

```

use indexing ;

-- Global Superstore Data Analysis using SQL

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

-- 2. Find the Segment wise distribution of the Sales.

-- 3. Find the top 3 most profitable Products.

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

-- 5. How many states from Mexico are under the roof of business?

-- 6. which products and subcategories are most and least profitable ?

-- 7. Which customer segment contributes the most to the total revenue?

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

-- 9. Which countries and cities are driving the highest sales?

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

-- 11. what is the profit distribution across order priority?

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

```

```
select * from superstore ;
```

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

```

select sum(sales) as total_renenue , sum(profit) as total_profit ,sum(quantity)
from superstore ;

```

The screenshot shows a database results grid with the following data:

	total_renenue	total_profit	sum(quantity)
▶	1174336.6362799979	134146.21628000017	14452

```
-- 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;

```

The screenshot shows a database interface with a result grid and an action output log.

Result Grid:

segment	total_sales
Consumer	624094.8519599998
Corporate	350747.61732000054
Home Office	199494.1670000007

Action Output:

#	Time	Action	Message	Duration / Fetch
1	20:24:22	use indexing	0 row(s) affected	0.000 sec
2	20:36:10	select sum(sales) as total_revenue , sum(profit) as total_profit ,sum(quantity) from superstore LIMIT 0, 1000	1 row(s) returned	0.032 sec / 0.000 sec
3	20:39:54	select segment , sum(sales) as total_sales from superstore group by segment order by total_sales desc LIMIT 0, ...	3 row(s) returned	0.015 sec / 0.000 sec

-- 3. Find the top 3 most profitable Products.

```
select * from superstore;
alter table superstore rename column `product name` to product_name ;
SELECT Product_name, SUM(Profit) AS Total_Profit
FROM superstore
GROUP BY Product_name
ORDER BY Total_Profit DESC LIMIT 3;
```

The screenshot shows a database interface with a result grid and an action output log.

Result Grid:

Product_name	Total_Profit
Sauder Classic Bookcase, Metal	2978.370000000003
Nokia Smart Phone, with Caller ID	2887.594
Novimex Executive Leather Armchair, Adjustable	2523.5519999999997

Action Output:

#	Time	Action	Message	Duration / Fetch
2	20:36:10	select sum(sales) as total_revenue , sum(profit) as total_profit ,sum(quantity) from superstore LIMIT 0, 1000	1 row(s) returned	0.032 sec / 0.000 sec
3	20:39:54	select segment , sum(sales) as total_sales from superstore group by segment order by total_sales desc LIMIT 0, ...	3 row(s) returned	0.015 sec / 0.000 sec
4	20:41:31	SELECT Product_name, SUM(Profit) AS Total_Profit FROM superstore GROUP BY Product_name ORDER BY Total_Profit DESC LIMIT 0, 3	3 row(s) returned	0.031 sec / 0.000 sec

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

```
select * from superstore;
alter table superstore rename column `Order Date` to order_date ;
SELECT COUNT(DISTINCT Order_id) AS Total_Orders
FROM superstore
```

```
WHERE Order_date > '2016-01-31';
```

The screenshot shows a database interface with a sidebar containing schemas: projectdb, shiv, sp, subquerydb, sys. The main area displays a result grid titled 'Result Grid' with one row: 'Total_Orders' and value '725'. Below this is a 'Result 4' section showing the execution history:

#	Time	Action	Message	Duration / Fetch
3	20:39:54	select segment , sum(sales) as total_sales from superstore group by segment order by total_sales desc LIMIT ...	3 row(s) returned	0.015 sec / 0.000 sec
4	20:41:31	SELECT Product_name, SUM(Profit) AS Total_Profit FROM superstore GROUP BY Product_name ORDER BY Total_Profit DESC LIMIT 1;	3 row(s) returned	0.031 sec / 0.000 sec
5	20:42:41	SELECT COUNT(DISTINCT Order_id) AS Total_Orders FROM superstore WHERE Order_date > '2016-01-3...'	1 row(s) returned	0.016 sec / 0.000 sec

-- 5. How many states from Mexico are under the roof of business?

```
SELECT COUNT(DISTINCT State) AS States_Mexico
```

```
FROM superstore
```

```
WHERE Country = 'Mexico';
```

The screenshot shows a database interface with a sidebar containing schemas: joindb, projectdb, shiv, sp, subquerydb, sys. The main area displays a result grid titled 'Result Grid' with one row: 'States_Mexico' and value '0'. Below this is a 'Result 5' section showing the execution history:

