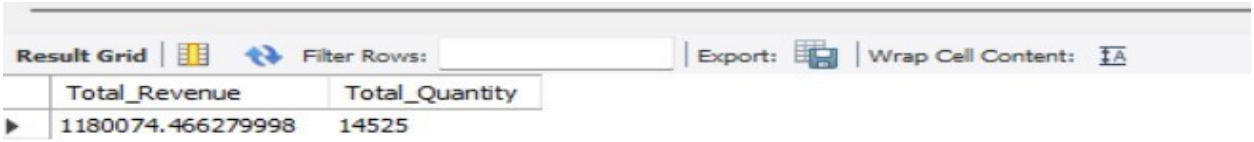
Global Superstore Data Analysis using SQL

1.Find the Total revenue, quantities and Profit generated.

```
SELECT
SUM(Sales) AS Total_Revenue,
SUM(Quantity) AS Total_Quantity FROM
superstore;
```

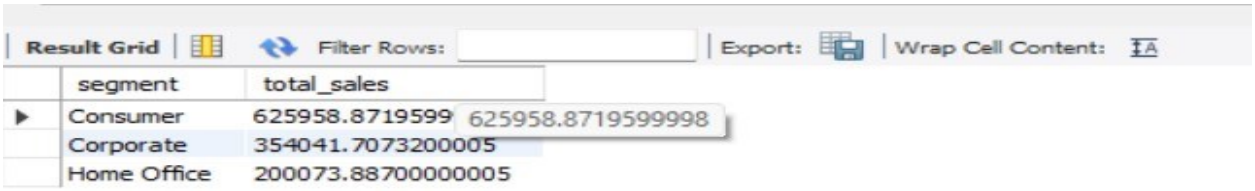
Output:-



2.Find the Segment wise distribution of the Sales.

```
SELECT segment,
    (SUM(sales)) AS total_sales
    FROM superstore
    GROUP BY segment
    ORDER BY total_sales DESC;
```

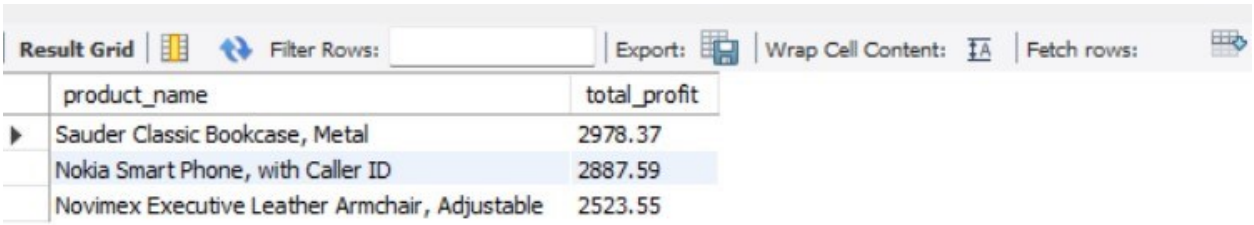
Output:-



3. **Find the top 3 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

4. **How many orders are placed after January 2016.**

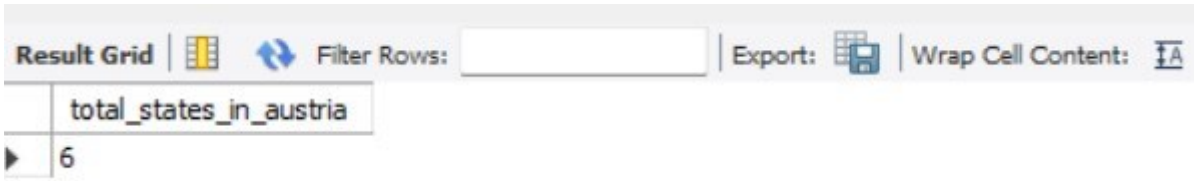
```
SELECT COUNT(*) AS total_orders_after_2016
FROM superstore
WHERE YEAR(`Order Date`) > '2016-12-31';
```

Output:-

total_orders_after_2016
0

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';
```



6. **which products and subcategories 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
)
UNION ALL
(
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 ASC
 LIMIT 5
);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

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
Bookcases	Ikea Library with Doors, Traditional	-1748.1749999999997
Machines	Panasonic Inkjet, Red	-1410.192
Tables	Chromcraft Conference Table, with Bottom Stor...	-1335.291
Tables	Bevis Wood Table, with Bottom Storage	-1056.807
Tables	Lesro Wood Table, Adjustable Height	-953.442

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;
```

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

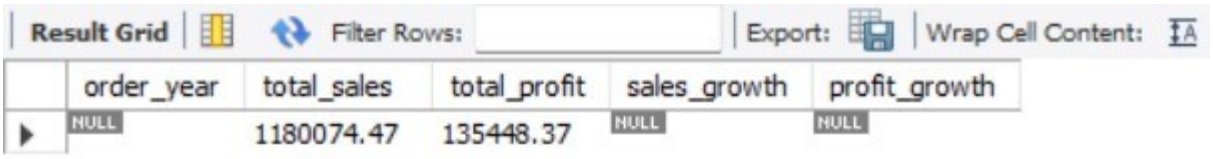
segment	total_revenue
Consumer	625958.8719599998

