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Batch: 15--Sep

create database if not exists indexing;

use indexing;

1) Find the total revenue AND PROFIT generated

SELECT \* FROM SUPERSTORE;

SELECT SUM(SALES) AS TOTAL\_REVENUE, SUM(PROFIT) AS TOTAL\_PROFIT FROM SUPERSTORE;

	TOTAL_REVENUE	TOTAL_PROFIT	total_count
▶	1174336.6362799979	134146.21628000017	3984

2) Find the segment wise distribution of the sales.

SELECT SEGMENT, SUM(SALES) AS TOTAL\_SALES FROM SUPERSTORE

GROUP BY SEGMENT;

	SEGMENT	TOTAL_SALES
▶	Home Office	199494.16700000007
	Consumer	624094.8519599998
	Corporate	350747.61732000054

3) find the top 3 most profitable products

```
SELECT `PRODUCT NAME`, SUM(PROFIT) FROM SUPERSTORE  
GROUP BY `PRODUCT NAME`  
ORDER BY SUM(PROFIT) DES  
  
LIMIT 3;
```

	PRODUCT NAME	SUM(PROFIT)
▶	Sauder Classic Bookcase, Metal	2978.3700000000003
	Nokia Smart Phone, with Caller ID	2887.594
	Novimex Executive Leather Armchair, Adjustable	2523.5519999999997

4) find how many orders are placed after January 2016

```
SELECT  
COUNT(DISTINCT `Order ID`) AS Orders_After_Jan2016  
FROM superstore  
WHERE `Order Date` > '2016-01-31';
```

	Orders_After_Jan2016
▶	725

5) How many states from austria are under the roof of business?

```
select country, count(state) from superstore  
group by country  
having country = 'austria';
```

	country	count(state)
▶	Austria	331

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

-- Most profitable product

```
SELECT `Product ID`, `Product Name`, SUM(Profit) AS Total_Profit  
FROM superstore  
GROUP BY `Product ID`, `Product Name`  
ORDER BY Total Profit DESC  
LIMIT 1;
```

	Product ID	Product Name	Total_Profit
▶	FUR-BO-5948	Sauder Classic Bookcase, Metal	2978.3700000000003

-- Least profitable product

```
SELECT `Product ID`, `Product Name`, SUM(Profit) AS Total_Profit  
FROM superstore  
GROUP BY `Product ID`, `Product name`  
ORDER BY Total_Profit ASC  
LIMIT 1;
```

	Product ID	Product Name	Total_Profit
▶	FUR-BO-4863	Ikea Library with Doors, Traditional	-1748.174999999997

-- Most profitable sub-category

```
SELECT Sub_Category, SUM(Profit) AS Total_Profit  
FROM superstore  
GROUP BY Sub_Category  
ORDER BY Total_Profit DESC  
LIMIT 1;
```

	Sub-Category	Total_Profit
▶	Copiers	22417.57627999999

-- Least profitable sub-category

```
SELECT Sub_Category, SUM(Profit) AS Total_Profit  
FROM superstore  
GROUP BY Sub_Category  
ORDER BY Total_Profit ASC  
LIMIT 1;
```

	Sub-Category	Total_Profit
▶	Tables	-5042.570999999997

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

```
select * from superstore;  
  
select `customer id` , segment , sum(sales) as total_revenue from superstore  
group by segment, customer id  
order by sum(sales) desc  
limit 1;
```

	customer id	segment	total_revenue
▶	DP-131057	Corporate	11864.139000000001

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

```
select * from superstore;  
select year('order date'),sum(sales),sum(profit)  
from superstore  
group by year ('order date');
```

Result Grid			
	year(`order date`)	sum(sales)	sum(profit)
▶	NULL	1174336.6362799979	134146.21628000017

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

```
select country, city, sum(sales) as highest_sales from  
superstore group by country, city  
order by sum(sales)  
limit 1;
```

Result Grid			
	country	city	highest_sales
▶	Argentina	Tartagal	6.714

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

SELECT

Region,

AVG('Ship Date'-‘Order Date’) AS Avg\_Days

FROM superstore

WHERE `Ship Date` IS NOT NULL AND `Order Date` IS NOT NULL

GROUP BY Region

ORDER BY Avg\_Days;

Region	Avg_Days
Southern Europe	-4.125
Western Asia	-1.9411764705882353
Western Europe	-0.6072507552870091
North Africa	-0.5306122448979592
Central Africa	-0.32786885245901637
Oceania	-0.031723651744800845
South America	0.2
Southern Asia	0.3448275862068966

11) what is the profit distribution across order priority?

Select

‘ORDER PRIORITY’, sum(profit) AS PROFIT DISTRIBUTION from superstore

GROUP BY ‘ORDER PRIORITY’;

	ORDER PRIORITY	PROFIT DISTRIBUTION
▶	Medium	73509.69276000009
	High	46576.51983999997
	Low	4283.192999999999
	Critical	9776.810679999997

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

```
SELEC 'Ship Mode',  
SUM ('Shipping Cost') AS Total_Shipping_Cost,  
SUM(Sales) AS Total_Sales,  
SUM(Profit) AS Total_Profit,  
ROUND (SUM (`Shipping Cost`) * 100.0 / NULLIF(SUM(Profit),0),2) AS Ship Cost_to_Profit_Ratio  
FROM superstore  
GROUP BY `Ship Mode`  
ORDER BY Ship Cost_to_Profit_Ratio DESC;
```

Ship Mode	Total_Shipping_Cost	Total_Sales	Total_Profit	ShipCost_to_Profit_Ratio
Same Day	11676.163000000002	64894.11863999999	5626.578639999996	207.52
First Class	26118.242999999995	153407.28676000008	16992.056759999992	153.71
Second Class	30743.19800000003	234902.79051999986	26582.180519999976	115.65
Standard Class	58735.41800000002	721132.4403599986	84945.40036000012	69.14