

Name: Srushti Awati

Batch: 15--Sep

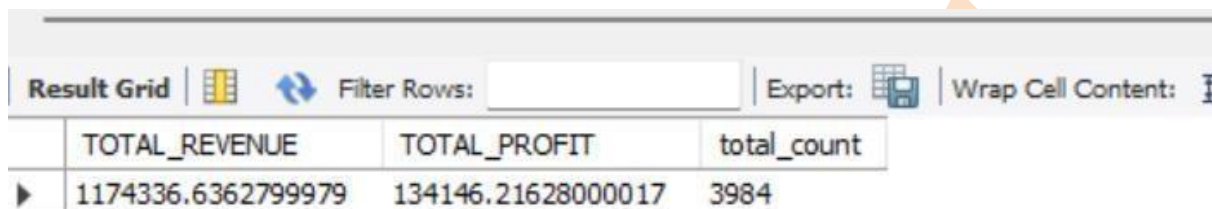
create database if not exists indexing;

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;



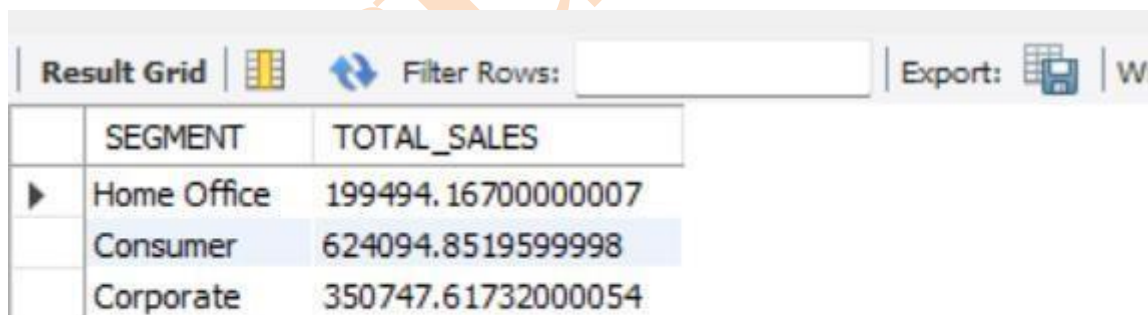
The screenshot shows a database interface with a 'Result Grid' tab. It includes a 'Filter Rows' input field, an 'Export' button with a grid icon, and a 'Wrap Cell Content' button with a vertical text icon. The table below has three columns: 'TOTAL_REVENUE', 'TOTAL_PROFIT', and 'total_count'. The first row contains the values 1174336.6362799979, 134146.21628000017, and 3984 respectively.

	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;



The screenshot shows a database interface with a 'Result Grid' tab. It includes a 'Filter Rows' input field, an 'Export' button with a grid icon, and a 'W' button. The table below has two columns: 'SEGMENT' and 'TOTAL_SALES'. The first row contains 'Home Office' and 199494.16700000007. The second row contains 'Consumer' and 624094.8519599998. The third row contains 'Corporate' and 350747.61732000054.

	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;
```

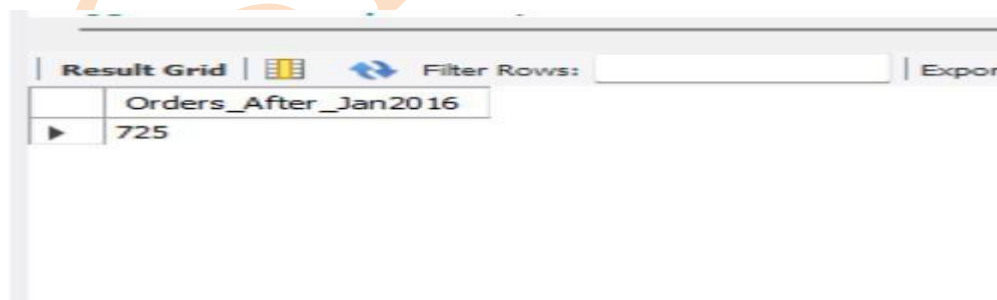


The screenshot shows a database query result grid with the following data:

	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';
```