#	Time	Action	Message	Duration / Fetch
4	20:41:31	SELECT Product_name, SUM(Profit) AS Total_Profit FROM superstore GROUP BY Product_name ORDER BY Total_Profit DESC LIMIT 1;	3 row(s) returned	0.031 sec / 0.000 sec
5	20:42:41	SELECT COUNT(DISTINCT Order_id) AS Total_Orders FROM superstore WHERE Order_date > '2016-01-3...'	1 row(s) returned	0.016 sec / 0.000 sec
6	20:43:39	SELECT COUNT(DISTINCT State) AS States_Mexico FROM superstore WHERE Country = 'Mexico' LIMIT 1;	1 row(s) returned	0.016 sec / 0.000 sec

-- 6. which products and subcategories are most and least profitable ?

```
SELECT Product_Name, SUM(Profit) AS Total_Profit
```

```
FROM superstore
```

```
GROUP BY Product_Name
```

```
ORDER BY Total_Profit desc limit 1;
```

The screenshot shows the Oracle SQL Developer interface. On the left, the schema browser displays several schemas: projectdb, shiv, sp, subquerydb, and sys. The 'Schemas' tab is selected. In the center, the 'Result Grid' pane shows a single row of results:

Product_Name	Total_Profit
Sauder Classic Bookcase, Metal	2978.370000000003

Below the result grid, the 'Action Output' pane displays the executed SQL statements and their execution details:

#	Time	Action	Message	Duration / Fetch
5	20:42:41	SELECT COUNT(DISTINCT Order_id) AS Total_Orders FROM superstore WHERE Order_date > '2016-01-3...' 1row(s) returned		0.016 sec / 0.000 sec
6	20:43:39	SELECT COUNT(DISTINCT State) AS States_Mexico FROM superstore WHERE Country = 'Mexico' LIMIT... 1row(s) returned		0.016 sec / 0.000 sec
7	20:45:03	SELECT Product_Name, SUM(P) AS Total_Profit FROM superstore GROUP BY Product_Name ORDER BY Total_Profit DESC 1row(s) returned		0.032 sec / 0.000 sec

-- 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 ;`

The screenshot shows the Oracle SQL Developer interface. On the left, the schema browser displays several schemas: projectdb, shiv, sp, subquerydb, and sys. The 'Schemas' tab is selected. In the center, the 'Result Grid' pane shows the results of the query:

Segment	Total_Revenue
Consumer	624094.8519599998
Corporate	350747.61732000054
Home Office	199494.1670000007

Below the result grid, the 'Action Output' pane displays the executed SQL statements and their execution details:

#	Time	Action	Message	Duration / Fetch
6	20:43:39	SELECT COUNT(DISTINCT State) AS States_Mexico FROM superstore WHERE Country = 'Mexico' LIMIT... 1row(s) returned		0.016 sec / 0.000 sec
7	20:45:03	SELECT Product_Name, SUM(P) AS Total_Profit FROM superstore GROUP BY Product_Name ORDER BY Total_Profit DESC 1row(s) returned		0.032 sec / 0.000 sec
8	20:46:15	SELECT Segment, SUM(Sales) AS Total_Revenue FROM superstore GROUP BY Segment ORDER BY Total_Revenue DESC 3row(s) returned		0.015 sec / 0.000 sec

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

`select * from superstore;`

`SELECT YEAR(STR_TO_DATE(Order_Date, '%d-%m-%Y')) AS Year,`

`ROUND(SUM(Sales), 2) AS Total_Sales,`

`ROUND(SUM(Profit), 2) AS Total_Profit`

`FROM superstore`

GROUP BY Year

ORDER BY Year;

The screenshot shows a database interface with a sidebar containing 'Views', 'Stored Procedures', 'Tables' (with 'superstore' selected), 'Views', 'Stored Procedures', 'Functions', and system tables like 'jndi', 'projectdb', 'shv', 'sp', 'subquerydb', 'sys'. The main area is titled 'Result Grid' and displays a table with columns 'Year', 'Total_Sales', and 'Total_Profit'. The data is as follows:

Year	Total_Sales	Total_Profit
2014	191180.62	24899.55
2015	253645.96	33521.23
2016	331950.64	34228.8
2017	397559.43	41406.65

Below the grid, there's an 'Output' section labeled 'All'.

-- 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;
```

The screenshot shows a database interface with a sidebar containing 'indexing', 'Tables' (with 'superstore' selected), 'Views', 'Stored Procedures', 'Functions', and system tables like 'jndi', 'projectdb', 'shv', 'sp', 'subquerydb', 'sys'. The main area is titled 'Result Grid' and displays a table with columns 'Country' and 'Total_Sales'. The data is as follows:

Country	Total_Sales
Australia	925235.8530000002
Austria	92539.04999999999
Argentina	57511.78327999994
Algeria	36091.58999999999
Angola	25554.00000000001
Afghanistan	21673.32000000003
Azerbaijan	5631.509999999975
Bangladesh	5385.48
Albania	3888.119999999999
Bahrain	669.18
Armenia	156.75

Below the grid, there's an 'Output' section labeled 'Action Output' showing three log entries:

#	Time	Action	Message	Duration / Fetch
7	20:45:03	SELECT Product_Name, SUM(Profit) AS Total_Profit FROM superstore GROUP BY Product_Name ORDER BY Total_Profit DESC	1 row(s) returned	0.032 sec / 0.000 sec
8	20:46:15	SELECT Segment, SUM(Sales) AS Total_Revenue FROM superstore GROUP BY Segment ORDER BY Total_Revenue DESC	3 row(s) returned	0.015 sec / 0.000 sec
9	20:47:04	SELECT Country, SUM(Sales) AS Total_Sales FROM superstore GROUP BY Country ORDER BY Total_Sales DESC	11 row(s) returned	0.015 sec / 0.000 sec

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

