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 endof-season sales.
- March showed stable revenue but slightly lower order count, hinting at highervalue 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.