The screenshot shows a database query result grid with the following data:

	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';
```



The screenshot shows a 'Result Grid' window with a 'Filter Rows' input field. The grid contains two columns: 'country' and 'count(state)'. The first row shows 'Austria' with a count of 331.

	country	count(state)
▶	Austria	331

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

```
-- Most profitable product
```

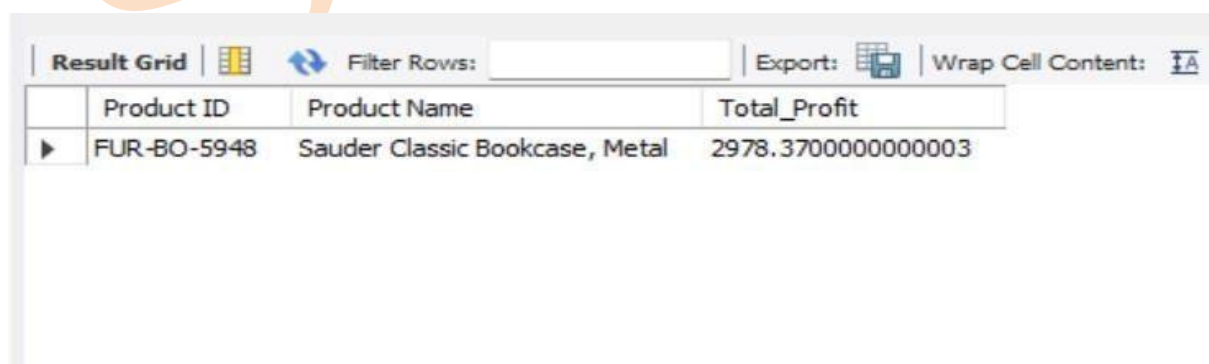
```
SELECT `Product ID`, `Product Name`, SUM(Profit) AS Total_Profit
```

```
FROM superstore
```

```
GROUP BY `Product ID`, `Product Name`
```

```
ORDER BY Total Profit DESC
```

```
LIMIT 1;
```

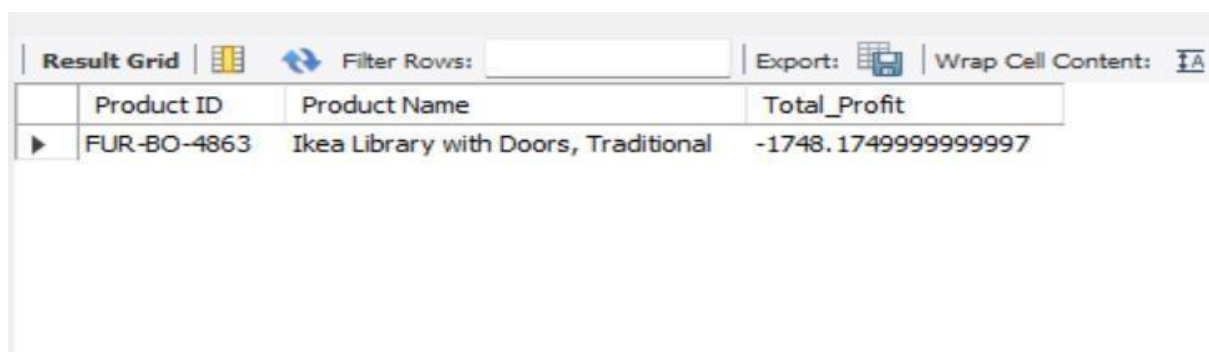


The screenshot shows a 'Result Grid' window with 'Filter Rows', 'Export', and 'Wrap Cell Content' options. The grid has three columns: 'Product ID', 'Product Name', and 'Total_Profit'. The first row shows 'FUR-BO-5948' for 'Sauder Classic Bookcase, Metal' with a total profit of 2978.3700000000003.

	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;
```

