

SQL ASSIGNMENT

Task 1:- Understanding the Data

- 1. Describe the data in hand in your own words.
- ->The Data consists of customers who have purchased the products with different order_id and shipped id and the sales done from different products and the profit gained.
- 2. Identify and list the Primary Keys and Foreign Keys for this dataset provided to you(In case you don't find either primary or foreign key, then specially mention this in your answer)

ANSWER: Unique field in table is primary is primary key and the key which joins two table(or common between 2 tables) is foreign key:

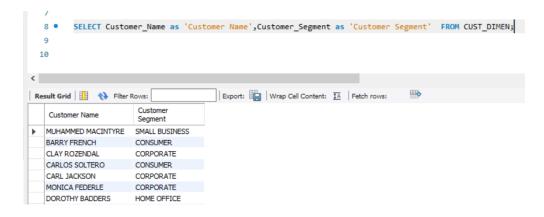
- 1) Table: cust_dimen:
 - a. Primary key: cust_id
 - b. Foreign key: cust_id
- 2) Table:market_fact:
 - a. Primary key: ord_id
 - b. Foreign_key:cust_id,ship_id
- 3) Table:prod_dimen:
 - a. Primary key: prod_id
 - b. Foreign key: prod_id
- 4) Table:orders_dimen:
 - a. Primary key:Order_id
 - b. Foreign key:ord_id
- 5) Table:shipping_dimen:
 - a. Primary key:Ship_id
 - b. Foreign key:Ship_id,Order_id



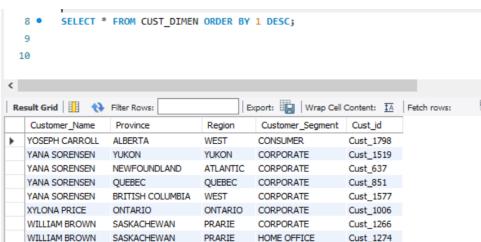
Task 2:- Basic & Advanced Analysis

1. Write a query to display the Customer_Name and Customer Segment using alias name "Customer Name", "Customer Segment" from table Cust_dimen.

CODE:



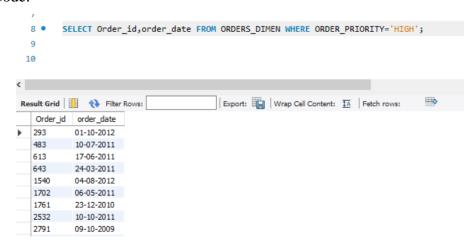
2. Write a query to find all the details of the customer from the table cust_dimen order by desc.





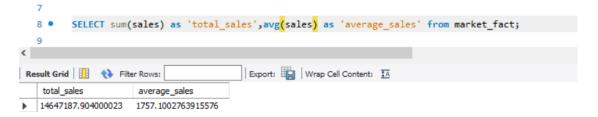
3. Write a query to get the Order ID, Order date from table orders_dimen where 'Order Priority' is high.

Code:

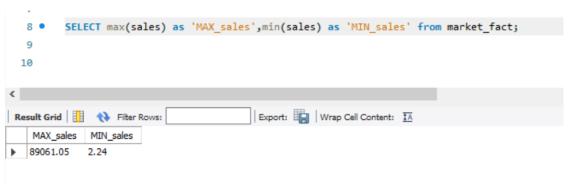


4. Find the total and the average sales (display total_sales and avg_sales)

CODE:



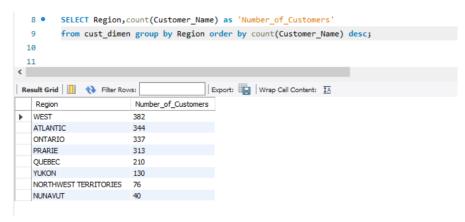
5. Write a query to get the maximum and minimum sales from maket_fact table.





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

CODE:

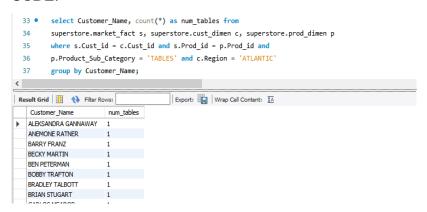


7. Find the region having maximum customers (display the region name and max(no_of_customers)

CODE:



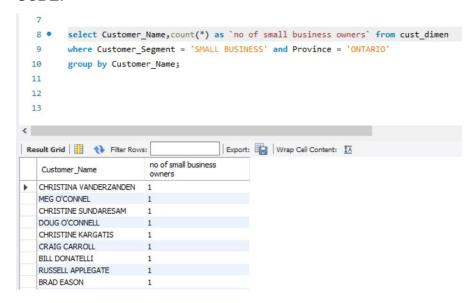
8. Find all the customers from Atlantic region who have ever purchased 'TABLES' and the number of tables purchased (display the customer name, no_of_tables purchased)



