

----- SUPERSTORE DATA PROJECT -----

--> Display all the columns in the table

```
SELECT * FROM dbo.Orders$
```

--> Display only the State and their respective sales. The result should not contain duplicates

```
SELECT STATE, SUM(SALES) AS TOTAL_SALES  
FROM  
DBO.Orders$ GROUP BY STATE
```

--> What is the total sales by state? Display the highest sales on the top and round it off to the nearest integer

```
SELECT STATE, ROUND(SUM(SALES),0) AS SALES  
FROM DBO.Orders$  
GROUP BY STATE ORDER BY SALES DESC
```

--> What is the total orders placed under each ship mode? Sort the results to display the "SAME DAY" shipmode in the first

```
SELECT SHIP_MODE, COUNT(ORDER_ID) AS TOTAL_ORDERS  
FROM DBO.Orders$  
GROUP BY SHIP_MODE  
ORDER BY  
CASE WHEN SHIP_MODE = 'SAME DAY' THEN 0 ELSE 1 END
```

--> Display the state which is

- a) Least profitable
- b) Most profitable

-----USING CTE-----

```
WITH CTE1 AS  
( SELECT STATE, SUM(PROFIT) AS TOTAL_PROFIT  
FROM DBO.Orders$  
GROUP BY STATE),  
CTE2 AS  
( SELECT MIN(TOTAL_PROFIT) AS MIN_PROFIT  
FROM CTE1)  
SELECT * FROM CTE1 WHERE TOTAL_PROFIT IN (SELECT MIN_PROFIT FROM CTE2)
```

-----USING RANK WITH CTE-----

```
WITH CTE1 AS  
(SELECT STATE, SUM(PROFIT) AS TOTAL_PROFIT, RANK() OVER(ORDER BY SUM(PROFIT) DESC) AS RANKING  
FROM DBO.Orders$  
GROUP BY STATE)  
SELECT * FROM CTE1 WHERE RANKING=1
```

--> Under each category, find the sub-category resulting in the highest sales

```
WITH CTE1 AS (  
  SELECT CATEGORY, SUB_CATEGORY, SUM(SALES) AS TOTAL_SALES, RANK() OVER(PARTITION BY CATEGORY ORDER BY SUM(SALES)  
  DESC) AS RANKING  
  FROM DBO.Orders$  
  GROUP BY CATEGORY, SUB_CATEGORY )  
SELECT * FROM CTE1 WHERE RANKING =1
```

--> Name the top 5 most ordered products

```
SELECT TOP 5 PRODUCT_ID, PRODUCT_NAME  
FROM DBO.Orders$  
GROUP BY PRODUCT_ID, PRODUCT_NAME  
ORDER BY COUNT(ORDER_ID) DESC
```

--> How many orders is placed under each sub-category year wise

```
WITH CTE1 AS (  
  SELECT YEAR(ORDER_DATE) AS ORDER_YEAR, SEGMENT, COUNT(ORDER_id) AS TOTAL_ORDERS  
  FROM DBO.Orders$  
  GROUP BY ORDER_DATE, SEGMENT)  
SELECT ORDER_YEAR ,SEGMENT, SUM(TOTAL_ORDERS) AS TOTAL_ORDERS  
FROM CTE1  
GROUP BY ORDER_YEAR, SEGMENT  
ORDER BY ORDER_YEAR
```

--> Which are the 3 least selling products in each segment

```
WITH CTE1 AS (  
  SELECT SEGMENT, PRODUCT_NAME, SUM(SALES) AS TOTAL_SALES, RANK() OVER(PARTITION BY SEGMENT ORDER BY SUM(SALES)) AS  
  RANKING  
  FROM DBO.Orders$  
  GROUP BY SEGMENT, PRODUCT_NAME)  
SELECT * FROM CTE1 WHERE RANKING BETWEEN 1 AND 3
```



--> What is the most purchased product on the store and how many times was it purchased

```
SELECT TOP 1 PRODUCT_ID,PRODUCT_NAME ,COUNT(PRODUCT_ID) AS TIMES_PURCHASED
FROM DBO.Orders$
GROUP BY PRODUCT_ID, PRODUCT_NAME
ORDER BY TIMES_PURCHASED DESC
```

--> Which Category has highest number of returns?

```
SELECT TOP 1 O.CATEGORY, COUNT(R.RETURNED) AS TIMES_RETURNED
FROM DBO.Orders$ AS O
JOIN Returns$ AS R
ON O.ORDER_ID = R.ORDER_ID
GROUP BY O.CATEGORY
ORDER BY TIMES_RETURNED DESC
```

--> Create a summary table to show the quantity of products sold by the loss making cities

```
SELECT CITY,SUM(PROFIT) AS TOTAL_LOSS, SUM(QUANTITY) AS TOTAL_QUANTITY
FROM DBO.Orders$
GROUP BY CITY
HAVING SUM(PROFIT) < 0
```

--> Create a summary report for month on month sales and profit. Round off sales and profit to 2 digits

```
SELECT YEAR(ORDER_DATE) AS YEAR, DATENAME(MONTH,ORDER_DATE) AS MONTH, ROUND(SUM(SALES),2) AS SALES,
ROUND(SUM(PROFIT),2) AS PROFIT
FROM DBO.Orders$
GROUP BY YEAR(ORDER_DATE), MONTH(ORDER_DATE), DATENAME(MONTH,ORDER_DATE)
ORDER BY YEAR, MONTH(ORDER_DATE)
```