ASSIGNMENT -04

TASK 01

A. Describe the data in hand in your own words.

Table 01: cust_dimen: It consists of all the details of customers

Customer_Name (TEXT): Name of the customer

Province (TEXT): Province of the customer

Region (TEXT): Region of the customer

Customer_Segment (TEXT): Segment of the customer

Cust_id (TEXT): Unique Customer ID

Table 02: market_fact: It consists of all the details of every order item sold

Ord_id (TEXT): Order ID

Prod_id (TEXT): Prod ID

Ship_id (TEXT): Shipment ID

Cust_id (TEXT): Customer ID

Sales (DOUBLE): Sales from the Item sold

Discount (DOUBLE): Discount on the Item sold

Order_Quantity (INT): Order Quantity of the Item sold

Profit (DOUBLE): Profit from the Item sold

Shipping_Cost (DOUBLE): Shipping Cost of the Item sold

Product_Base_Margin (DOUBLE): Product Base Margin on the Item sold

Table 03: orders_dimen: Details of every order placed by the customers.

Order_ID (INT): Order ID

Order_Date (TEXT): Order Date

Order_Priority (TEXT): Priority of the Order

Ord_id (TEXT): Unique Order ID

Table 04: prod_dimen: The details of product category and sub category of each and every product.

Product_Category (TEXT): Product Category

Product_Sub_Category (TEXT): Product Sub Category

Prod_id (TEXT): Unique Product ID

Table 05: shipping_dimen: The details of all the shipping orders of the products

Order_ID (INT): Order ID

Ship_Mode (TEXT): Shipping Mode

Ship_Date (TEXT): Shipping Date

Ship_id (TEXT): Unique Shipment ID

B. Identify and list the Primary Keys and Foreign Keys for this dataset

Table 01: cust_dimen

Primary Key: Cust_id

Foreign Key: Not Available

Table 02: market_fact

Primary Key: Not Available

Foreign Key: Ord_id, Prod_id, Ship_id, Cust_id

Table 03: orders_dimen

Primary Key: Ord_id

Foreign Key: Not Available

Table 04: prod_dimen

Primary Key: Prod_id, Product_Sub_Category

Foreign Key: Not Available

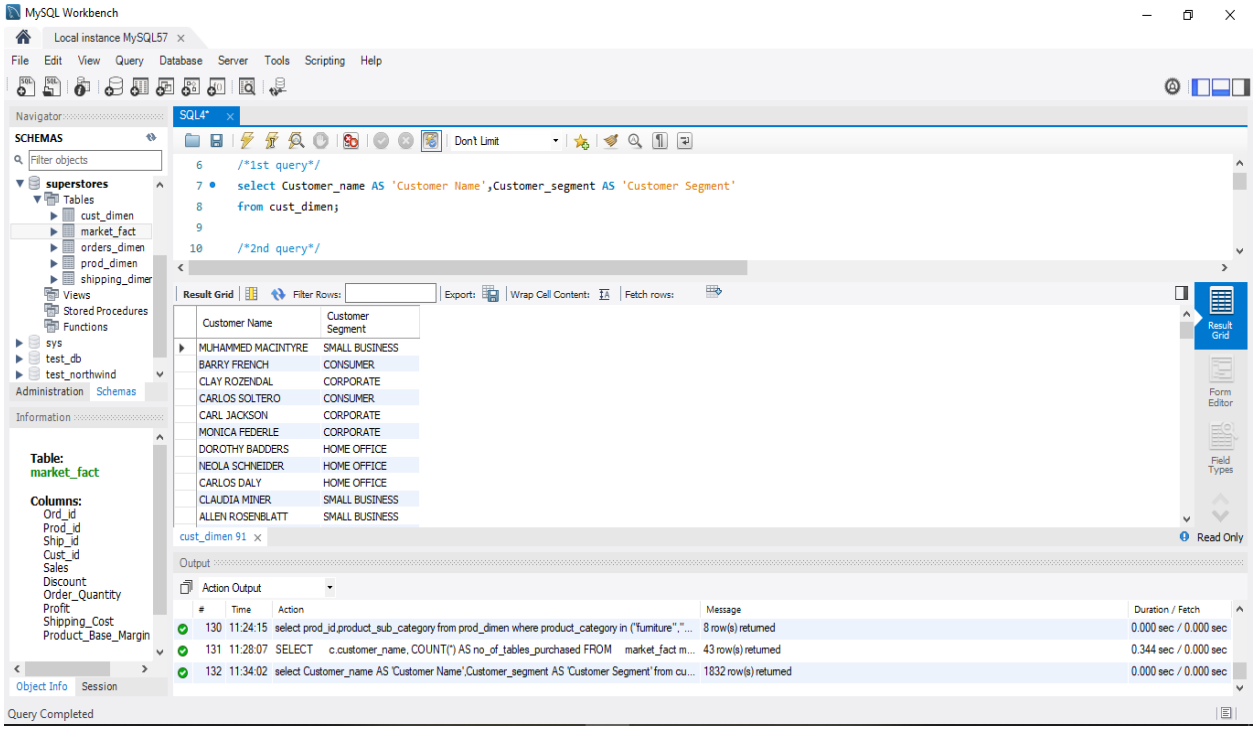
Table 05: shipping_dimen

Primary Key: Ship_id

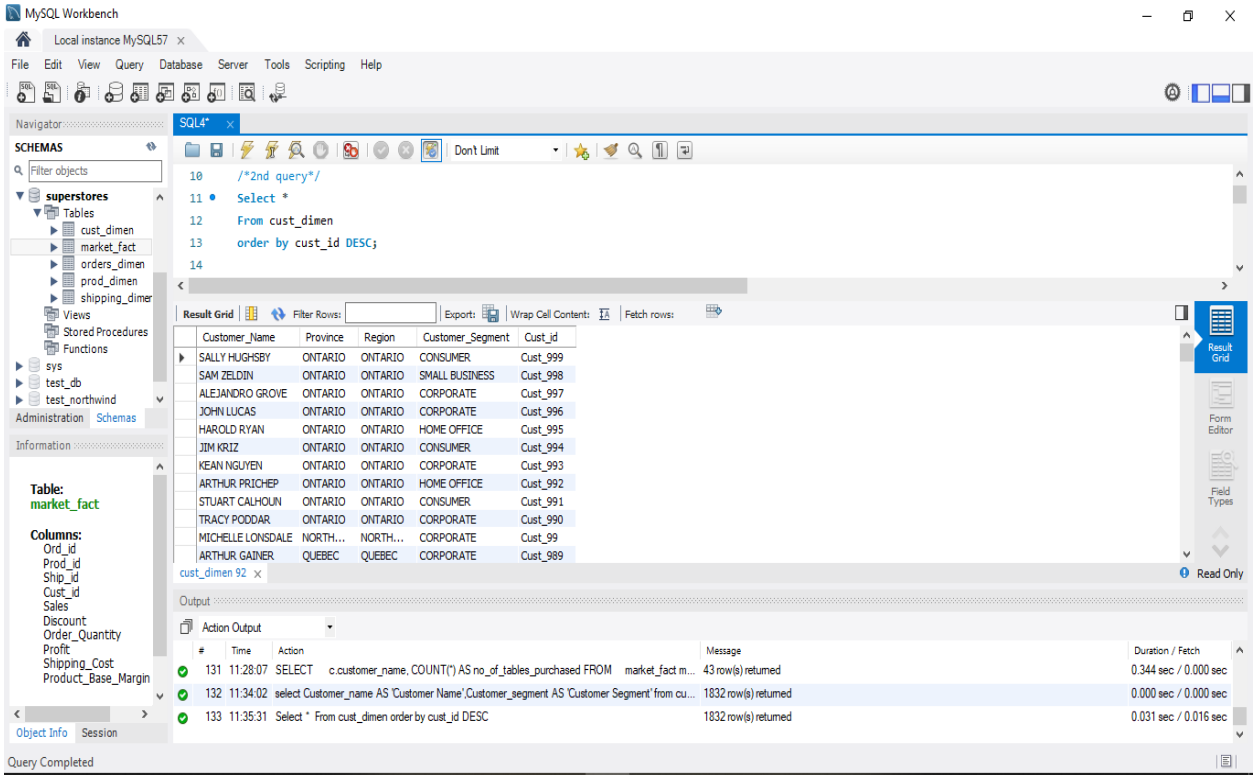
Foreign Key: Not Available

Task 02:

