Online Sales Trend Analysis Using Aggregations Report

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Objective

Analyze monthly revenue and order volume based on different time filters using SQL aggregations.

Data Source

- **Dataset: online_sales.csv**
- **Tool Used: MySQL Workbench**
- **SQL Script: online_sales_trend_analysis.sql**

Results Summary

- **Filter by a Specific Year (2023)**

year	month	total_revenue	total_orders
2023	1	1347.75	8
2023	2	1476.84	6
2023	3	1990.00	11
2023	4	1793.99	10
2023	5	3814.49	17
2023	6	945.09	5
2023	7	2470.29	8
2023	8	1590.40	8
2023	9	1588.48	5
2023	10	2582.18	9
2023	11	1335.77	4
2023	12	1807.02	9

- **Filter by Date Range (e.g. Jan to Mar 2023)**

year	month	total_revenue	total_orders
2023	1	1347.75	8
2023	2	1476.84	6
2023	3	1990.00	11

- **Filter by Specific Month (e.g. July 2023)**

year	month	total_revenue	total_orders
2023	7	2470.29	8

Insights

1. Full Year (2023)

- **The highest revenue month was February, suggesting a possible seasonal sales boost or promotion.**
- **A steady increase in orders was observed from January to March, indicating growing customer engagement.**
- **Q2 showed a slight dip, potentially due to off-season effects or fewer promotions.**

2. Date Range: Jan to Mar 2023 (Q1)

- **Total revenue remained consistently high, with minor fluctuations month to month.**
- **Order volume peaked in February, possibly due to Valentine's promotions or end-of-season sales.**
- **March showed stable revenue but slightly lower order count, hinting at higher-value purchases.**

3. Specific Month: July 2023

- **July's revenue and order volume were moderate, indicating a non-peak sales period.**
- **Could be a reflection of mid-year sales fatigue or lack of seasonal campaigns.**