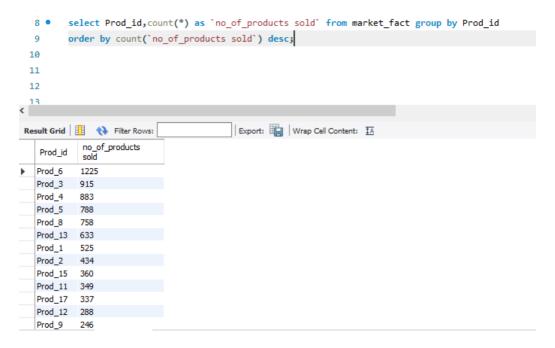


9. Find all the customers from Ontario province who own Small Business. (display the customer name, no of small business owners)

CODE:



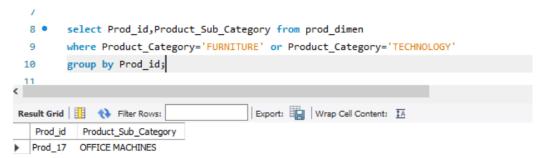
10. Find the number and id of products sold in decreasing order of products sold (display product id, no_of_products sold)



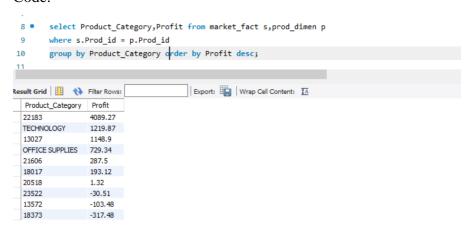


11. Display product Id and product sub category whose product category belongs to Furniture and Technlogy. The result should contain columns product id, product sub category.

Code:



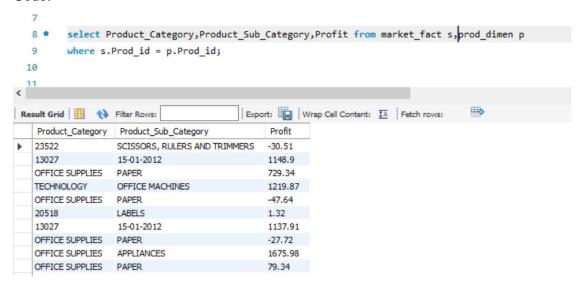
12. Display the product categories in descending order of profits (display the product category wise profits i.e. product_category, profits)?



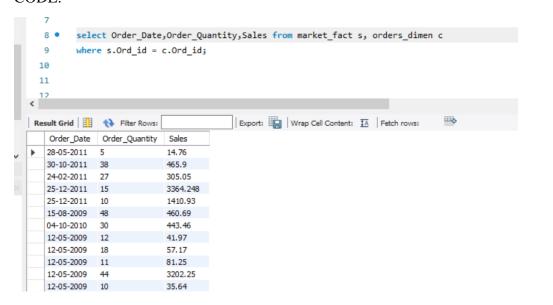


13. Display the product category, product sub-category and the profit within each subcategory in three columns.

Code:



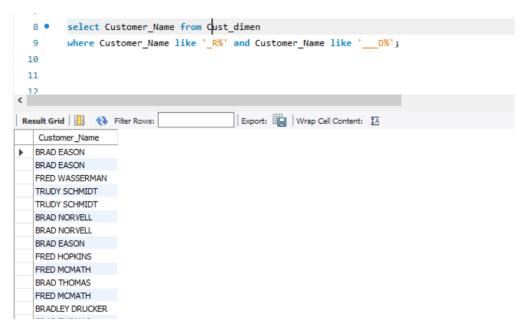
14. Display the order date, order quantity and the sales for the order.



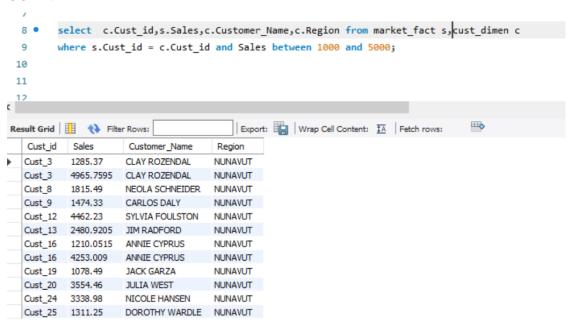


- 15. Display the names of the customers whose name contains the
 - i) Second letter as 'R'
 - ii) Fourth letter as 'D'

CODE:



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





17. Write a SQL query to find the 3rd highest sales.

CODE:

18. Where is 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)

