



SQL

CASE STUDIES IN SQL

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Questions

1. What is the total sales revenue in the data?
2. What is the total profit obtained?
3. How many transactions are recorded?
4. What is the average quantity of sales?

Questions

- 5. Which product is ordered the most?
- 6. Provide the sales ranking based on customer ID (top 5 sales).
- 7. Provide the customer ranking based on sales, partitioned by segment.



Data:

<https://www.kaggle.com/datasets/vivek468/superstore-dataset-final>

1.What is the total sales revenue in the data?

Query No 1

```
select sum(sales) as total_sales  
from sample;
```

Output

)	123 total_sales ▾	
	2,291,304	

2. What is the total profit obtained?

Query No 2

```
select sum(profit) as total_profit  
from sample;
```

Output

	123 total_profit ▼	
	283,183	

3. How many transactions are recorded?

Query No 3

```
select count(order_id) as total_transaksi  
from sample;
```

Output

123 total_transaksi	
9,994	

4. What is the average quantity of sales?

Query No 4

```
select avg(quantity) as average_quantity  
from sample;
```

Output

123	average_quantity
	3.7895737442

5. Which product is ordered the most?

Query No 5

```
select category, sum(quantity) as total_order_quantity
from sample s
group by category;
```

Output

	A-Z category ▼	123 total_order_quantity ▼	
	Furniture	8,028	
	Office Supplies	22,906	
	Technology	6,939	

6. Provide the sales ranking based on customer ID (top 5 sales).

Query No 6

```
select customer_id, customer_name, sum(sales) as total_sales
from sample s
group by customer_id, customer_name
order by total_sales desc
limit 5;
```

Output

A-Z customer_id ▼	A-Z customer_name ▼	123 total_sales ▼	
SM-20320	Sean Miller	25,035	
TC-20980	Tamara Chand	19,046	
RB-19360	Raymond Buch	15,107	
TA-21385	Tom Ashbrook	14,589	
AB-10105	Adrian Barton	14,460	

7. Provide the customer ranking based on sales, partitioned by segment.

Query No 7

```
with ranking_customer as (select customer_id, segment, sum(sales) as total_sales
                           from sample
                           group by customer_id, segment)--CTE
select customer_id, segment, total_sales,
       rank() over(partition by segment order by total_sales desc) as ranked
from ranking_customer;
```

Output

A-Z customer_id	A-Z segment	123 total_sales	123 ranked
RB-19360	Consumer	15,107	1
AB-10105	Consumer	14,460	2
KL-16645	Consumer	14,157	3
SC-20095	Consumer	14,127	4
HL-15040	Consumer	12,865	5
SE-20110	Consumer	12,198	6
CC-12370	Consumer	12,122	7
GT-14710	Consumer	11,803	8
BM-11140	Consumer	11,778	9
CV-20265	Consumer	11,451	10

INSIGHT

1. The total sales revenue is 2,291,304.
2. The total profit obtained is 283,183.
3. The total number of transactions recorded is 9,994.
4. The average quantity of items sold per transaction is 3.78.
5. The product category with the highest order volume is office supplies, with a total order quantity of 22,906.

INSIGHT

- Sean Miller (Customer ID: SM-20320) generated the highest total sales revenue of 25,035
- The top 5 customers collectively contribute significantly to the total sales, with Sean Miller leading by a substantial margin compared to others.
- The sales difference between the 4th (Tom Ashbrook) and 5th (Adrian Barton) customers is relatively small (14,589 vs. 14,460). This suggests consistent purchasing patterns among lower top-tier customers.

The background is a light gray textured paper. It is decorated with various watercolor-style illustrations. In the top left, there is a pink flower-like shape and a cluster of small brown dots. At the top center, there is a large orange shape and a blue squiggly line. The top right features a pink circle and a yellow oval. On the left side, there is a blue wavy shape. On the right side, there are orange radiating lines and a blue spiral. The bottom left has an orange star-like shape, and the bottom center and right have orange and yellow semi-circles and a blue spiral.

**THANK YOU
VERY MUCH!**