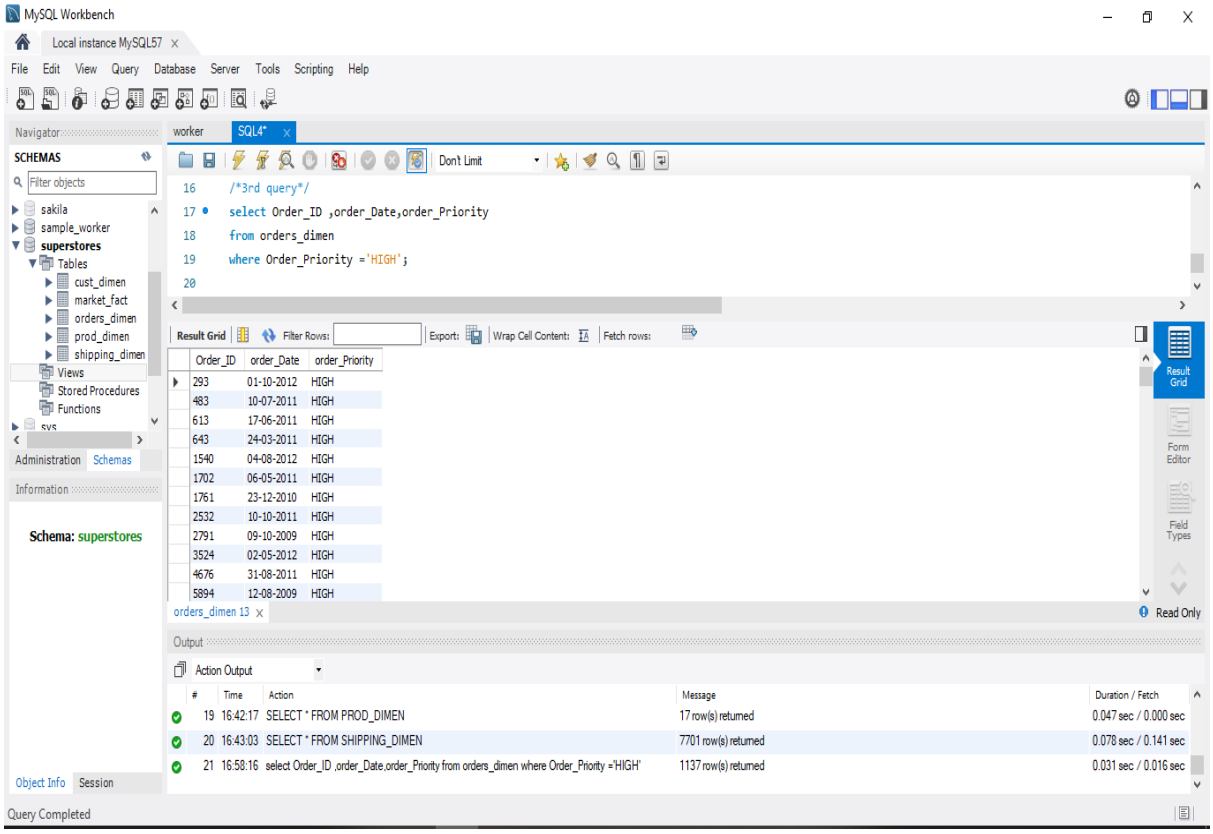
1) A query to display the Customer_Name and Customer Segment using alias name “Customer Name", "Customer Segment" from table Cust_dimen



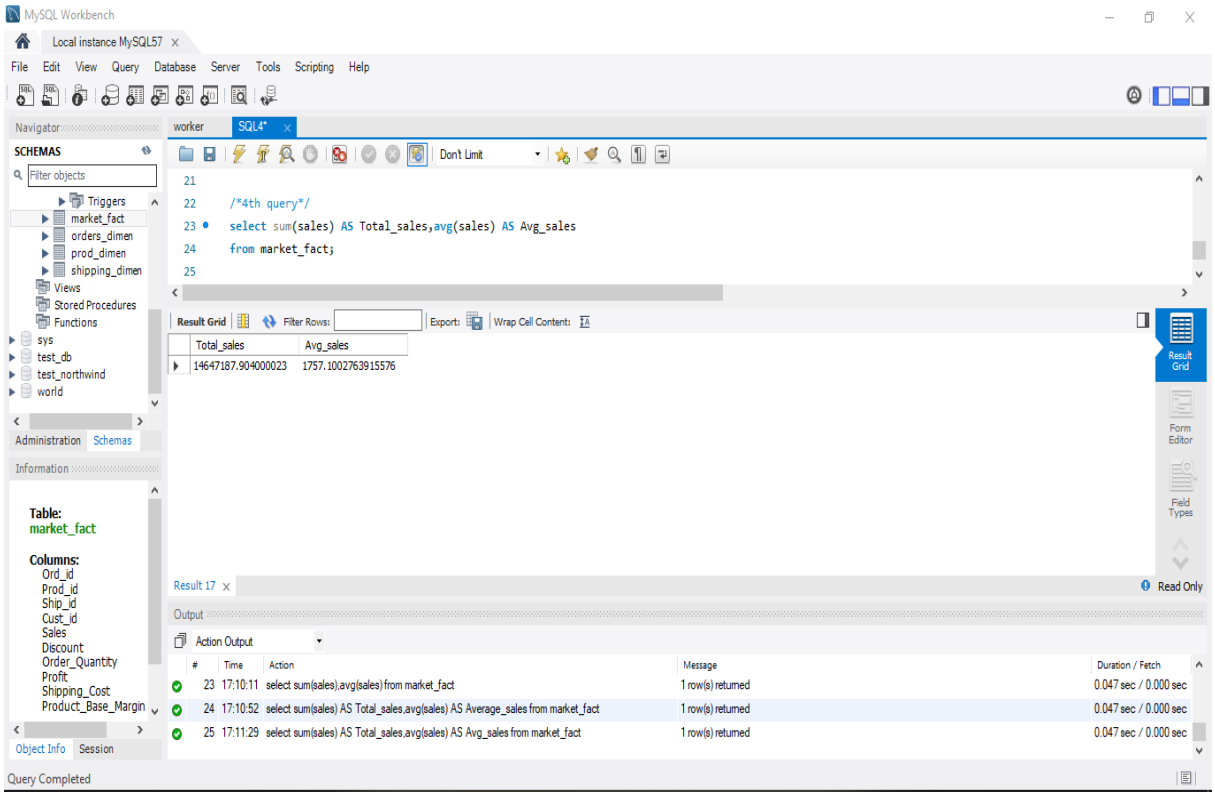
2) A query to find all the details of the customer from the table cust_dimen order by desc.



