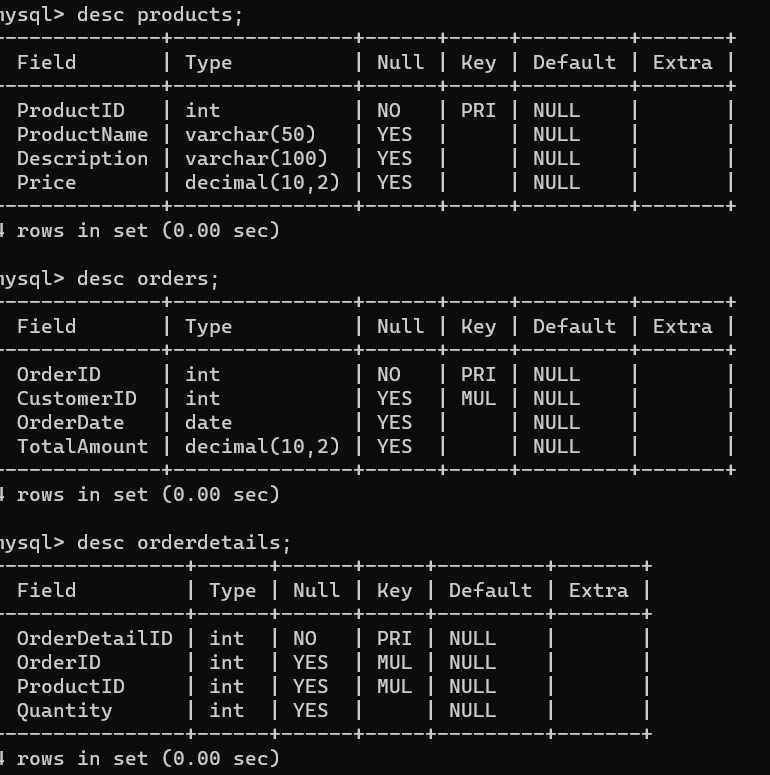
**Task 1**

**Q1:-Create the database named "TechShop”**



**Q2 :-Define the schema for the Customers, Products, Orders, OrderDetails and Inventory tables based on the provided schema**



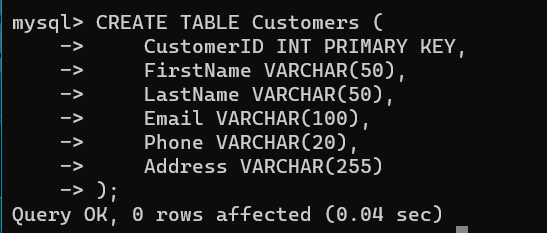


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**Q4. Create appropriate Primary Key and Foreign Key constraints for referential integrity.**

**Customers table:-**



**Products table:-**

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**Order table:-**

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**OrderDetails table:-**

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**Inventory tables:-**

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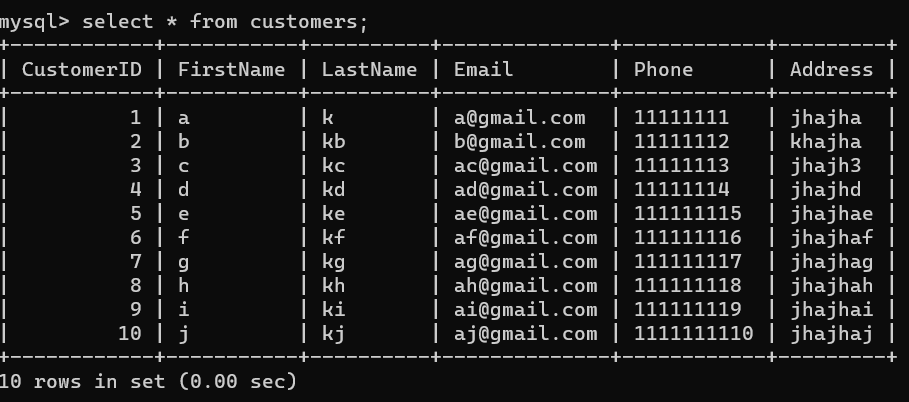
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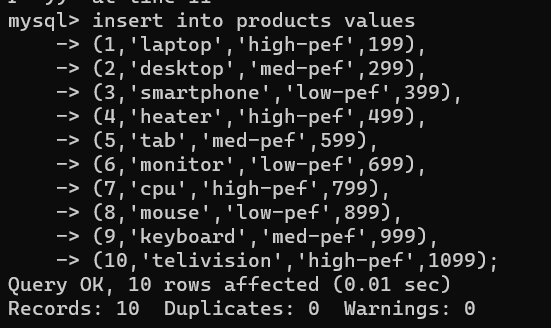
**Q 5. Insert at least 10 sample records into each of the following tables.**

