

Global superstore data analysis using SQL

-- 1) find the total revenue ,quantities and profit generated .

```
select sum(sales)as total_revenue,  
sum(quantity)as total_quantity  
from superstore;
```

output:

| total_revenue | total_quantity |
|--------------------|----------------|
| 1174336.6362799979 | 14452 |

Result 1

-- 2) find the segement wise distribution sales.

```
select segment, (sum(sales)) as total_sales  
from superstore  
group by segment  
order by total_sales desc;
```

output:

| segment | total_sales |
|-------------|--------------------|
| Consumer | 624094.8519599998 |
| Corporate | 350747.61732000054 |
| Home Office | 199494.16700000007 |

Result 2

--3) find the top3 most profitable products.

```
select `product name` as product_name,  
round(sum( profit),2) as total_profit  
from superstore  
group by `product name`  
order by total_profit desc  
limit 3;
```

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 |

Result 3

-- 4)how many orders are placed after January 2016.

```
select count(*)as total_orders_after_2016
from superstore
where year(`Order Date`) > '2016-12-31';
```

output:

| Result Grid | | Filter Rows: | Export: | Wrap Cell Content: |
|-------------|-------------------------|--------------|---------|--------------------|
| | total_orders_after_2016 | | | |
| ▶ | 0 | | | |

Result 4 x

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

```
select count( distinct state)as total_states_in_austria
from superstore
where country = 'Austria';
```

output:

| Result Grid | | Filter Rows: | Export: | Wrap Cell Content: |
|-------------|-------------------------|--------------|---------|--------------------|
| | total_states_in_austria | | | |
| ▶ | 6 | | | |

Result 5 x

--6) which products and sub categories are most and least profitable

```
(select `sub-category` as sub_category,
`Product Name` as product_name,
sum(Profit) as total_profit
from superstore
group by `sub-category`, `product name`
order by total_profit desc
limit 5);
```

output:

| sub_category | product_name | total_profit |
|--------------|--|--------------------|
| Bookcases | Sauder Classic Bookcase, Metal | 2978.370000000003 |
| Phones | Nokia Smart Phone, with Caller ID | 2887.594 |
| Chairs | Novimex Executive Leather Armchair, Adjustable | 2523.5519999999997 |
| Chairs | Hon Executive Leather Armchair, Adjustable | 2410.2749999999996 |
| Copiers | Brother Copy Machine, Color | 1963.362 |

-- 7) Which customer segment contributes the most to the total revenue.

```
select segment,
sum(sales) as total_revenue
from superstore
group by segment
order by total_revenue DESC
limit 1;
```

output:

| segment | total_revenue |
|----------|-------------------|
| Consumer | 624094.8519599998 |

-- 8) Which countries and cities are driving the highest sales.

```
select country,
SUM(sales) AS total_sales
FROM superstore
group by country
order by total_sales DESC;
```

output:

| country | total_sales |
|-------------|--------------------|
| Australia | 925235.8530000002 |
| Austria | 92539.04999999999 |
| Argentina | 57511.78327999994 |
| Algeria | 36091.58999999999 |
| Angola | 25554.00000000001 |
| Afghanistan | 21673.320000000003 |
| Azerbaijan | 5631.5099999999975 |
| Bangladesh | 5385.48 |
| Albania | 3888.119999999999 |

-- 9)what is year-over- year growth in profit.

```
select year (`order Date`) as year,  
       sum(sales) as sales,  
       sum(profit)as profit,  
       sum(sales) - lag(sum(sales)) over ( order by year (`order date`))as sales _growth,  
       sum(profit) - lag(sum(profit)) over ( order by year (`order date`))as profit_growth  
from superstore  
group by year(`order date`)  
order by year;
```

output:

| Result Grid | | | | |
|-----------------------------------|------|--------------------|--------------------|--------------|
| Filter Rows: <input type="text"/> | | | | |
| Export: Wrap Cell Content: | | | | |
| | year | sales | profit | sales_growth |
| ▶ | NULL | 1174336.6362799979 | 134146.21628000017 | NULL |

Result 9 ×

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

```
select region, avg(datediff(`ship date`,`order date`))as avg_delivery_days  
from superstore  
group by region  
order by avg_delivery_days;
```

output:

| Result Grid | |
|-----------------------------------|-------------------|
| Filter Rows: <input type="text"/> | |
| Export: Wrap Cell Content: | |
| region | avg_delivery_days |
| ▶ Southern Asia | NULL |
| Southern Europe | NULL |
| North Africa | NULL |
| Central Africa | NULL |
| South America | NULL |
| Western Asia | NULL |
| Oceania | NULL |
| Western Europe | NULL |

Result 10 ×

-- 11) what is the profit distribution across order priority.

```
select `order Priority` as order_priority,  
SUM(profit) as total_profit,  
avg(profit) as avg_profit_per_order  
from superstore  
group by `order Priority`  
order by total_profit DESC;
```

| order_priority | total_profit | avg_profit_per_order |
|----------------|-------------------|----------------------|
| Medium | 73509.69276000009 | 32.0443298866609 |
| High | 46576.51983999997 | 36.703325327029134 |
| Critical | 9776.810679999997 | 34.18465272727271 |
| Low | 4283.192999999999 | 31.727355555555555 |

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

```
select `product Name`,  
`sub-category`,  
sum(Profit) as total_Profit  
from superstore  
group by `product name`, `sub-category`  
having sum(profit) < 0  
order by total_profit ASC;
```

output:

| product Name | sub-category | total_Profit |
|--|--------------|---------------------|
| Ikea Library with Doors, Traditional | Bookcases | -1748.1749999999997 |
| Panasonic Inkjet, Red | Machines | -1410.192 |
| Chromcraft Conference Table, with Bottom Stor... | Tables | -1335.291 |
| Bevis Wood Table, with Bottom Storage | Tables | -1056.807 |
| Lesro Wood Table, Adjustable Height | Tables | -953.442 |
| Safco Classic Bookcase, Pine | Bookcases | -909.9 |
| Bush Library with Doors, Pine | Bookcases | -872.886 |
| Chromcraft Round Table, Rectangular | Tables | -836.43 |
| Office Star Executive Leather Armchair, Black | Chairs | -813.492 |
| Lesro Conference Table, Adjustable Height | Tables | -773.838 |
| Barricks Round Table, Adjustable Height | Tables | -725.36 |
| Okidata Printer, Durable | Machines | -652.752 |
| Chromcraft Round Table, Fully Assembled | Tables | -632.799 |
| Office Star Swivel Stool, Adjustable | Chairs | -630.207 |
| Novimex Executive Leather Armchair, Black | Chairs | -624.915 |
| Office Star Rocking Chair, Adjustable | Chairs | -573.96 |
| Hon Round Table, Fully Assembled | Tables | -551.936 |
| Cuisinart Stove, White | Appliances | -536.448 |
| KitchenAid Stove, Black | Appliances | -512.712 |
| Fellowes Lockers, Industrial | Storage | -498.85200000000003 |
| Canon Fax Machine, Digital | Copiers | -489.77099999999996 |
| Brother Ink, Laser | Copiers | -443.3928 |
| Chromcraft Conference Table, Adjustable Height | Tables | -443.296 |
| Okidata Inkjet, White | Machines | -435.84 |
| Sharp Copy Machine, High-Speed | Copiers | -430.92 |
| Cuisinart Microwave, White | Appliances | -428.82 |
| Hon Executive Leather Armchair, Red | Chairs | -413.736 |