Sales Trend Analysis - Detailed SQL Script & Example Output

SQL Script (With Step-by-Step Hints Applied)

```
-- a. Extract the month from order_date
-- b. Extract the year from order_date
-- c. Use SUM() to calculate monthly revenue
-- d. Use COUNT(DISTINCT order_id) to calculate order volume
-- e. GROUP BY year and month to aggregate results properly
\mbox{--} f. ORDER BY year and month for chronological sorting
-- g. Optionally, limit results for a specific period using WHERE clause
 -- Monthly Revenue & Order Volume (All Years)
SELECT
    EXTRACT(YEAR FROM order_date) AS year,
    EXTRACT(MONTH FROM order_date) AS month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM online_sales
GROUP BY year, month ORDER BY year, month;
-- Monthly Revenue & Order Volume for a Specific Year (Example: 2023)
    EXTRACT(YEAR FROM order_date) AS year,
    EXTRACT(MONTH FROM order_date) AS month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM online_sales
WHERE EXTRACT(YEAR FROM order_date) = 2023
GROUP BY year, month
ORDER BY month;
```

Example Results Table

Year	Month	Total_Revenue	Total_Orders
2022	1	120000.50	340
2022	2	98000.75	280
2022	3	145600.00	410
2022	4	110000.25	295
2023	1	132000.80	365
2023	2	118500.60	322