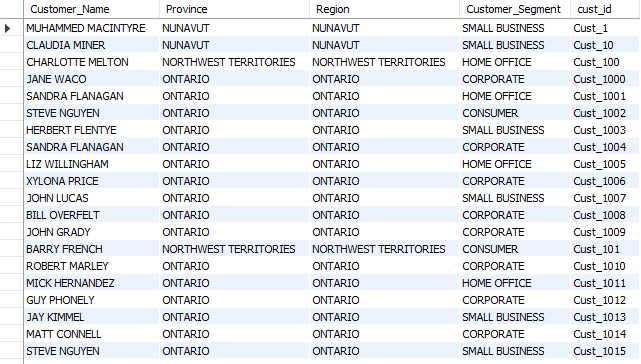
**Task 2:- Basic & Advanced Analysis**

1 Write a query to display the Customer Name and Customer Segment using alias

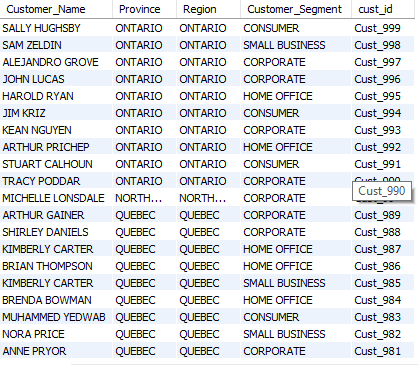
Name “Customer Name", "Customer Segment" from table Cust\_dimen.

Q) SELECT Customer Name AS 'Customer Name’, Customer Segment AS 'Customer Segment ‘FROM Cust\_dimen;



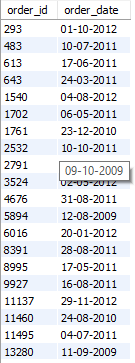
2) Write a query to find all the details of the customer from the table cust\_dimen order by desc

Select \* from cust\_dimen order by cust\_id desc;



3) Write a query to get the Order ID, Order date from table orders\_dimen where ‘Order Priority’ is high.

select order\_id,order\_date from orders\_dimen where order\_priority = 'high';



4) Find the total and the average sales (display total\_sales and avg\_sales)

select avg(sales) as average,sum(sales) as total\_sales from market\_fact;



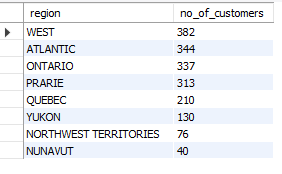
5. Write a query to get the maximum and minimum sales from maket\_fact table.

select max(sales) as maximum, min(sales) as minimum from market\_fact;



6. Display the number of customers in each region in decreasing order of no\_of\_customers. The result should contain columns Region, no\_of\_customer

SELECT region, COUNT(Cust\_id) AS 'no\_of\_customers'FROM cust\_dimen GROUP BY region ORDER BY COUNT(Cust\_id) DESC;



#7. Find the region having maximum customers (display the region name and max(no\_of\_customers)

select region,count(cust\_id) as no\_of\_customers from cust\_dimen group by region order by cust\_id desc limit 1;



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)

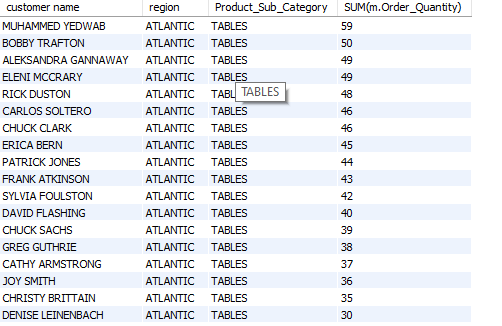
SELECT c.customer\_name AS 'customer name',region,p.Product\_Sub\_Category,SUM(m.Order\_Quantity)FROM cust\_dimen c

INNER JOIN market\_fact m ON c.Cust\_id = m.Cust\_id INNER JOIN

prod\_dimen p ON p.Prod\_id = m.Prod\_id WHERE region = 'Atlantic'AND p.Product\_Sub\_Category = 'TABLES'

GROUP BY c.Customer\_Name

ORDER BY SUM(m.Order\_Quantity) DESC;



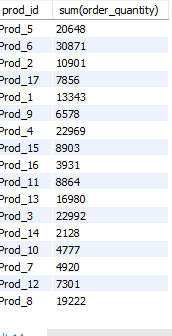
#9 Find all the customers from Ontario province who own Small Business. (display the customer name, no of small business owners)

select customer\_name,province,customer\_segment from cust\_dimen where region='ontario' and customer\_segment='small business';