**a. Customers**





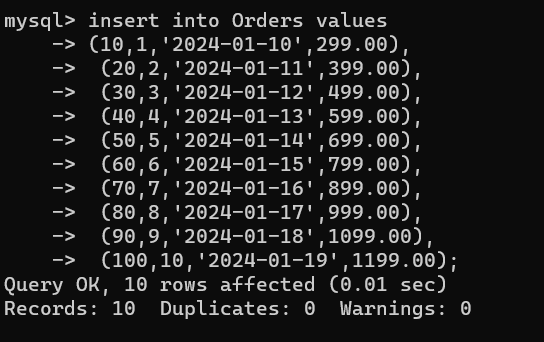
**b. Products**

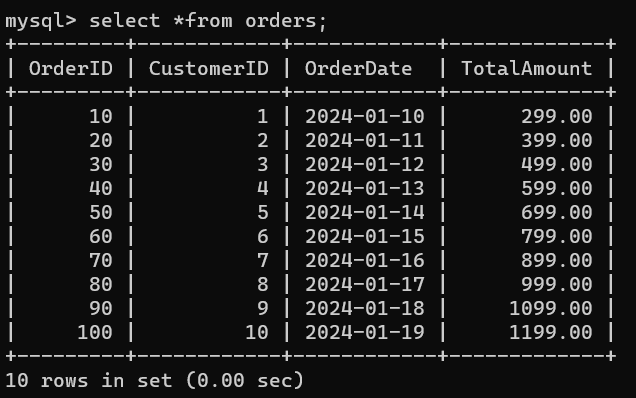


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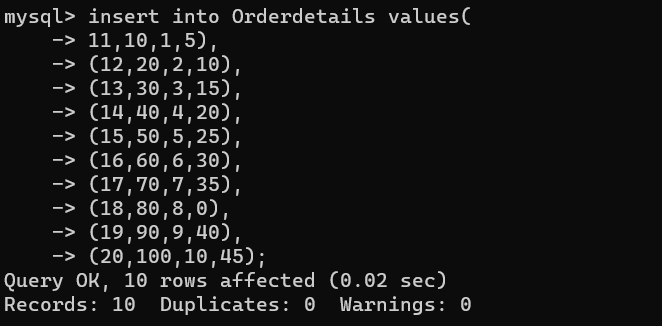
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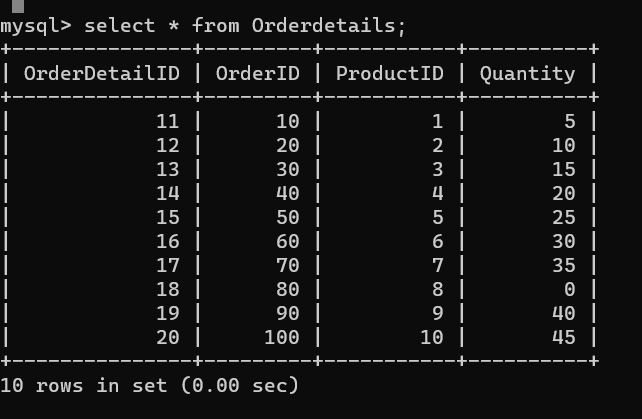
**c. Orders**



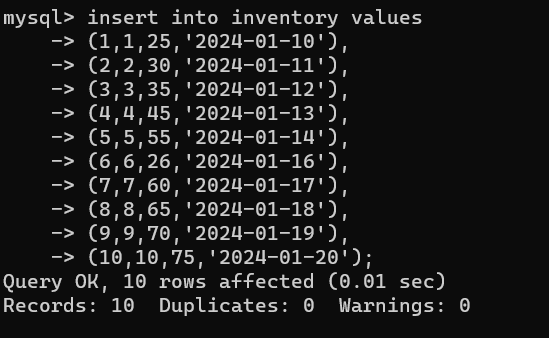


**d. OrderDetails**

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**e. Inventory**

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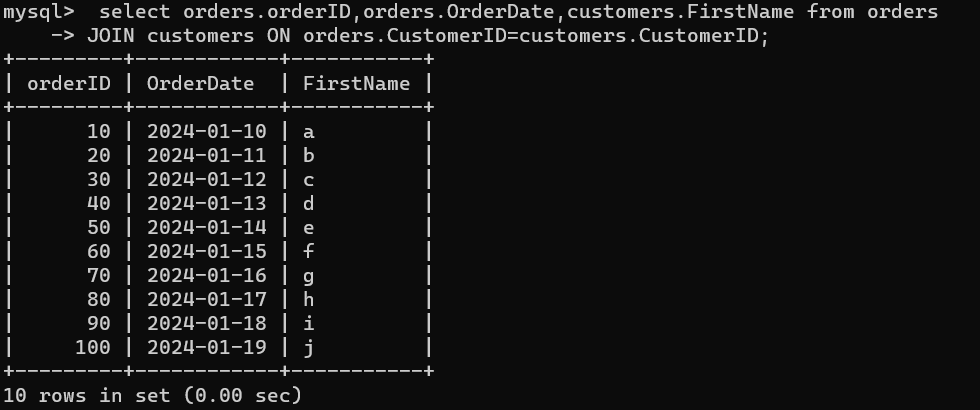
**Tasks 2: Select, Where, Between, AND, LIKE:**

1. **Write an SQL query to retrieve the names and emails of all customers**.