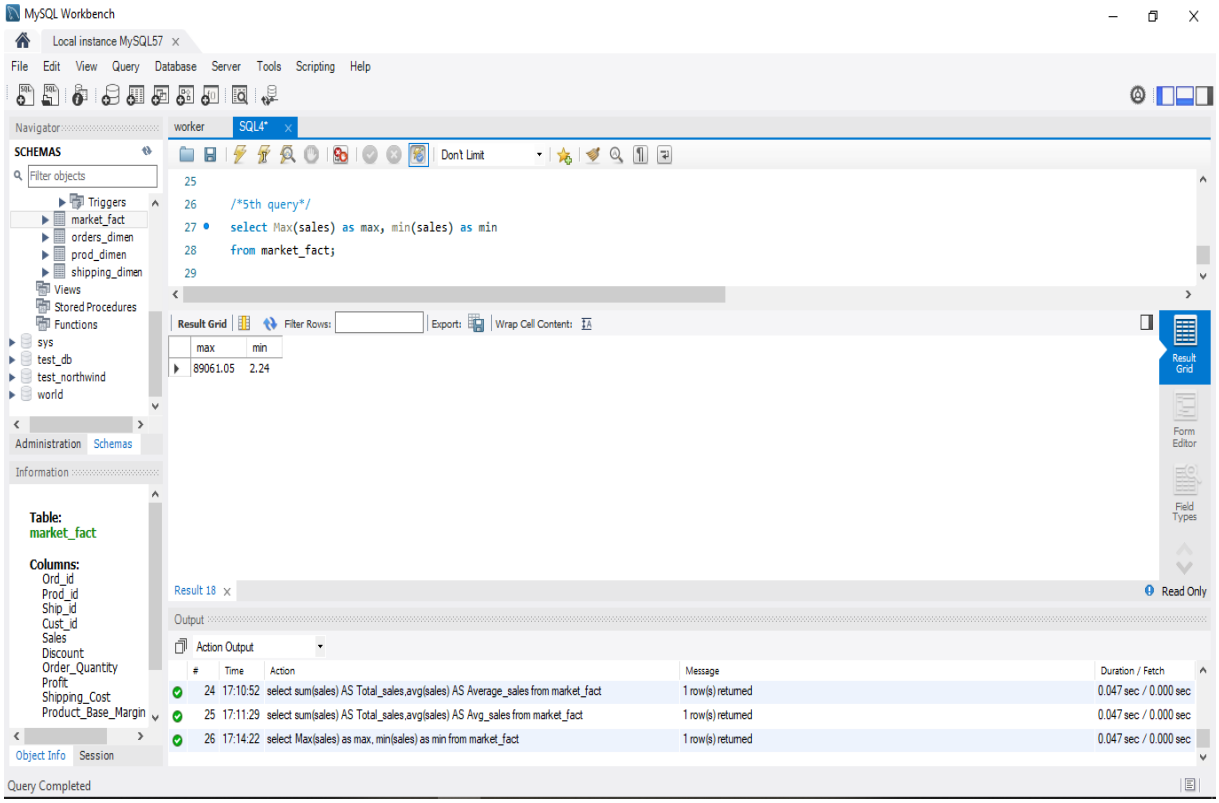
3) A query to get the Order ID, Order date from table orders_dimen where ‘Order Priority’ is high



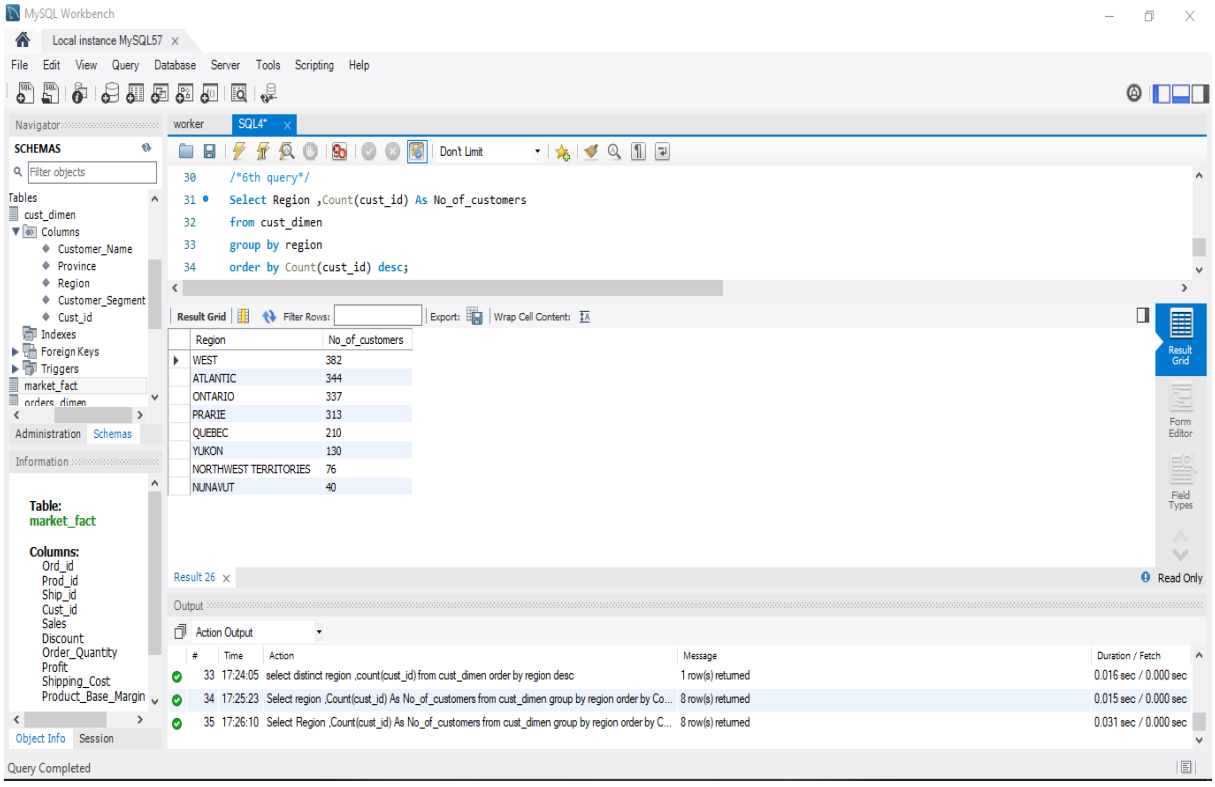
4)The total and the average sales (display total_sales and avg_sales)



