SUPERSTORE SALE CASE STUDIES using SQL

I have covered almost all the concept like Operator, Clause, Aggregate function:

Creating Database: This concept will make you learn how to create your own database.

Creating Tables and adding data: From this concept, you will learn how to create tables inside the database and insert data into them.

SELECT Clause: Retrieve or fetch data from a database.

FROM Clause: From which table in the database do you have to select data?

WHERE Clause: It forms the condition based on which data have to be queried.

DELETE Statement: For deletion tasks.

INSERT INTO: For insertion tasks.

AND and OR operator: Selecting data based on AND or operator.

Between operator: Filter the results within a specific range.

NOT Operator: It will select the data which is not based on the given condition.

Arithmetic Operators: Using arithmetic operators to filter the data conveniently and precisely.

Wildcard Operators: To intelligently select the exact data like names starting or ending with r and n.

Concat function : combine Two or more string into a single string

Aggregate functions in SQL:

•**DISTINCT Clause:** It will select only the distinct data, not repetitive.

•**Count Function:** Returns the total count of the data filtered.

•**Sum Function:** Return the sum of all the data being queried.

•**Average Function:** Return the average of all the data being queried.

•**Minimum Function:** It will return the minimum data from the whole data that is being queried.

•**Maximum Function:** It will return the maximum data from the whole data that is being queried.

•**ORDER BY:** This statement will order the queried data as per your convenience in ascending or descending order.

CREATE TABLE

```
create table superstore(
order_id char(14) not null,
order_date date not null default '1990-01-01',
customer_name varchar(50) not null,
category varchar(20) not null,
product varchar(20) not null,
sales float,
profit numeric(18,5)
);

INSERT VALUE
insert into superstore values
('CA-2015-124891','2015-07-31','Rick Hansen','Technology','Accessories',2309.65,762.1845),
('CA-2017-135909','2017-10-13','Jane waco','office Supplies','Binders',5083.96,1906.485),
('CA-2015-116638','2015-01-28','Joseph Holt','Furniture','Tables',2953.176,-1862.3124),
('CA-2017-143567','2017-02-11','Thomas Boland','Office
Supplies','Accessories',2249.91,517.4793),
('CA-2014-154627','2014-10-29','Sue Ann Reed','Technology','Phones',2735.952,341.994),
('CA-2016-159016','2016-03-10','Karen Ferguson','Technology','Phones',4158.912,363.9048),
('CA-2015-139731','2015-10-15','Joel Eaton','Furniture','Chairs',2453.43,-350.49),
('CA-2014-168494','2014-12-12','Nora Preis','Furniture','Tables',3610.848,135.4068),
('CA-2014-160766','2014-09-14','Darrin Martin','Technology','Machines',2799.96,1371.9804),
('US-2017-168116','2017-11-04','Grant Thornton','Technology','Machines',7999.98,-3839.9904),
('CA-2014-116904','2014-09-23','Sanjit Chand','Office Supplies','Binders',9449.95,4630.4755),
('US-2015-163825','2015-06-16','Lena Creighton','Office Supplies','Binders',3050.376,1143.891),
('US-2017-135013','2017-07-24','Harold Ryan','Technology','Copiers',2399.96,839.986),
('CA-2015-111829','2015-03-19','Fred Hopkins','Technology','Copiers',3149.93,1480.4671),
('CA-2017-129021','2017-08-23','Patrick O Brill','Technology','Phones',4367.896,327.5922),
('CA-2017-129021','2017-08-23','Patrick O Brill','Technology','Phones',4367.896,327.5922),
('CA-2016-143805','2016-12-01','Jonathan Doherty','Office
Supplies','Appliances',2104.55,694.5015),
('CA-2015-114811','2015-11-08','Keith Dawkins','Technology','Machines',4643.8,2229.024);
-- Retrieve all order details from Table?
```

SUPERSTORE SALE CASE STUDIES QUESTIONS

Q1: List all orders in ascending or descending orders of Sales?

Q2: List all customers in ascending order of Category and descending order of Sales?

Q3: Display only unique records from the order table?

Q4: Display unique combination of Category and Product arranged in proper order?

Q5: which order are giving loss to the company?

Q6: which are the orders that belong to Technology Category?

Q7: are there any orders from Technology category where products were Sold at Loss?

Q8: which are the orders where Tables, Phones and Appliances are Sold?

Q9: List all orders excluding Tables Product?

Q10: from which of the orders company has gained profit by selling Tables, Phones and Appliances?

Q11: List all order details where Sales are between 4000 and 6000?

Q12: List orders which are placed by customers where customer name starts with R and G and ends with N?

Q13: Orders where characters at 2nd and 3rd of Customer name positions are is 'ar'?

Q14: which are the top 5 Orders in terms of Sales amount?

Q15: which are the bottom 25% orders in terms of profits?

Q16: Display order details with appropriate header labels? e.g. Customer name, Product category and sales amount etc.

Q17: Functions in SQL

Q18: How many orders are placed for each category? Get the total sales amount as well.

Q19: what is the monthly sales amount?

Q20: Are there any customers with Duplicate reference number?

Bonus Question

1. what is count of customers buying particular product in Technology and Furniture category in year 2014 and 2015.

2. Get the Maximum, minimum and Average sales amount for each Product along with customer count.

3.Display data for only those products which are bought by more than one customer.

4. Output should be arranged in descending order of customer count and average sales amount.

5. what is count of customers buying particular product in Technology and Furniture category in year 2014 and 2015.Get the Maximum, minimum and Average sales amount for each Product along with customer count. Display data for only those products which are bought by more than one customer. Output should be arranged in descending order of customer count and average sales amount.