A screen shot of a computer

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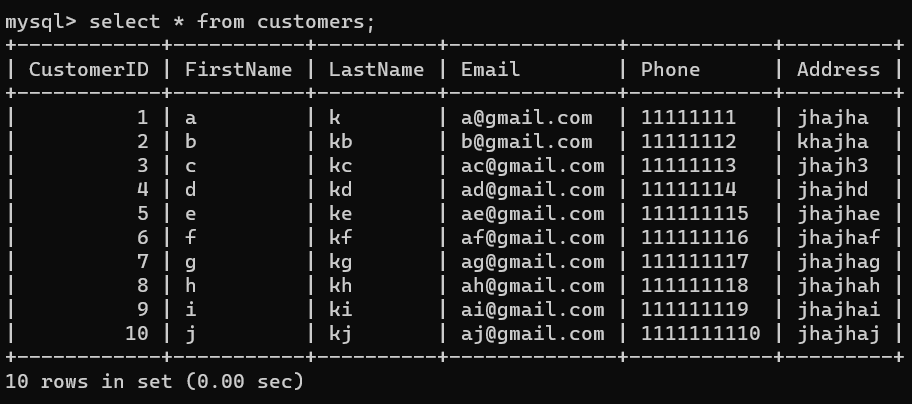
1. **Write an SQL query to list all orders with their order dates and corresponding customer names.**



1. **Write an SQL query to insert a new customer record into the "Customers" table. Include customer information such as name, email, and address**

**Ans:-**

**Before Adding the new customer data**

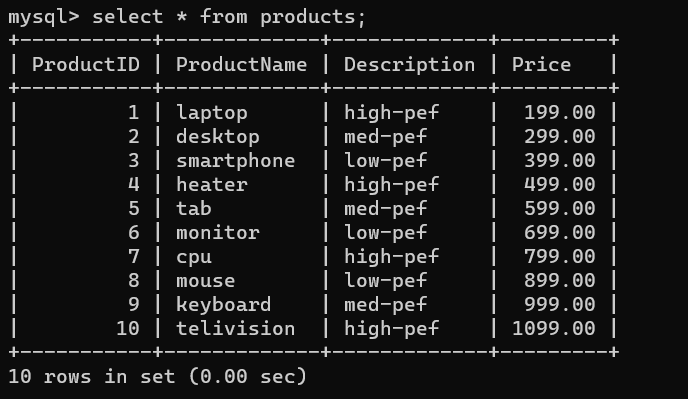
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**After Adding the new customer data**

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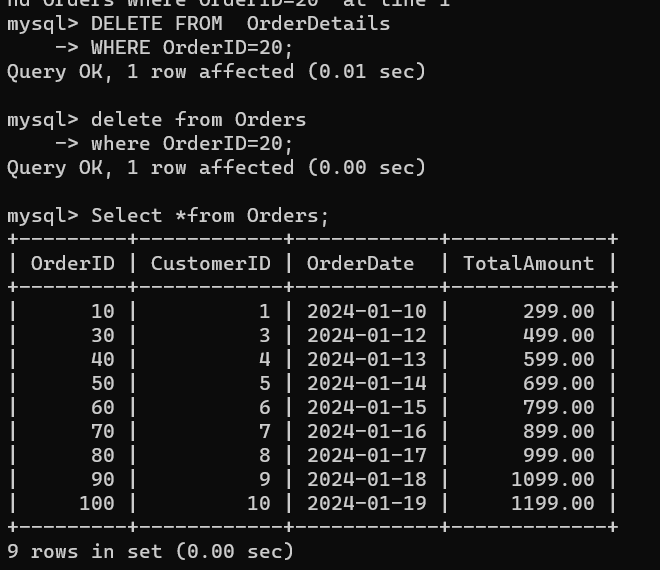
**4. Write an SQL query to update the prices of all electronic gadgets in the "Products" table by increasing them by 10%.**



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**5.Write an SQL query to delete a specific order and its associated order details from the "Orders" and "OrderDetails" tables. Allow users to input the order ID as a parameter**

****

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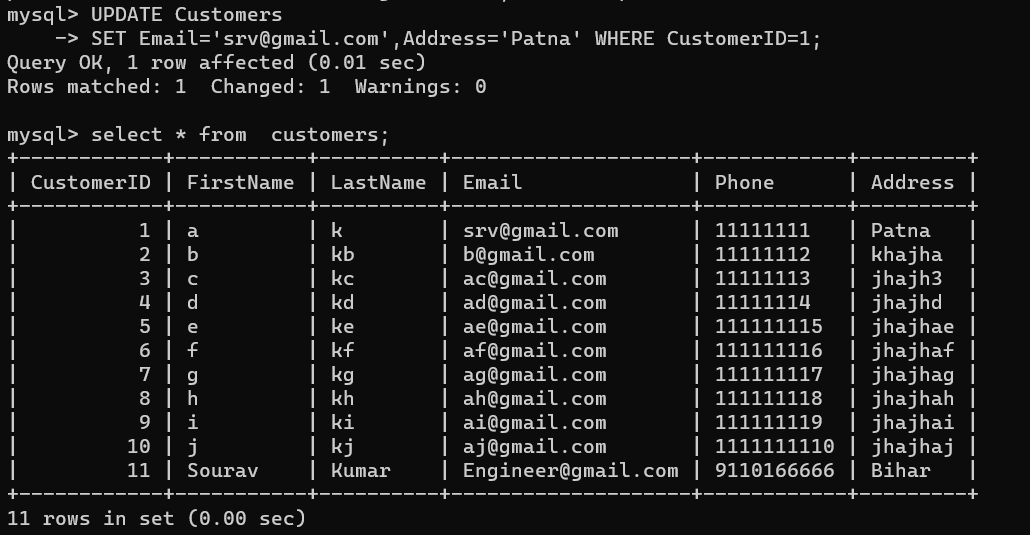
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**6.Write an SQL query to insert a new order into the "Orders" table. Include the customer ID, order date, and any other necessary information.**