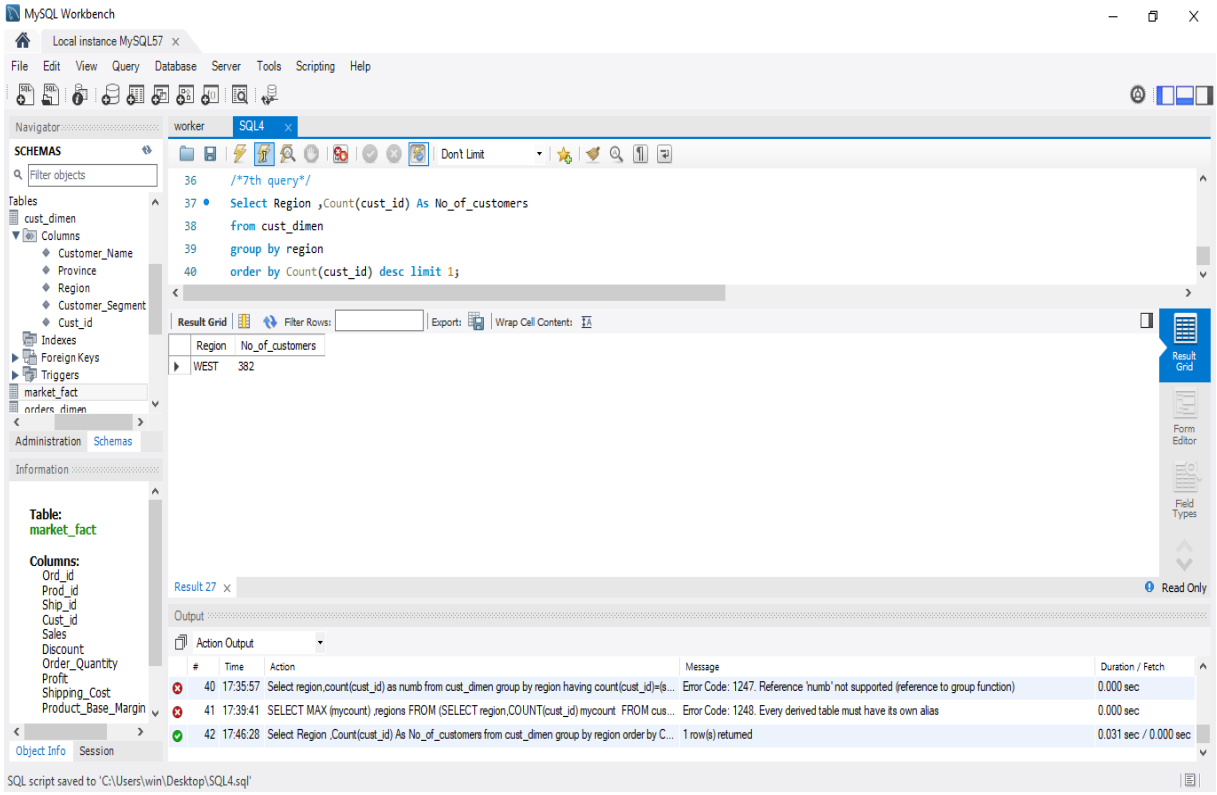
5) A query to get the maximum and minimum sales from maket_fact table.



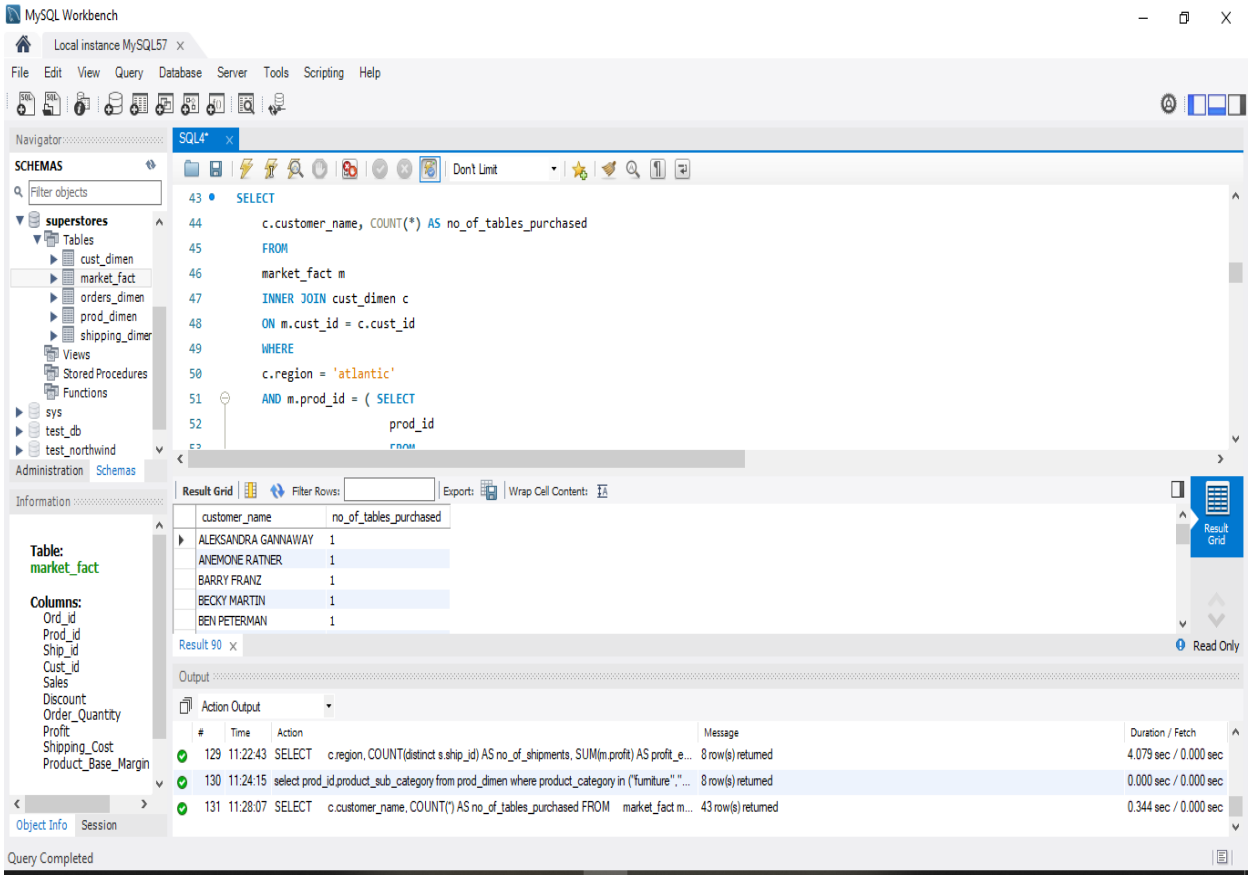
5) Display the number of customers in each region in decreasing order of no_of_customers. The result should contain columns Region, no_of_customers.