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

```
SELECT
YEAR(`Order Date`) AS order_year,
ROUND(SUM(Sales), 2) AS total_sales,
ROUND(SUM(Profit), 2) AS total_profit,
ROUND(
```

```
    SUM(Sales) - LAG(SUM(Sales)) OVER (ORDER BY YEAR(`Order Date`)),2) AS
sales_growth,
  ROUND(
    SUM(Profit) - LAG(SUM(Profit)) OVER (ORDER BY YEAR(`Order Date`)), 2
  ) AS profit_growth
FROM superstore
GROUP BY YEAR(`Order Date`)
ORDER BY order_year;
```

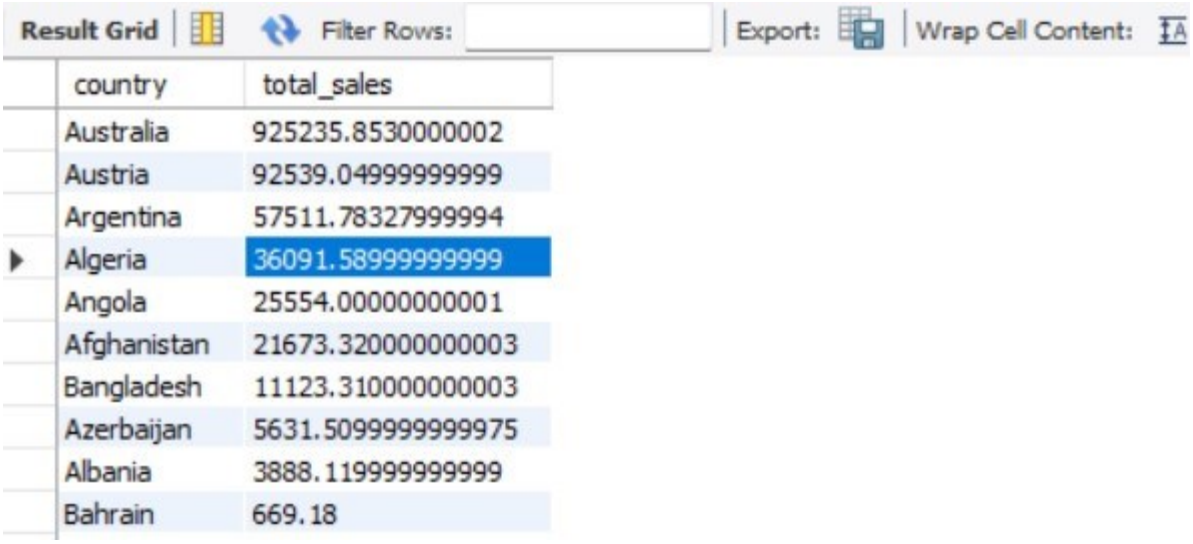
Output:-



order_year	total_sales	total_profit	sales_growth	profit_growth
NULL	1180074.47	135448.37	NULL	NULL