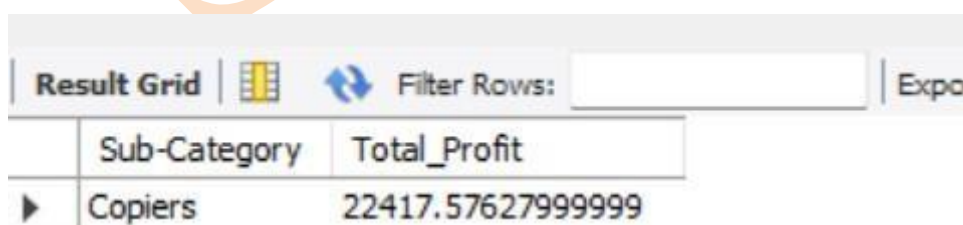


The screenshot shows a database query result grid. The header row contains 'Product ID', 'Product Name', and 'Total_Profit'. The first data row shows 'FUR-BO-4863' as the Product ID, 'Ikea Library with Doors, Traditional' as the Product Name, and '-1748.1749999999997' as the Total_Profit. The interface includes a 'Result Grid' tab, a 'Filter Rows' input field, and an 'Export' button.

Product ID	Product Name	Total_Profit
FUR-BO-4863	Ikea Library with Doors, Traditional	-1748.1749999999997

-- 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;
```

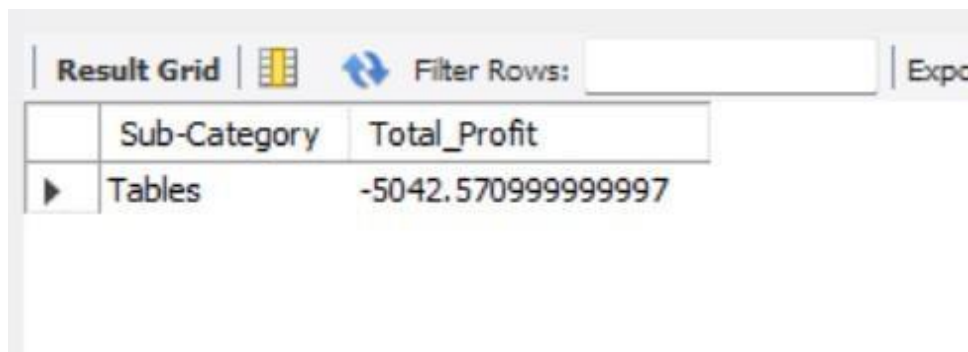


The screenshot shows a database query result grid. The header row contains 'Sub-Category' and 'Total_Profit'. The first data row shows 'Copiers' as the Sub-Category and '22417.576279999999' as the Total_Profit. The interface includes a 'Result Grid' tab, a 'Filter Rows' input field, and an 'Export' button.

Sub-Category	Total_Profit
Copiers	22417.576279999999

-- 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;
```

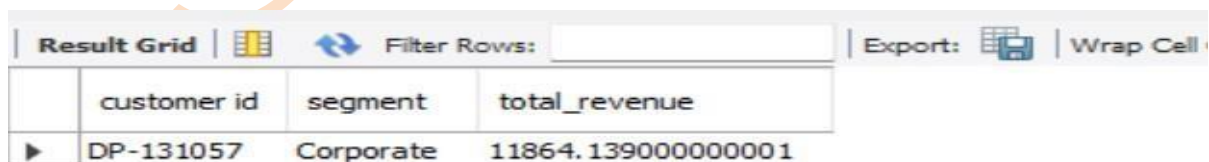


The screenshot shows a 'Result Grid' window with a 'Filter Rows' input field. The table has two columns: 'Sub-Category' and 'Total_Profit'. The first row, which is highlighted, shows 'Tables' with a 'Total_Profit' of -5042.570999999997.

