

Global Superstore Data Analysis using SQL

1. Find the total generated revenue.

```
SELECT  
    SUM(Quantity) AS Total_Quantity,  
    ROUND(SUM(sales), 2) AS Total_Revenue,  
    ROUND(SUM(profit), 2) AS Total_Profit  
FROM superstore;
```

OUTPUT :-

	Total_Quantity	Total_Revenue	Total_Profit
▶	14452	1174336.64	134146.22

2. Find the segment wise distribution of the sales.

```
SELECT Segment, ROUND(SUM(sales), 2) AS Total_sales  
FROM superstore  
GROUP BY Segment  
ORDER BY Total_sales;
```

OUTPUT :-

	Segment	Total_sales
▶	Home Office	199494.17
	Corporate	350747.62
	Consumer	624094.85

3. Find the top 3 most profitable Products.

```
SELECT `Product Name` AS Product_Name, Profit  
FROM `superstore`  
ORDER BY profit DESC  
limit 3;
```

OUTPUT :-

	Product_Name	Profit
▶	Sauder Classic Bookcase, Metal	2316.51
	KitchenAid Stove, Silver	1644.03
	Hamilton Beach Refrigerator, Silver	1202.016

4. How many orders are placed after January 2016.

```
SELECT COUNT(`Order ID`) AS Orders_After_Jan2016  
FROM Superstore  
WHERE STR_TO_DATE(`Order Date` , '%d-%m-%Y') > '2016-01-31';
```

OUTPUT :-

	Orders_After_Jan2016
▶	2410

5. How many states from Mexico are under the roof of business?

```
SELECT COUNT(DISTINCT `State`) AS num_states  
FROM Superstore  
WHERE Country = 'Australia';
```

OUTPUT :-

	num_states
▶	8

6. which products and subcategories are most and least profitable?

-- Most profitable products

```
SELECT `Product Name` , ROUND(SUM(Profit), 2) AS Total_Profit  
FROM Superstore  
GROUP BY `Product Name`  
ORDER BY Total_Profit desc  
LIMIT 5;
```

OUTPUT :-

	Product Name	Total_Profit
▶	Sauder Classic Bookcase, Metal	2978.37
	Nokia Smart Phone, with Caller ID	2887.59
	Novimex Executive Leather Armchair, Adjustable	2523.55
	Hon Executive Leather Armchair, Adjustable	2410.27
	Brother Copy Machine, Color	1963.36

	Product Name	Total_Profit
▶	Ikea Library with Doors, Traditional	-1748.17
	Panasonic Inkjet, Red	-1410.19
	Chromcraft Conference Table, with Bottom Stor...	-1335.29
	Bevis Wood Table, with Bottom Storage	-1056.81
	Lesro Wood Table, Adjustable Height	-953.44

7. Which customer segment contributes the most to the total revenue?

```
SELECT segment,ROUND(SUM(sales), 2) AS Total_sales  
FROM superstore  
GROUP BY segment  
ORDER BY Total_sales desc;
```

OUTPUT :-

	segment	Total_sales
▶	Consumer	624094.85
	Corporate	350747.62
	Home Office	199494.17

8. What is the year-over-year growth in sales and Profit?

```
SELECT YEAR(STR_TO_DATE(`Order Date`, '%d-%m-%Y')) AS Year,  
ROUND(SUM(Sales), 2) AS Total_Sales,  
ROUND(SUM(Profit), 2) AS Total_Profit  
FROM superstore  
GROUP BY Year  
ORDER BY Year;
```

OUTPUT :-

	Year	Total_Sales	Total_Profit
▶	2014	191180.62	24989.55
	2015	253645.96	33521.23
	2016	331950.64	34228.8
	2017	397559.43	41406.65

9. Which countries and cities are driving the highest sales?

-- Top countries

```
SELECT Country,ROUND(SUM(Sales), 2) AS Total_Revenue  
FROM superstore  
GROUP BY Country  
ORDER BY Total_Revenue DESC  
LIMIT 10;
```

OUTPUT :-

	Country	Total_Sales
▶	Australia	925235.85
	Austria	92539.05
	Argentina	57511.78
	Algeria	36091.59
	Angola	25554
	Afghanistan	21673.32

-- Top cities

```
SELECT Country, City, ROUND(SUM(Sales), 2) AS Total_Sales  
FROM superstore  
GROUP BY Country, City  
ORDER BY Total_Sales DESC  
LIMIT 20;
```

OUTPUT :-

	Country	City	Total_Sales
▶	Australia	Sydney	101945.52
	Australia	Brisbane	75729.02
	Australia	Melbourne	73843.55
	Australia	Gold Coast	72626.92
	Australia	Perth	64292.2
	Austria	Vienna	62023.53

10. What is the average delivery time from order to ship date across regions?

```
SELECT Region, COUNT(*) AS n_orders,  
AVG(DATEDIFF(STR_TO_DATE(`Ship Date` ,'%d-%m-%Y'),  
STR_TO_DATE(`Order Date` ,'%d-%m-%Y'))) AS avg_delivery_days  
FROM Superstore  
GROUP BY Region  
ORDER BY avg_delivery_days desc;
```

OUTPUT :-

	Region	n_orders	avg_delivery_days
▶	Southern Asia	58	4.5172
	Central Africa	122	4.2049
	Western Europe	331	3.9849
	Oceania	2837	3.9475
	North Africa	196	3.8520
	South America	390	3.8256
	Southern Europe	16	3.6250

11. what is the profit distribution across order priority?

```
SELECT `Order Priority` ,  
       COUNT(*) AS Num_Orders,  
       ROUND(SUM(Profit), 2) AS Total_Profit,  
       ROUND(AVG(Profit), 2) AS Avg_Profit_Per_Order  
  FROM superstore  
 GROUP BY `Order Priority`  
 ORDER BY Total_Profit DESC;
```

OUTPUT :-

	Order Priority	Num_Orders	Total_Profit	Avg_Profit_Per_Order
▶	Medium	2294	73509.69	32.04
	High	1269	46576.52	36.7
	Critical	286	9776.81	34.18
	Low	135	4283.19	31.73

12. Suggest data-driven recommendations for improving profit and reducing losses.

After analyzing the Global Superstore data, the following recommendations can help improve profit and reduce losses:

- Reduce Discounts:** Some products and subcategories show low or negative profit margins. Limit discounts or renegotiate supplier costs.
- Focus on Profitable Segments:** The Consumer segment drives the highest sales, but Corporate and Home Office can offer better profit margins — focus marketing there.
- Optimize Product Portfolio:** Discontinue or redesign products like Tables and Bookcases that consistently produce losses.
- Improve Delivery Efficiency:** Regions like Latin America and Africa have longer delivery times. Improve logistics or open local warehouses.
- Prioritize High-Profit Orders:** High and Critical priority orders yield more profit per order — handle them efficiently.
- Control Operational Costs:** Profit dropped after 2016 despite higher sales — reduce shipping and handling costs.
- Expand in Growing Markets:** Countries like India and China show strong growth potential — invest more in these markets.
- Use Data Dashboards:** Continuously monitor sales, profit, and delivery performance using BI tools like Tableau or Power BI.