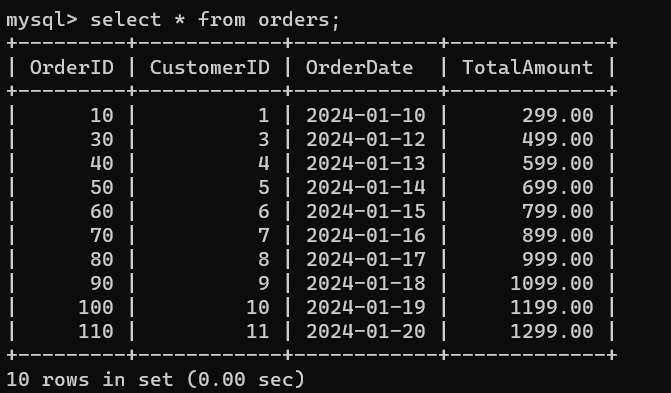
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**7. Write an SQL query to update the contact information (e.g., email and address) of a specific customer in the "Customers" table. Allow users to input the customer ID and new contact information**

****

**8. Write an SQL query to recalculate and update the total cost of each order in the "Orders" table based on the prices and quantities in the "OrderDetails" table.**

****

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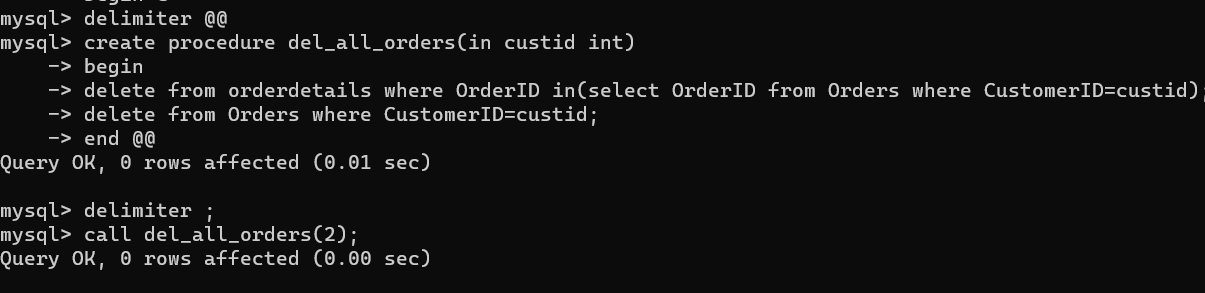
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**9. Write an SQL query to delete all orders and their associated order details for a specific customer from the "Orders" and "OrderDetails" tables. Allow users to input the customer ID as a parameter**

****

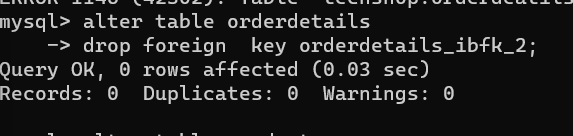
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**10. Write an SQL query to insert a new electronic gadget product into the "Products" table, including product name, category, price, and any other relevant details**.

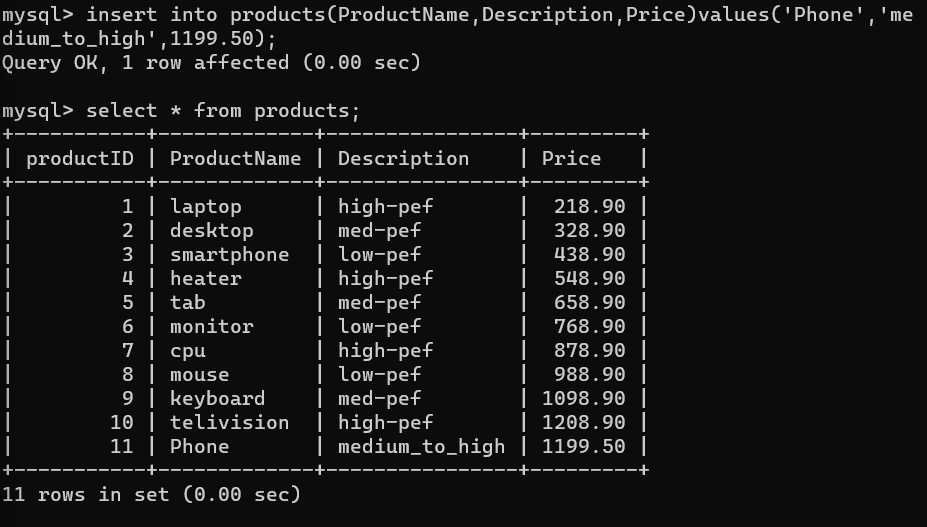
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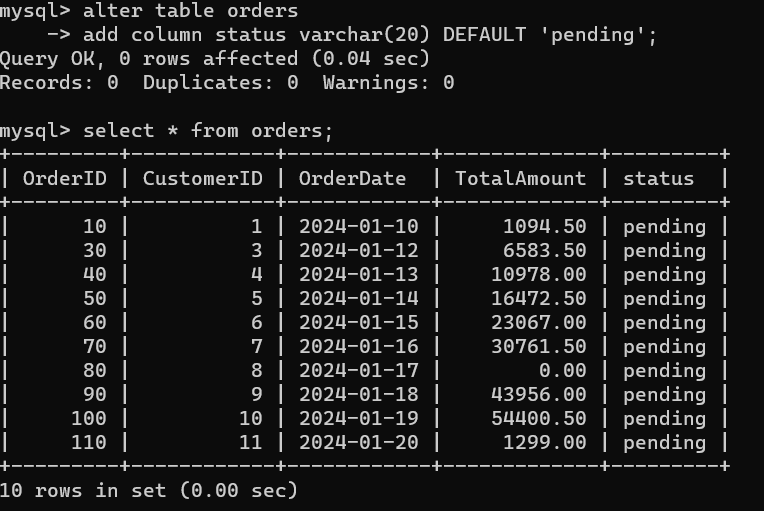
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**11. Write an SQL query to update the status of a specific order in the "Orders" table (e.g., from "Pending" to "Shipped"). Allow users to input the order ID and the new status**