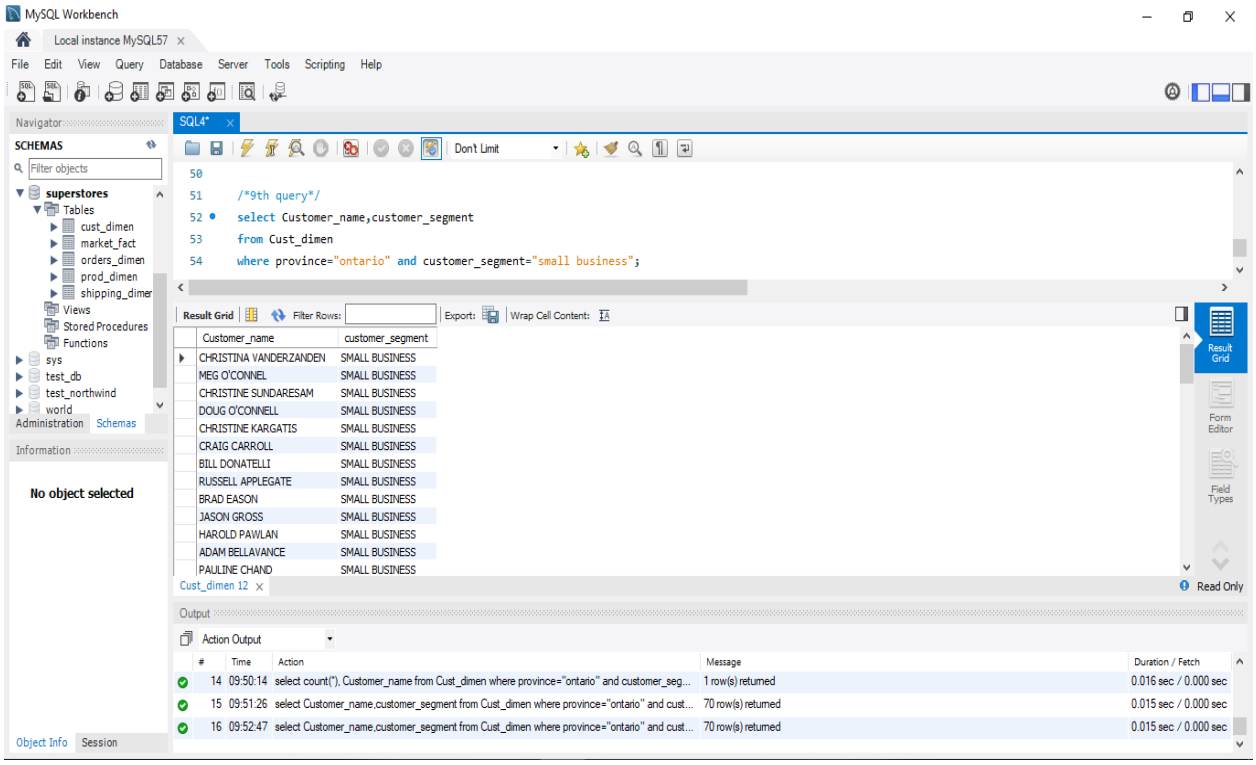
7) The region having maximum customers (display the region name and max(no_of_customers)



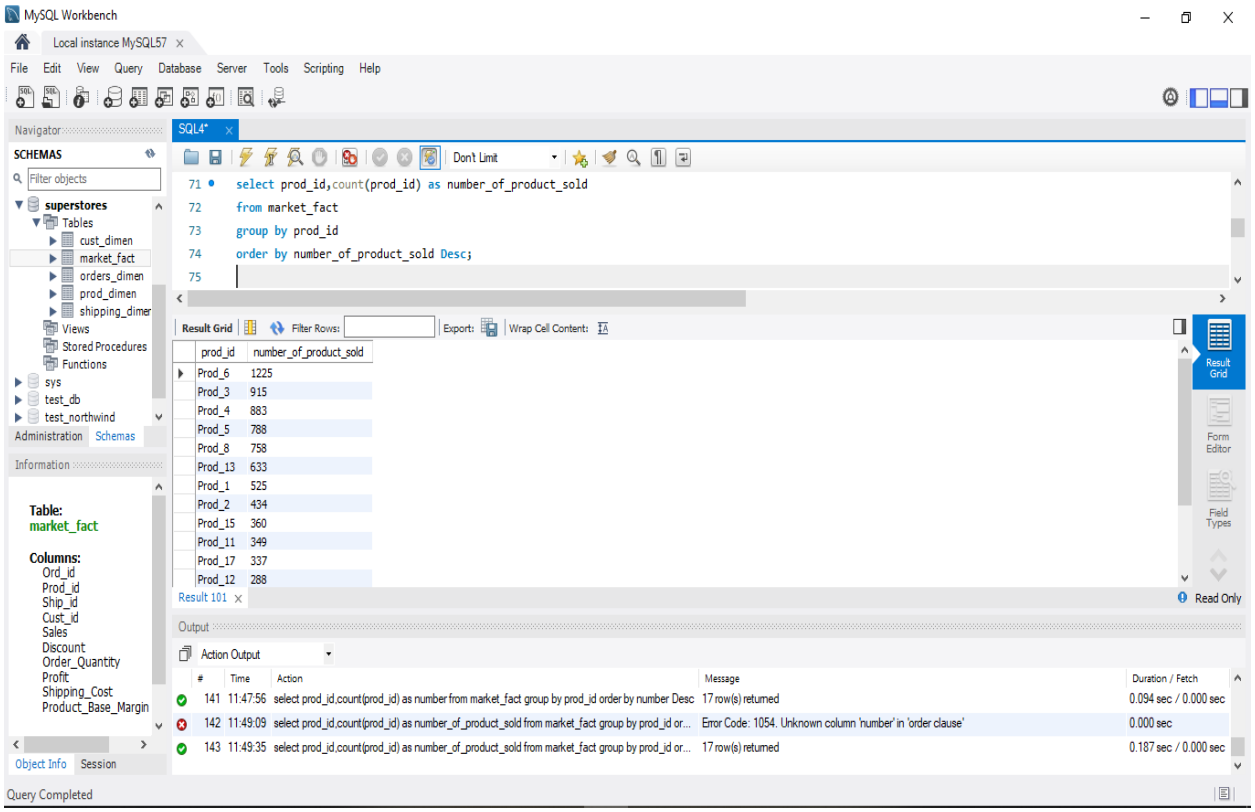
8) A query to retrieve all the customers from Atlantic region who have ever purchased ‘TABLES’ and the number of tables purchased (display the customer name, no_of_tables purchased)



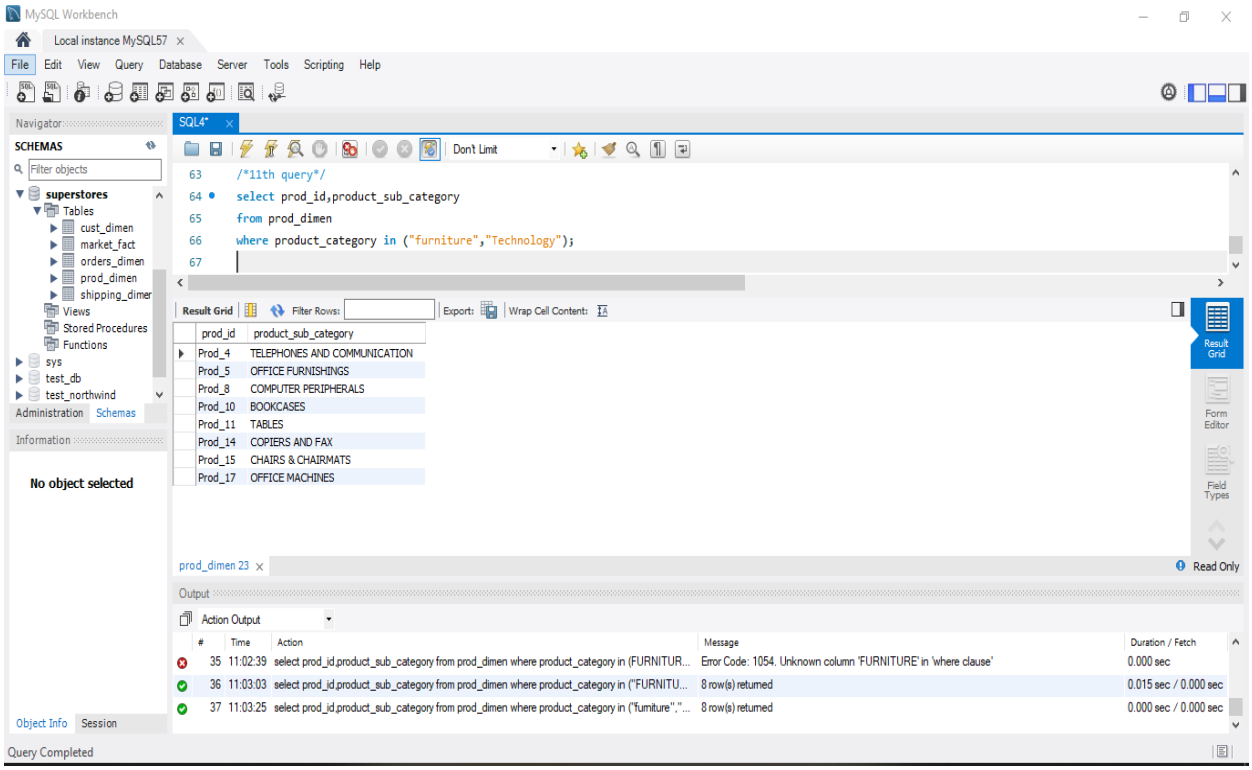
9) A query to obtain all the customers from Ontario province who own Small Business. (display the customer name, no of small business owners)



