

## 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:**

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	total_revenue	total_quantity		
▶	1174336.6362799979	14452		

-- 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:**

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	segment	total_sales		
▶	Consumer	624094.851959998		
	Corporate	350747.6173200054		
	Home Office	199494.1670000007		

--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:**

Result Grid		Filter Rows:	Export:	Wrap Cell Content:	Fetch rows:
	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			

-- 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			

--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:**

Result Grid		
Filter Rows: <input type="text"/>		
Export:  Wrap Cell Content: <input type="checkbox"/>		
sub_category	product_name	total_profit
Bookcases	Sauder Classic Bookcase, Metal	2978.3700000000003
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

Result 6 x

**-- 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:**

Result Grid		
Filter Rows: <input type="text"/>		
Export:  Wrap Cell Content: <input type="checkbox"/> Fetch rows:		
segment	total_revenue	
Consumer	624094.8519599998	

Result 7 x

**-- 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:**

Result Grid		
Filter Rows: <input type="text"/>		
Export:  Wrap Cell Content: <input type="checkbox"/>		
country	total_sales	
Australia	925235.853000002	
Austria	92539.0499999999	
Argentina	57511.78327999994	
Algeria	36091.58999999999	
Angola	25554.0000000001	
Afghanistan	21673.32000000003	
Azerbaijan	5631.5099999999975	
Bangladesh	5385.48	
Albania	3888.119999999999	
	...	

Result 8 x

-- 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:**

year	sales	profit	sales_growth	profit_growth
NULL	1174336.6362799979	134146.21628000017	NULL	NULL

--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:**

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

-- 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;
```

Result Grid		
order_priority	total_profit	avg_profit_per_order
Medium	73509.69276000009	32.0443298866609
High	46576.51983999997	36.703325327029134
Critical	9776.81067999997	34.18465272727271
Low	4283.19299999999	31.72735555555555

-- 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:**

Result Grid		
product Name	sub-category	total_Profit
Ikea Library with Doors, Traditional	Bookcases	-1748.174999999997
Panasonic Inkjet, Red	Machines	-1410.192
Chromcraft Conference Table, with Bottom Stor...	Tables	-1335.291
Bewi 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
Barriks Round Table, Adjustable Height	Tables	-725.36
Okiidata 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	-498.8520000000003
Canon Fax Machine, Digital	Copiers	-489.7709999999996
Brother Ink, Laser	Copiers	-443.3928
Chromcraft Conference Table, Adjustable Height	Tables	-443.296
Okiidata 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