9. **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;
```



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

country	total_sales
Australia	925235.8530000002
Austria	92539.04999999999
Argentina	57511.78327999994
Algeria	36091.58999999999
Angola	25554.00000000001
Afghanistan	21673.320000000003
Bangladesh	11123.310000000003
Azerbaijan	5631.5099999999975
Albania	3888.119999999999
Bahrain	669.18

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

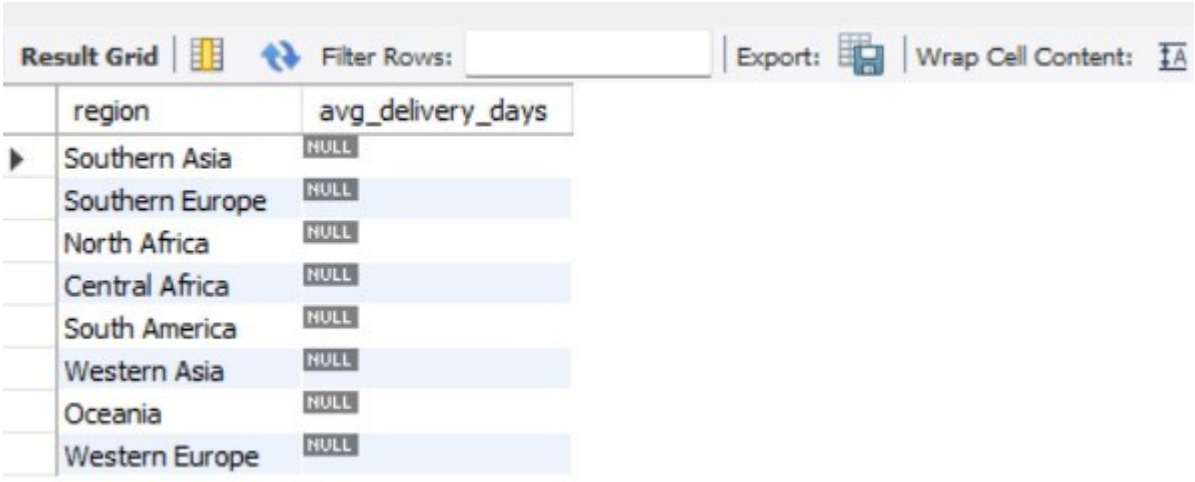
region,

AVG(DATEDIFF(`Ship Date`, `Order Date`))AS avg_delivery_days

FROM superstore

GROUP BY region

ORDER BY avg_delivery_days;



Result Grid | Filter Rows: | 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

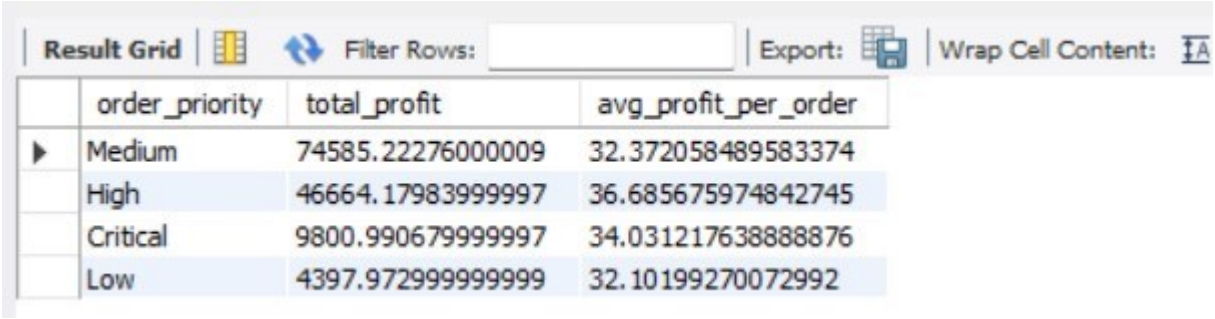
11. what is the profit distribution across order priority?

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;
```

Output:-



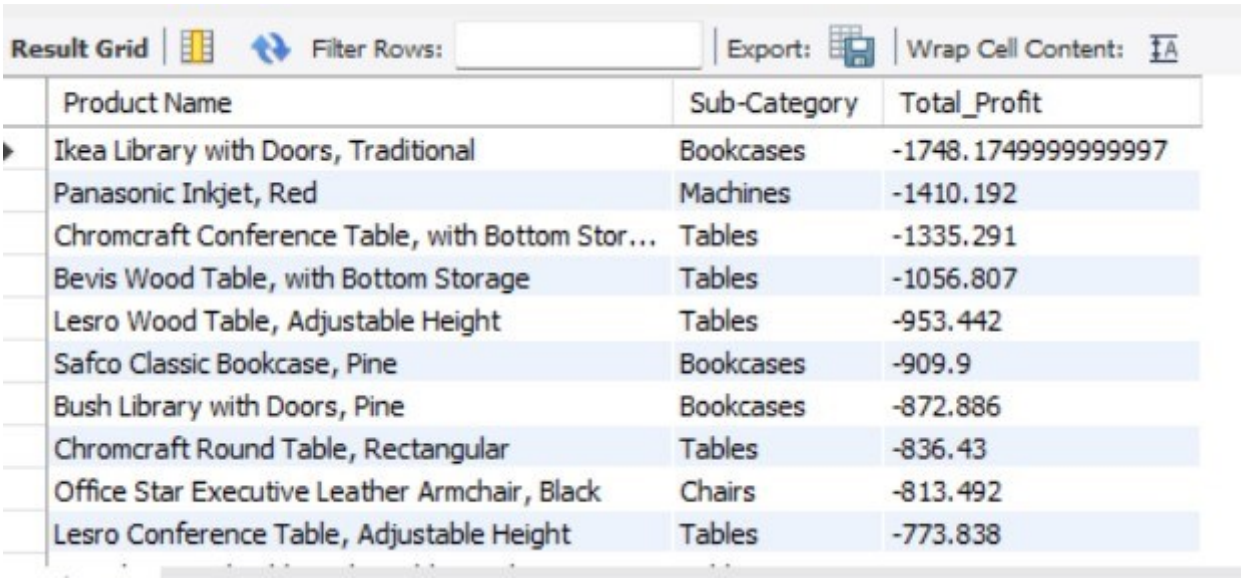
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

order_priority	total_profit	avg_profit_per_order
Medium	74585.22276000009	32.372058489583374
High	46664.17983999997	36.685675974842745
Critical	9800.990679999997	34.031217638888876
Low	4397.972999999999	32.10199270072992

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 | Filter Rows: | Export: | Wrap Cell Content:

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