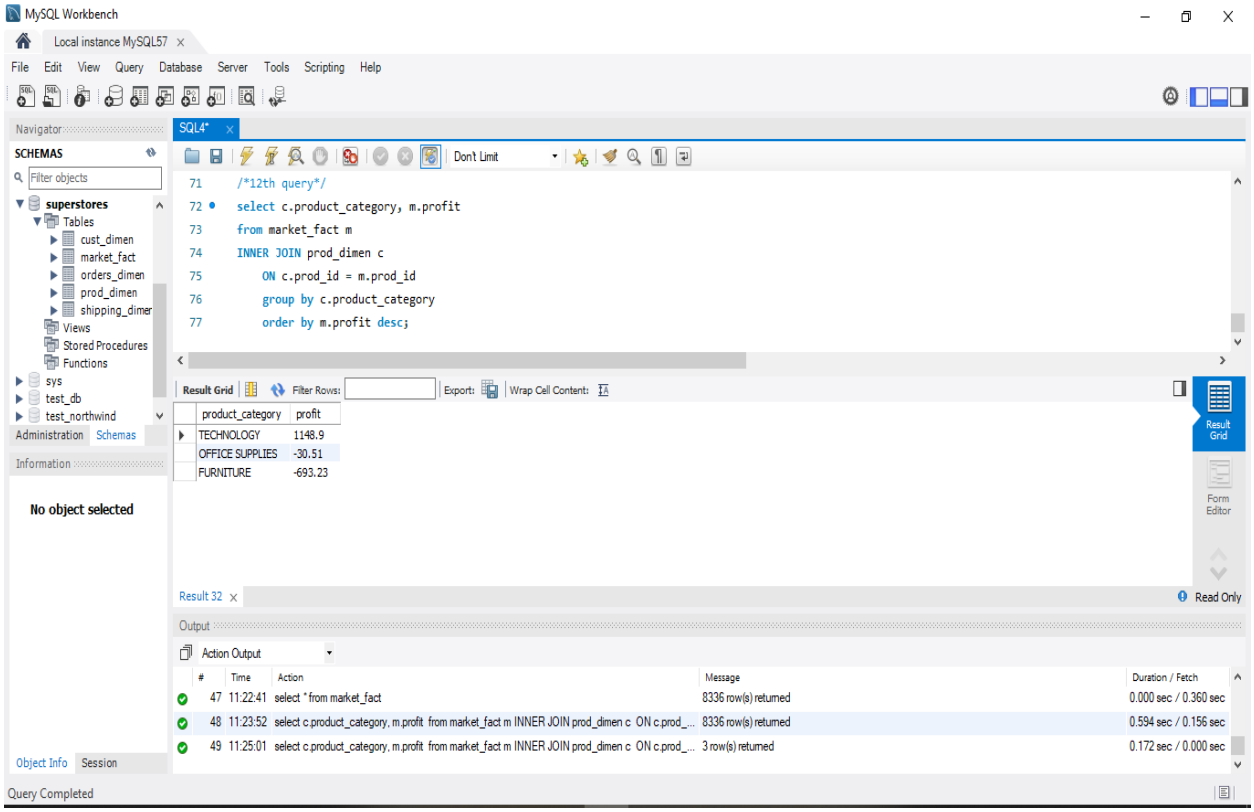
10) A query to retrieve the number and id of products sold in decreasing order of products sold (display product id, no_of_products sold)



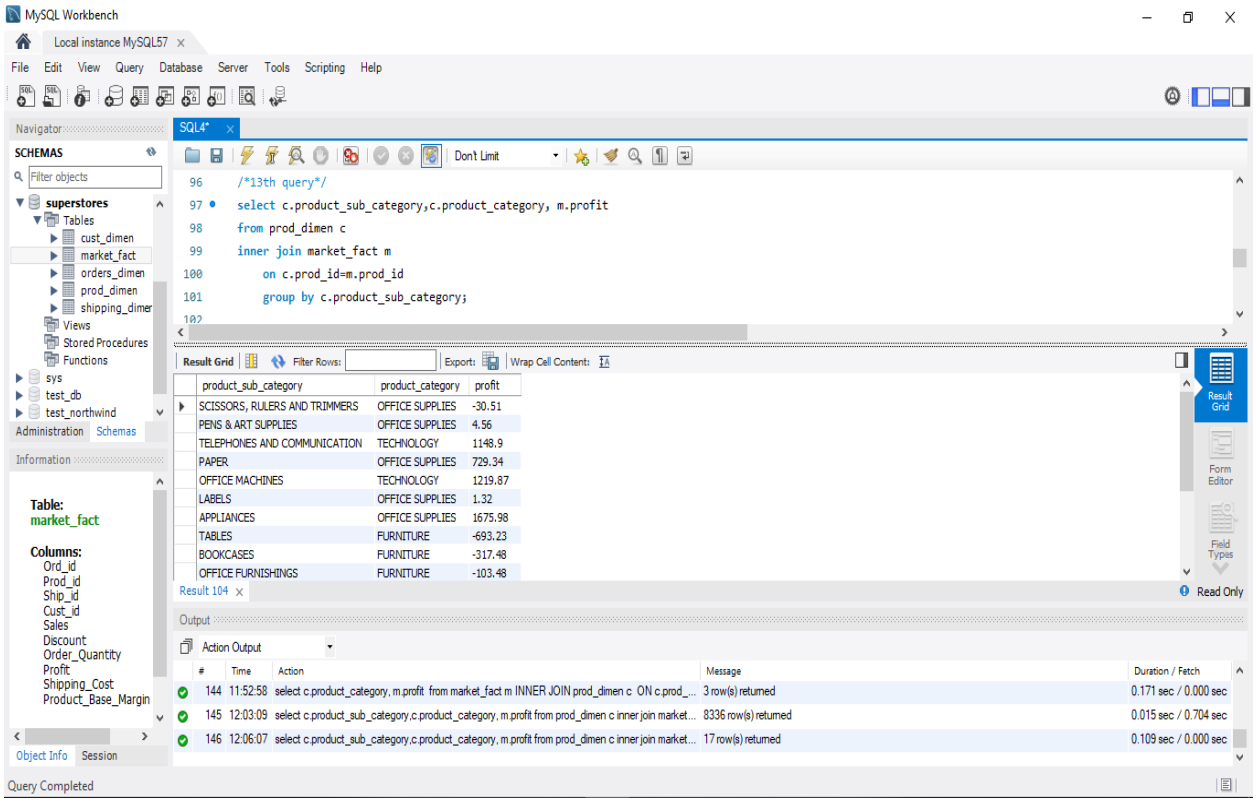
11) A query display product Id and product sub category whose product category belongs to Furniture and Technology. The result should contain columns product id, product sub category.



