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Batch: DADS 15—Sep

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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(PROPIT) FROM SUPERSTORE  
GROUP BY `PRODUCT NAME`  
ORDER BY SUM(PROPIT) DES  
  
LIMIT 3;
```

PRODUCT NAME	SUM(PROPIT)
Sauder Classic Bookcase, Metal	2978.3700000000003
Nokia Smart Phone, with Caller ID	2887.594
Novimex Executive Leather Armchair, Adjustable	2523.551999999997

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	26118.24299999995	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