****

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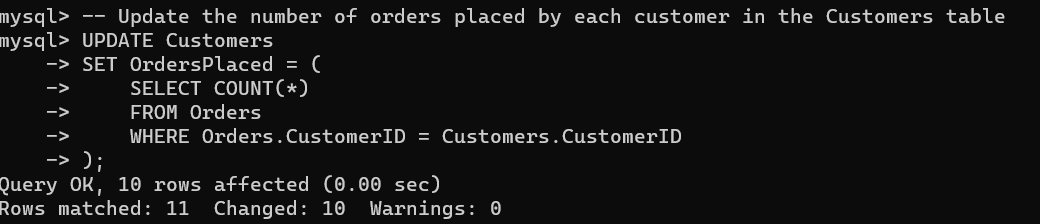
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**12. Write an SQL query to calculate and update the number of orders placed by each customer in the "Customers" table based on the data in the "Orders" table**

****

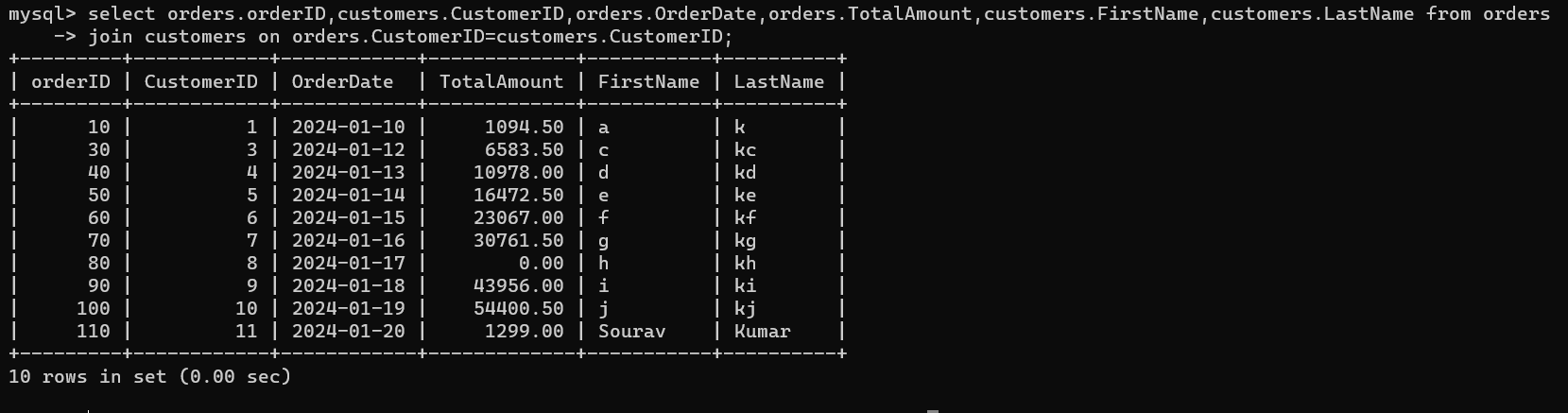
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**Task 3. Aggregate functions, Having, Order By, GroupBy and Joins:**

1. **Write an SQL query to retrieve a list of all orders along with customer information (e.g., customer name) for each order**.

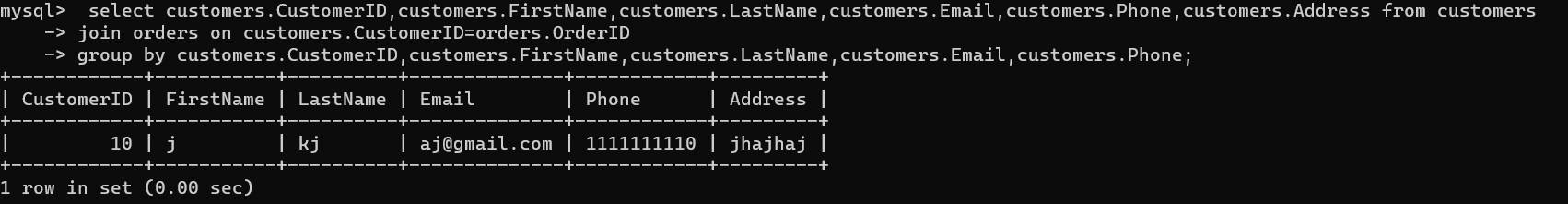
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1. **Write an SQL query to find the total revenue generated by each electronic gadget product. Include the product name and the total revenue**

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1. **Write an SQL query to list all customers who have made at least one purchase. Include their names and contact information**.