#10 Find the number and id of products sold in decreasing order of products sold (display product id, no\_of\_products sold)

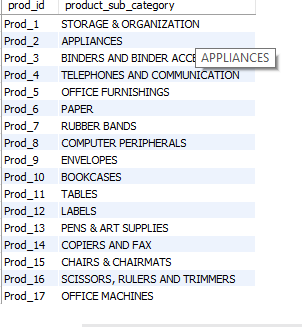
select prod\_id,sum(order\_quantity) from market\_fact group by prod\_id order by order\_quantity desc;



11. Display product Id and product sub category whose produt category belongs to Furniture and Technlogy.

# The result should contain columns product id, product sub category

select prod\_id,product\_sub\_category from prod\_dimen where product\_category in ('furniture' and'technology');



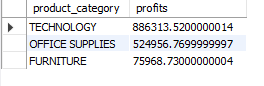
# 12 Display the product categories in descending order of profits (display the product category wise profits i.e. product\_category, profits)?

SELECT p.product\_category, SUM(m.profit) AS profits FROM market\_fact m

INNER JOIN prod\_dimen p ON m.prod\_id = p.prod\_id

GROUP BY p.product\_category

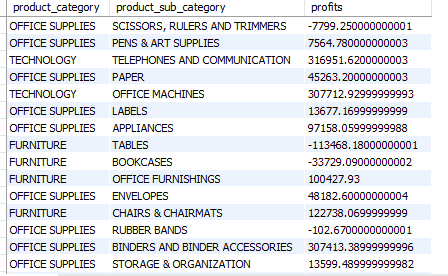
ORDER BY profits DESC;



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

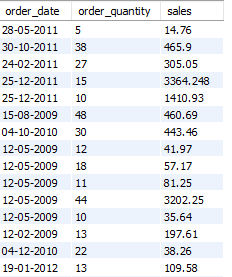
SELECT p.product\_category, p.product\_sub\_category, SUM(m.profit) AS profits FROM market\_fact m

INNER JOIN prod\_dimen p ON m.prod\_id = p.prod\_id GROUP BY p.product\_category, p.product\_sub\_category;



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

select a.order\_date, b.order\_quantity ,b.sales from orders\_dimen a INNER JOIN market\_fact b ON a.ord\_id=b.ord\_id;

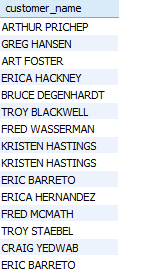


#15 Display the names of the customers whose name contains the

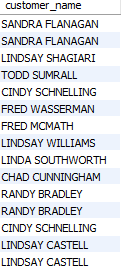
# i) Second letter as ‘R’

#ii) Fourth letter as ‘D

select customer\_name from cust\_dimen where customer\_name like '\_r%';



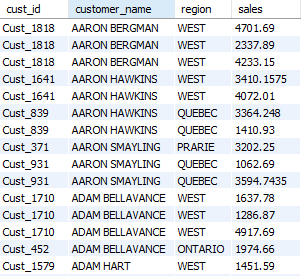
select customer\_name from cust\_dimen where customer\_name like '\_\_\_d%';



#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.

SELECT b.cust\_id,b.customer\_name,b.region,a.sales FROM cust\_dimen b

INNER JOIN market\_fact a WHERE b.cust\_id=a.cust\_id AND a.sales BETWEEN 1000 AND 5000;



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

select sales from market\_fact order by sales desc limit 2,1;



#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\_rgion)

SELECT

c.region, COUNT(distinct s.ship\_id) AS no\_of\_shipments, SUM(m.profit) AS profit\_in\_each\_region

FROM

market\_fact m

INNER JOIN

cust\_dimen c ON m.cust\_id = c.cust\_id

INNER JOIN

shipping\_dimen s ON m.ship\_id = s.ship\_id

INNER JOIN

prod\_dimen p ON m.prod\_id = p.prod\_id

WHERE

p.product\_sub\_category IN ( SELECT p.product\_sub\_category FROM market\_fact m INNER JOIN prod\_dimen p ON m.prod\_id = p.prod\_id GROUP BY p.product\_sub\_category HAVING SUM(m.profit) <= ALL

( SELECT

SUM(m.profit) AS profits

FROM

market\_fact m

INNER JOIN

prod\_dimen p ON m.prod\_id = p.prod\_id

GROUP BY p.product\_sub\_category

)

)

GROUP BY c.region

ORDER BY profit\_in\_each\_region DESC;