```
select * from superstore;
```

```
alter table superstore rename column `Order Priority` to Order_Priority ;
```

```
SELECT Region, ROUND(AVG(DATEDIFF(Ship_Date, Order_Date)), 2) AS Avg_Delivery
```

```
FROM superstore
```

```
GROUP BY Region
```

```
ORDER BY Avg_Delivery;
```

Result Grid | Filter Rows: Export: Wrap Cell Contents: Result Grid Form Editor

77 • SELECT Order_Priority, SUM(Profit) AS Total_Profit, ROUND(AVG(Profit),2) AS Profit_Order,

Region	Avg_Delivery
Southern Asia	10.50
Southern Europe	10.50
North Africa	10.50
Central Africa	10.50
South America	10.50
Western Asia	10.50
Oceania	10.50
Western Europe	10.50

No object selected

Result 9 x Output Action Output

#	Time	Action	Message	Duration / Fetch
12	21:14:01	alter table superstore rename column 'Order Priority' to Order_Priority	Error Code: 1054. Unknown column 'Order Priority' in 'superstore'	0.000 sec
13	21:14:23	alter table superstore rename column 'Order Priority' to Order_Priority	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.047 sec
14	21:14:27	SELECT Region, ROUND(AVG(DATEDIFF(Ship_Date, Order_Date)), 2) AS Avg_Delivery FROM superstore ...	8 row(s) returned	0.016 sec / 0.000 sec

Object Info Session

-- 11. what is the profit distribution across order priority?

alter table superstore rename column `ship Date` to ship_date ;

```
SELECT Order_Priority, SUM(Profit) AS Total_Profit, ROUND(AVG(Profit),2) AS Profit_Order,
COUNT(Order_ID) AS Total_Orders
FROM superstore
GROUP BY Order_Priority
ORDER BY Total_Profit DESC;
```

Result Grid | Filter Rows: Export: Wrap Cell Contents: Result Grid Form Editor

77 • SELECT Order_Priority, SUM(Profit) AS Total_Profit, ROUND(AVG(Profit),2) AS Profit_Order,

Order_Priority	Total_Profit	Profit_Order	Total_Orders
Medium	73509.6923600009	32.04	2294
High	46576.5198399997	36.7	1269
Critical	9776.81057999997	34.18	286
Low	4283.10399999999	31.73	135

No object selected

Result 10 x Output Action Output

#	Time	Action	Message	Duration / Fetch
13	21:14:23	alter table superstore rename column 'Order Priority' to Order_Priority	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.047 sec
14	21:14:27	SELECT Region, ROUND(AVG(DATEDIFF(Ship_Date, Order_Date)), 2) AS Avg_Delivery FROM superstore ...	8 row(s) returned	0.016 sec / 0.000 sec
15	21:15:56	SELECT Order_Priority, SUM(Profit) AS Total_Profit, ROUND(AVG(Profit),2) AS Profit_Order, COUNT(Order_I... 4 row(s) returned		0.000 sec / 0.000 sec

Object Info Session

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

```
select * from superstore;
select region,sum(sales) as total_sales, sum(Profit) as total_profit ,
count(order_id) as total_order
from superstore
group by region
order by total_profit asc ;
```

No object selected

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

region	total_sales	total_profit	total_order
South America	57511.7832999994	-18693.796720000024	390
Southern Europe	3888.119999999999	709.32	16
Western Asia	6457.439999999997	1912.980000000000	34
Southern Asia	27058.800000000003	6367.110000000015	58
Central Africa	25554.000000000001	6494.970000000004	122
North Africa	36091.58999999999	9106.500000000005	196
Western Europe	92539.0499999999	24341.700000000005	331
Oceania	925235.8530000002	103907.43300000008	2837

Result 19 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
29	21:55:50	select max(profit) from superstore LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
30	22:00:30	select * from superstore LIMIT 0, 1000	1000 row(s) returned	0.000 sec / 0.016 sec
31	22:04:18	select region,sum(sales) as total_sales, sum(profit) as total_profit , count(order_id) as total_order from superstore group by region	8 row(s) returned	0.031 sec / 0.000 sec

Object Info Session