****

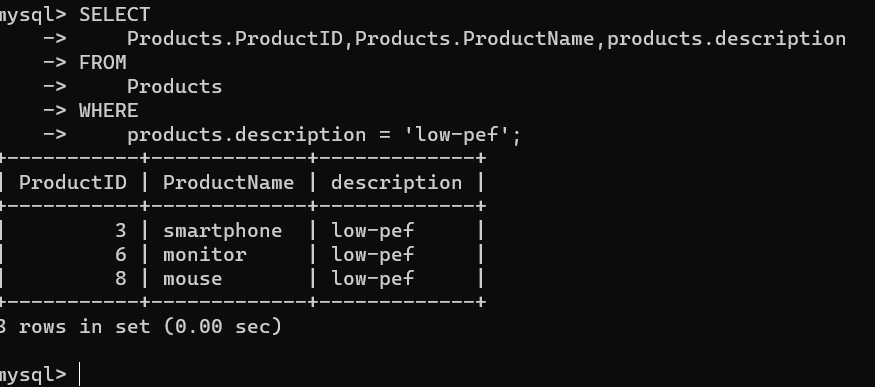
1. **Write an SQL query to find the most popular electronic gadget, which is the one with the highest total quantity ordered. Include the product name and the total quantity ordered**

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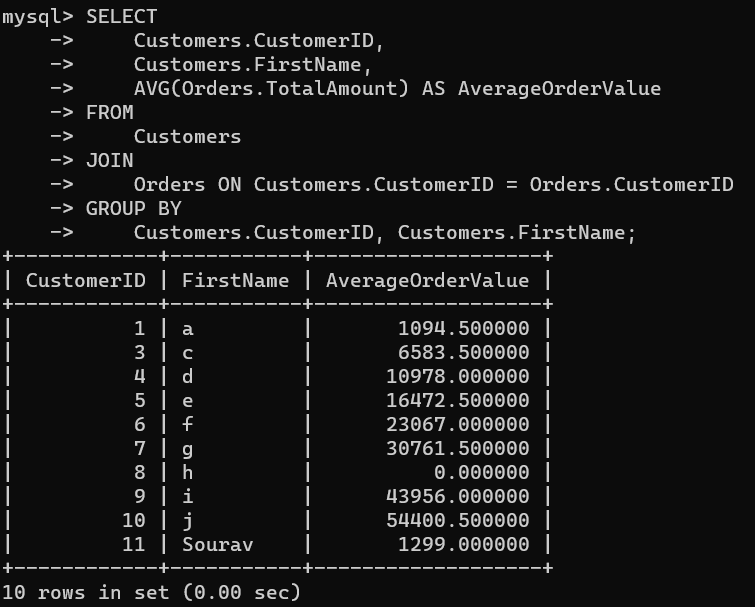
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1. **Write an SQL query to retrieve a list of electronic gadgets along with their corresponding categories**

**Ans:- I have consider and use description instead of category---**

****

1. **Write an SQL query to calculate the average order value for each customer. Include the customer's name and their average order value**

****

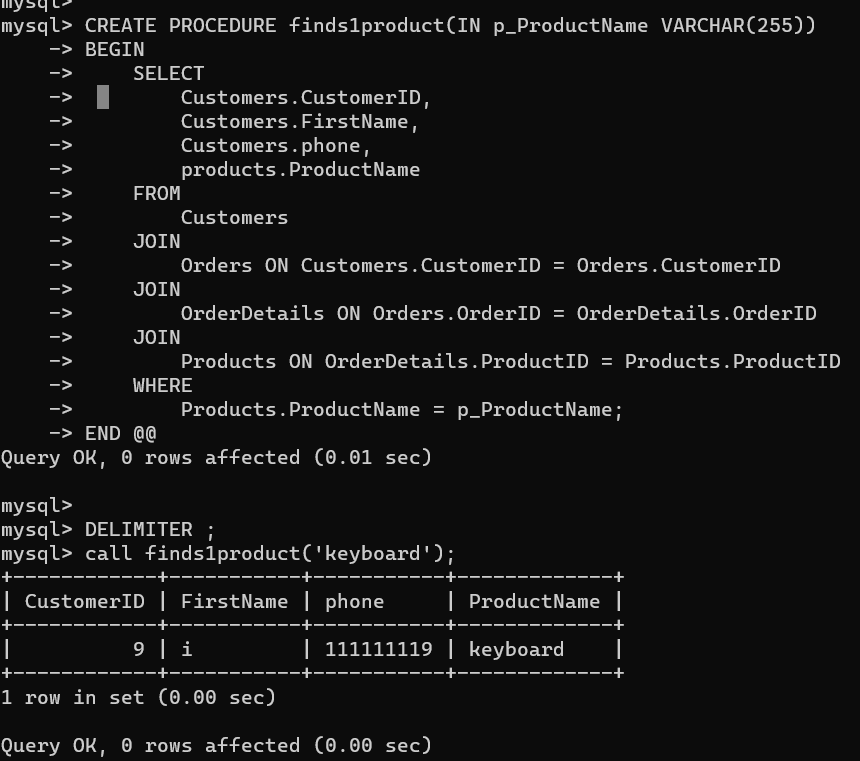
1. **Write an SQL query to find the order with the highest total revenue. Include the order ID, customer information, and the total revenue**.

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1. **Write an SQL query to list electronic gadgets and the number of times each product has been ordered** A screenshot of a computer

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2. **Write an SQL query to find customers who have purchased a specific electronic gadget product. Allow users to input the product name as a parameter**.