	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;
```

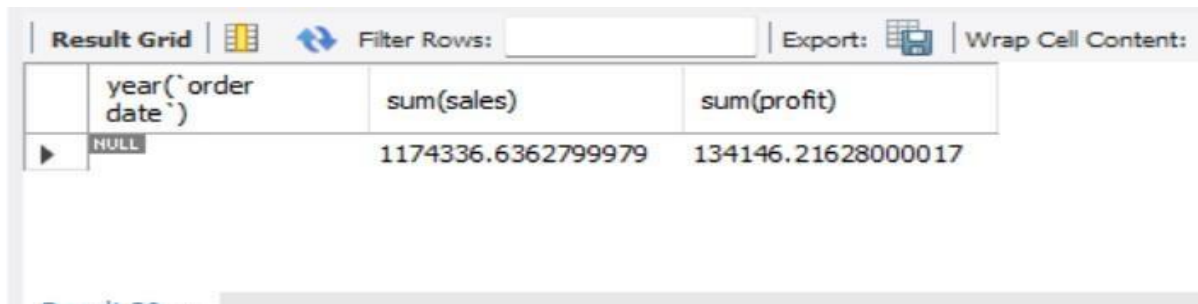


The screenshot shows a 'Result Grid' window with 'Export' and 'Wrap Cell' buttons. The table has three columns: 'customer id', 'segment', and 'total_revenue'. The first row, which is highlighted, shows 'DP-131057' for the 'Corporate' segment with a 'total_revenue' of 11864.139000000001.

	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');
```

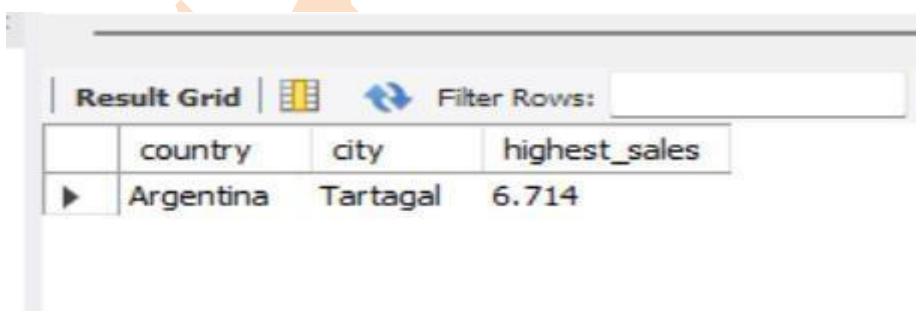


The screenshot shows a 'Result Grid' interface with a table containing three columns: 'year('order date')', 'sum(sales)', and 'sum(profit)'. The first row has a 'year('order date')' value of 'NULL', a 'sum(sales)' value of '1174336.6362799979', and a 'sum(profit)' value of '134146.21628000017'. The interface includes a 'Filter Rows' search bar and an 'Export' button.