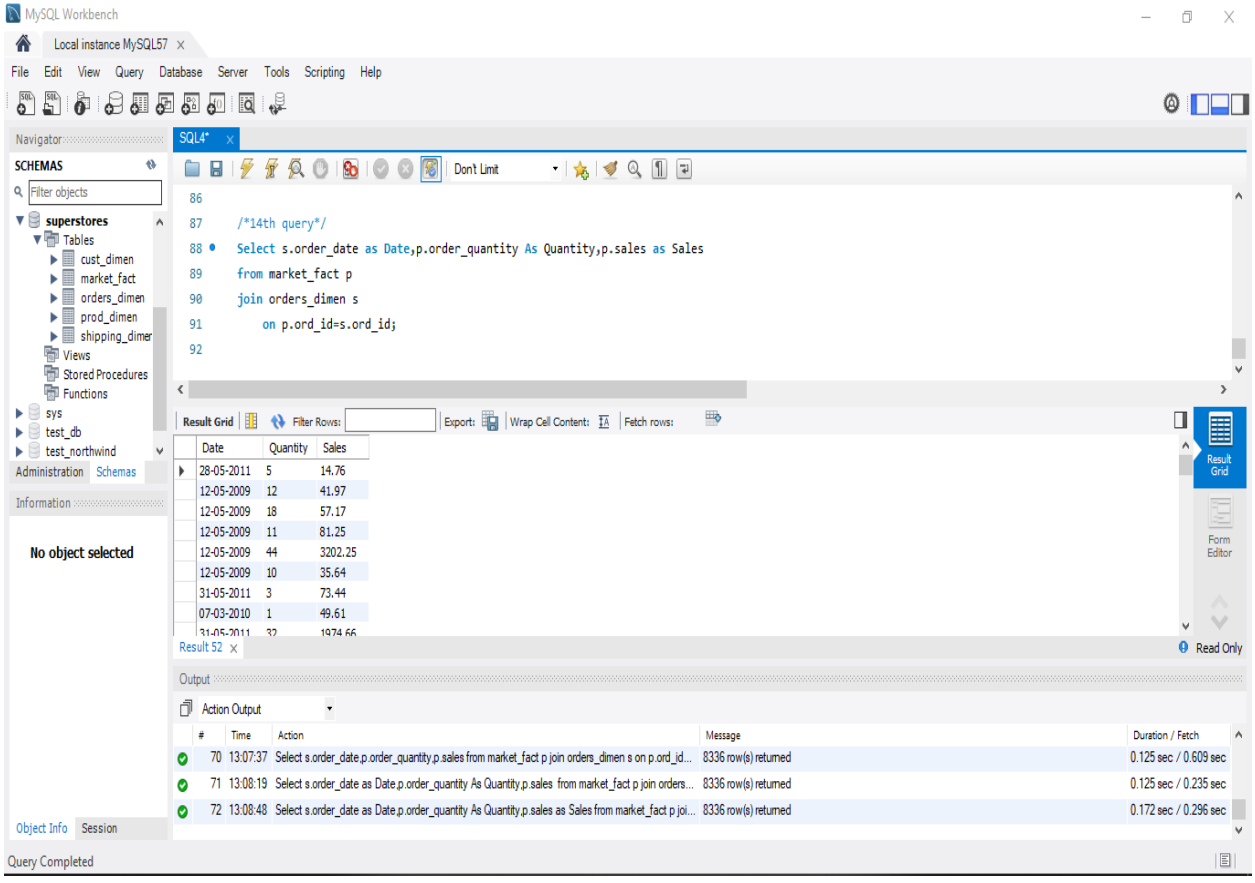
12) A query to display the product categories in descending order of profits (display the product category wise profits i.e. product_category, profits)?



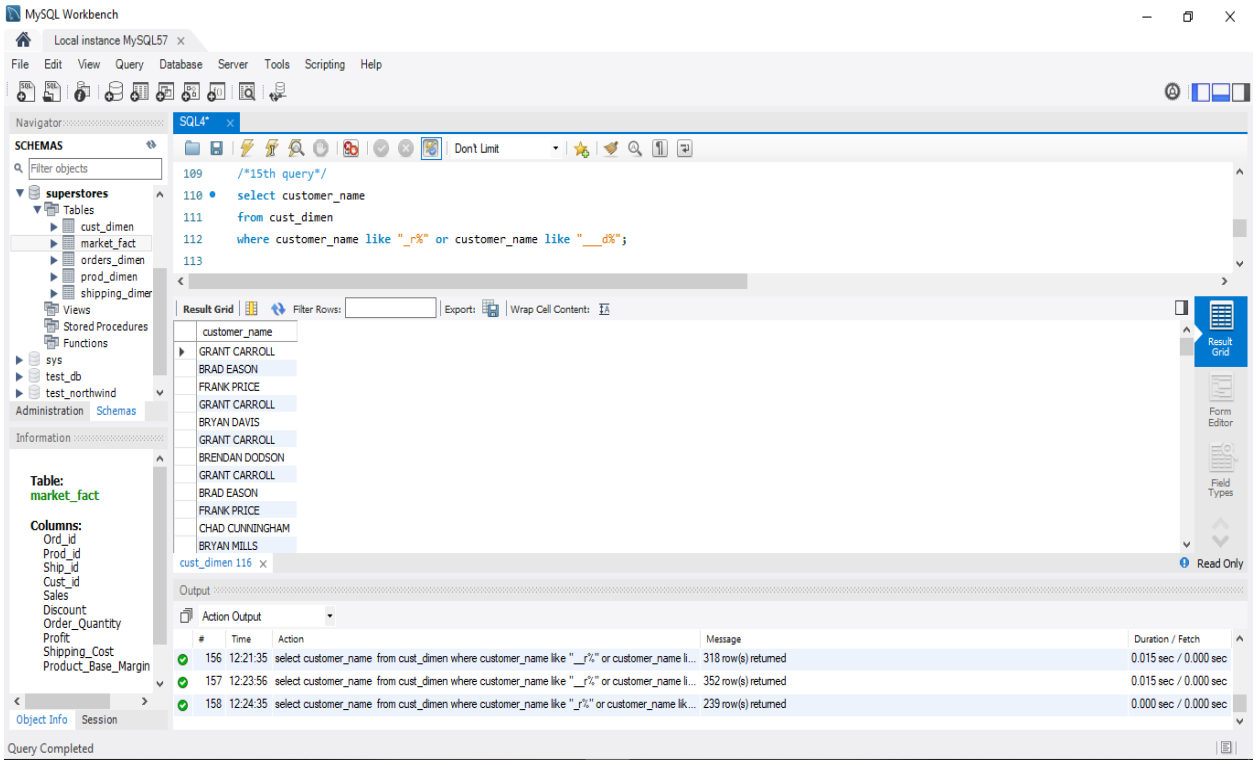
13) Display the product category, product sub-category and the profit within each subcategory in three columns.