****

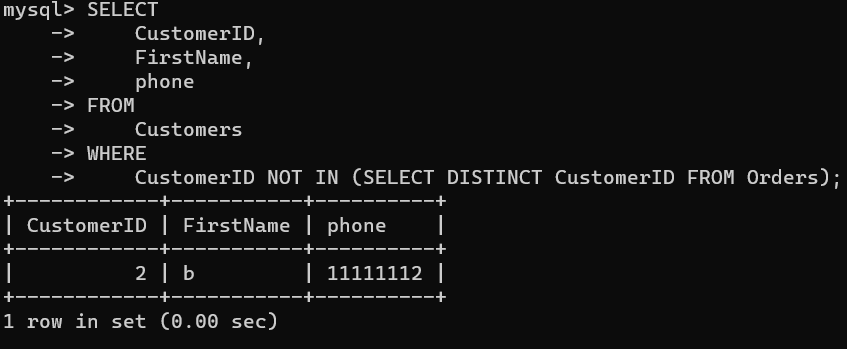
1. **Write an SQL query to calculate the total revenue generated by all orders placed within a specific time period. Allow users to input the start and end dates as parameters**.

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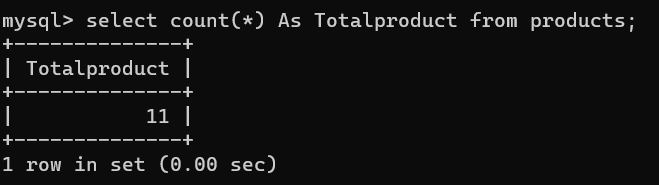
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**Task 4. Subquery and its type:**

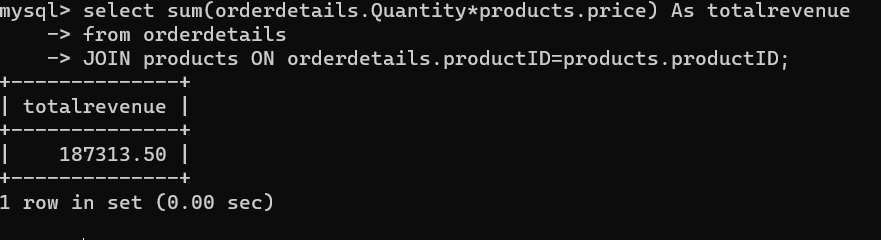
1. **Write an SQL query to find out which customers have not placed any orders.**

****

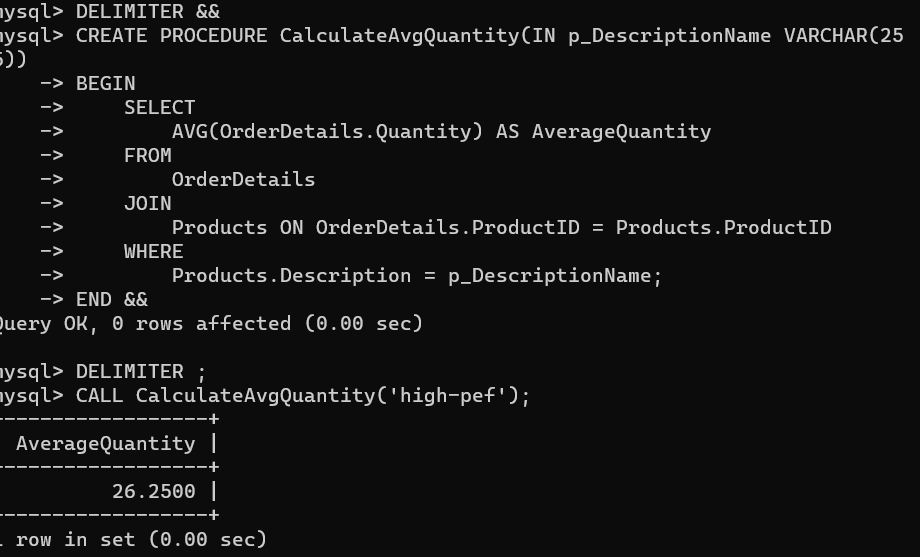
1. **Write an SQL query to find the total number of products available for sale.**

****

1. **Write an SQL query to calculate the total revenue generated by TechShop**

****

**4. Write an SQL query to calculate the average quantity ordered for products in a specific category. Allow users to input the category name as a parameter**.

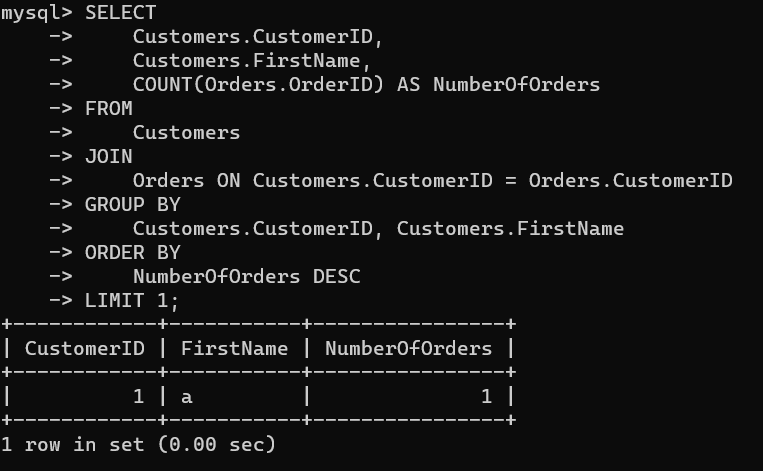
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**5. Write an SQL query to calculate the total revenue generated by a specific customer. Allow users to input the customer ID as a parameter.**