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;
```



The screenshot shows a 'Result Grid' interface with a table containing three columns: 'country', 'city', and 'highest_sales'. The first row shows 'Argentina' as the country, 'Tartagal' as the city, and '6.714' as the highest sales value. The interface includes a 'Filter Rows' search bar.

country	city	highest_sales
Argentina	Tartagal	6.714

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

SELECT

Region,

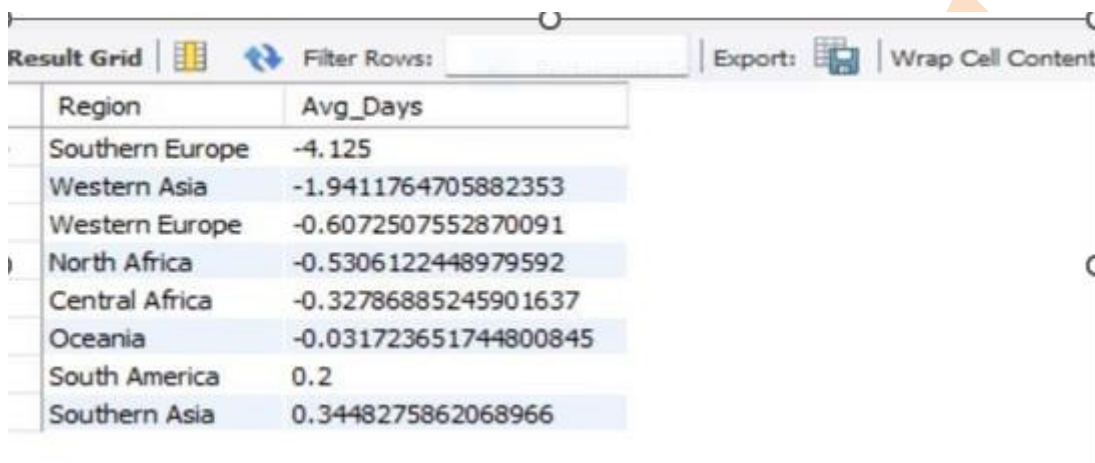
AVG('Ship Date'-'Order Date') AS Avg_Days

FROM superstore

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

GROUP BY Region

ORDER BY Avg_Days;



The screenshot shows a 'Result Grid' window with a toolbar at the top containing icons for a grid, a refresh button, a 'Filter Rows' input field, an 'Export' button, and a 'Wrap Cell Content' button. The table below has two columns: 'Region' and 'Avg_Days'. The data is sorted by 'Avg_Days' in ascending order.

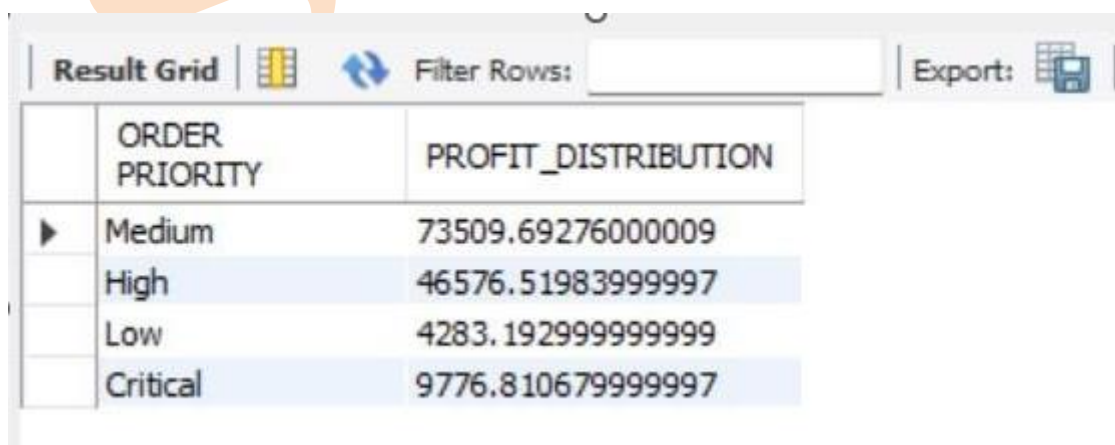
Region	Avg_Days
Southern Europe	-4.125
Western Asia	-1.9411764705882353
Western Europe	-0.6072507552870091
North Africa	-0.5306122448979592
Central Africa	-0.32786885245901637
Oceania	-0.031723651744800845
South America	0.2
Southern Asia	0.3448275862068966

11) what is the profit distribution across order priority?

Select

'ORDER PRIORITY', sum(profit) AS PROFIT_DISTRIBUTION from superstore

GROUP BY 'ORDER PRIORITY';






The screenshot shows a 'Result Grid' window with a toolbar at the top containing icons for a grid, a refresh button, a 'Filter Rows' input field, an 'Export' button, and a 'Wrap Cell Content' button. The table below has two columns: 'ORDER PRIORITY' and 'PROFIT_DISTRIBUTION'. The data is grouped by 'ORDER PRIORITY'.

ORDER PRIORITY	PROFIT_DISTRIBUTION
Medium	73509.69276000009
High	46576.519839999997
Low	4283.1929999999999
Critical	9776.810679999997

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

```
SELECT '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;
```

Result Grid  Filter Rows: <input type="text"/> Export:  Wrap Cell Content: 					
	Ship Mode	Total_Shipping_Cost	Total_Sales	Total_Profit	ShipCost_to_Profit_Ratio
▶	Same Day	11676.163000000002	64894.118639999999	5626.578639999996	207.52
	First Class	26118.242999999995	153407.286760000008	16992.056759999992	153.71
	Second Class	30743.198000000003	234902.79051999986	26582.180519999976	115.65
	Standard Class	58735.418000000002	721132.4403599986	84945.40036000012	69.14