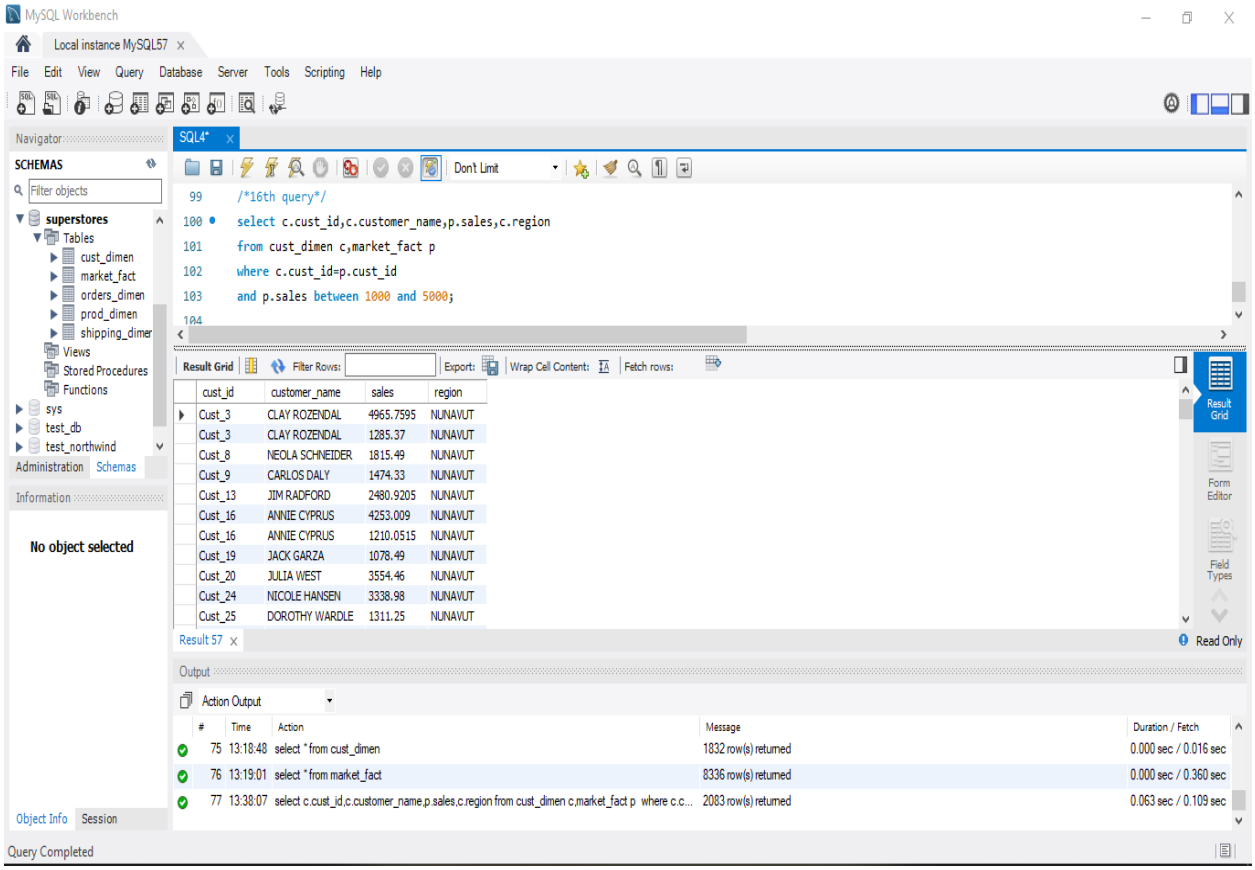
14) A query to display the order date, order quantity and the sales for the order.



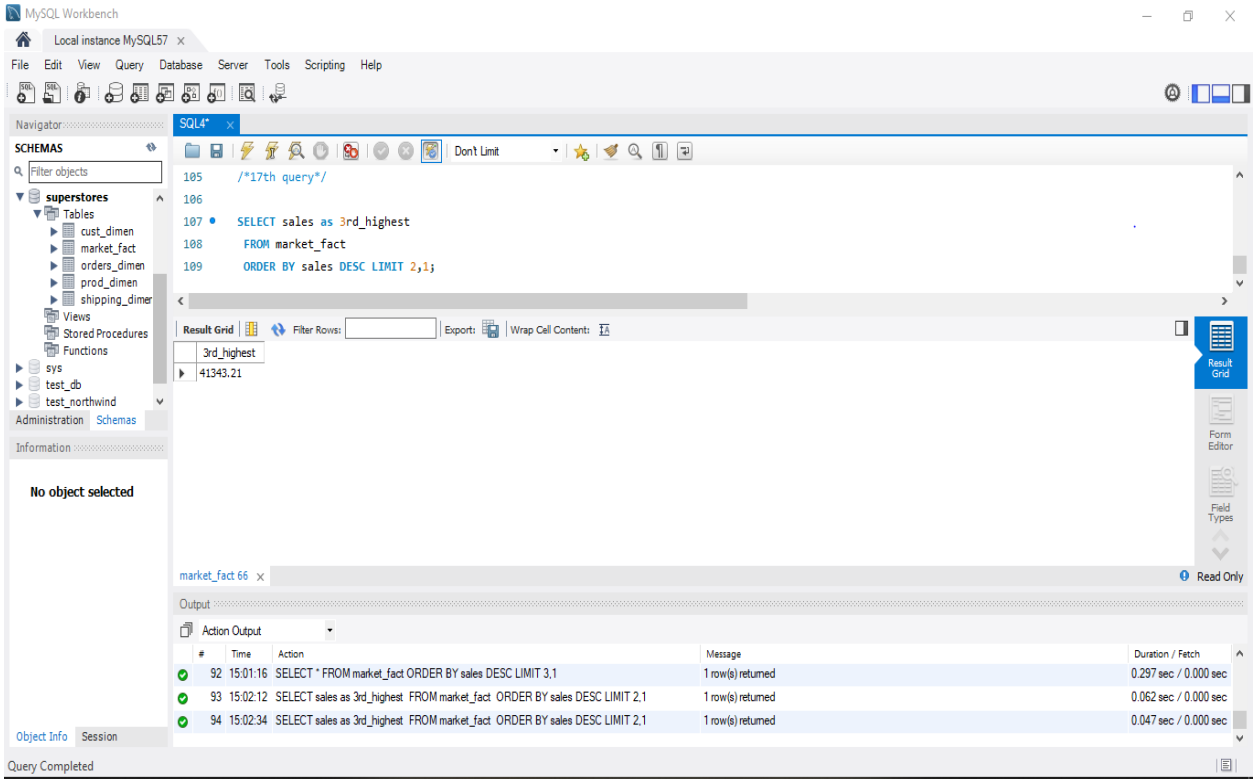
15)A query to display the names of the customers whose name contains the i) Second letter as ‘R’ ii) Fourth letter as ‘D



16) A SQL query to make a list with Cust_Id, Sales, Customer Name and their region where sales are between 1000 and 5000.



17) A SQL query to find the 3rd highest sales.



18) A query to obtain the least profitable product subcategory shipped the most? For the least profitable product sub-category, display the region-wise no_of_shipments and the profit made in each region in decreasing order of profits (i.e. region, no_of_shipments, profit_in_each_region)