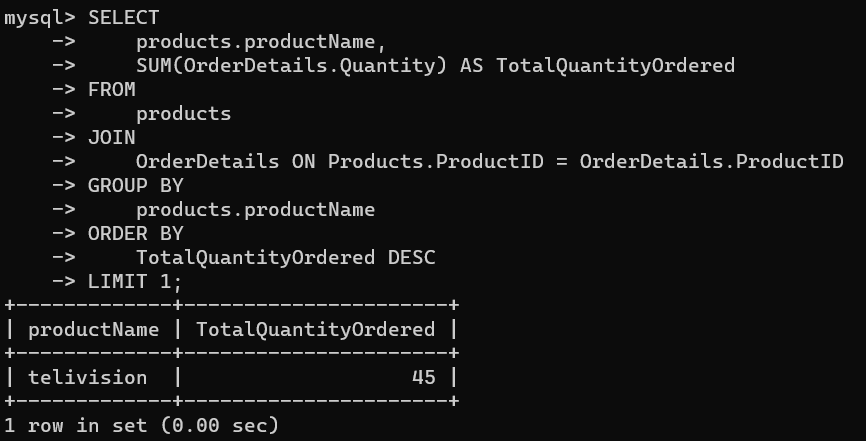
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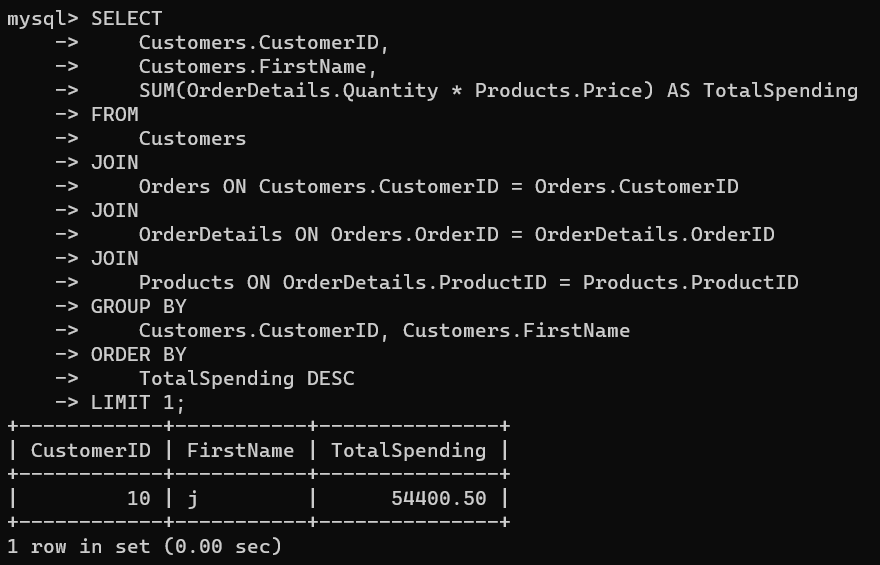
**6. Write an SQL query to find the customers who have placed the most orders. List their names and the number of orders they've placed**

****

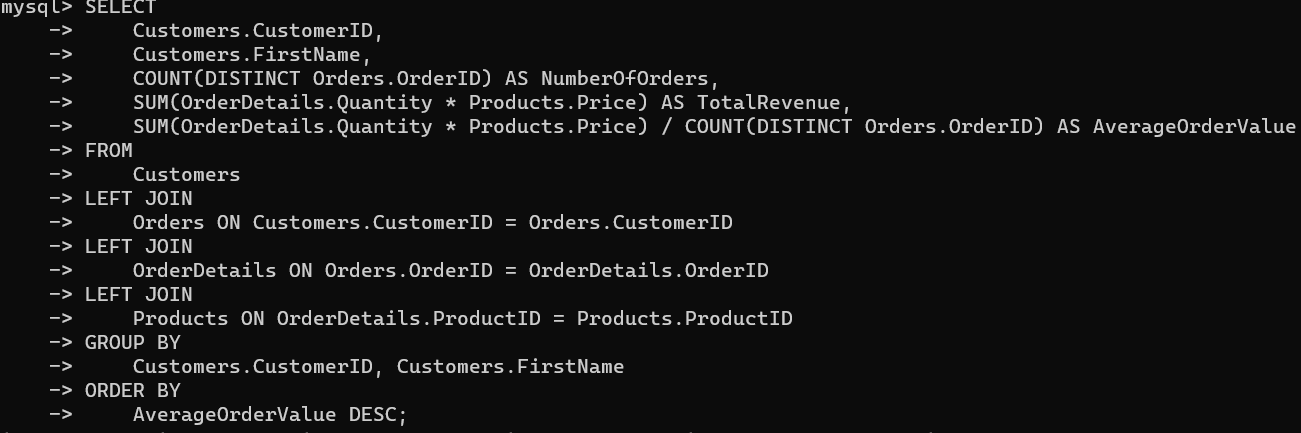
**7. Write an SQL query to find the most popular product category, which is the one with the highest total quantity ordered across all orders**

****

**8. Write an SQL query to find the customer who has spent the most money (highest total revenue) on electronic gadgets. List their name and total spending**

****

**9. Write an SQL query to calculate the average order value (total revenue divided by the number of orders) for all customers**

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**10. Write an SQL query to find the total number of orders placed by each customer and list their names along with the order count.**

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