**TASK 6: Sales Trend Analysis Using Aggregations**

Objective: Analyze monthly revenue and order volume.

Tools: MySQL

Deliverables: SQL script + results table

Hints/Mini Guide:

a.Use EXTRACT(MONTH FROM order\_date) for month.

b.GROUP BY year/month.

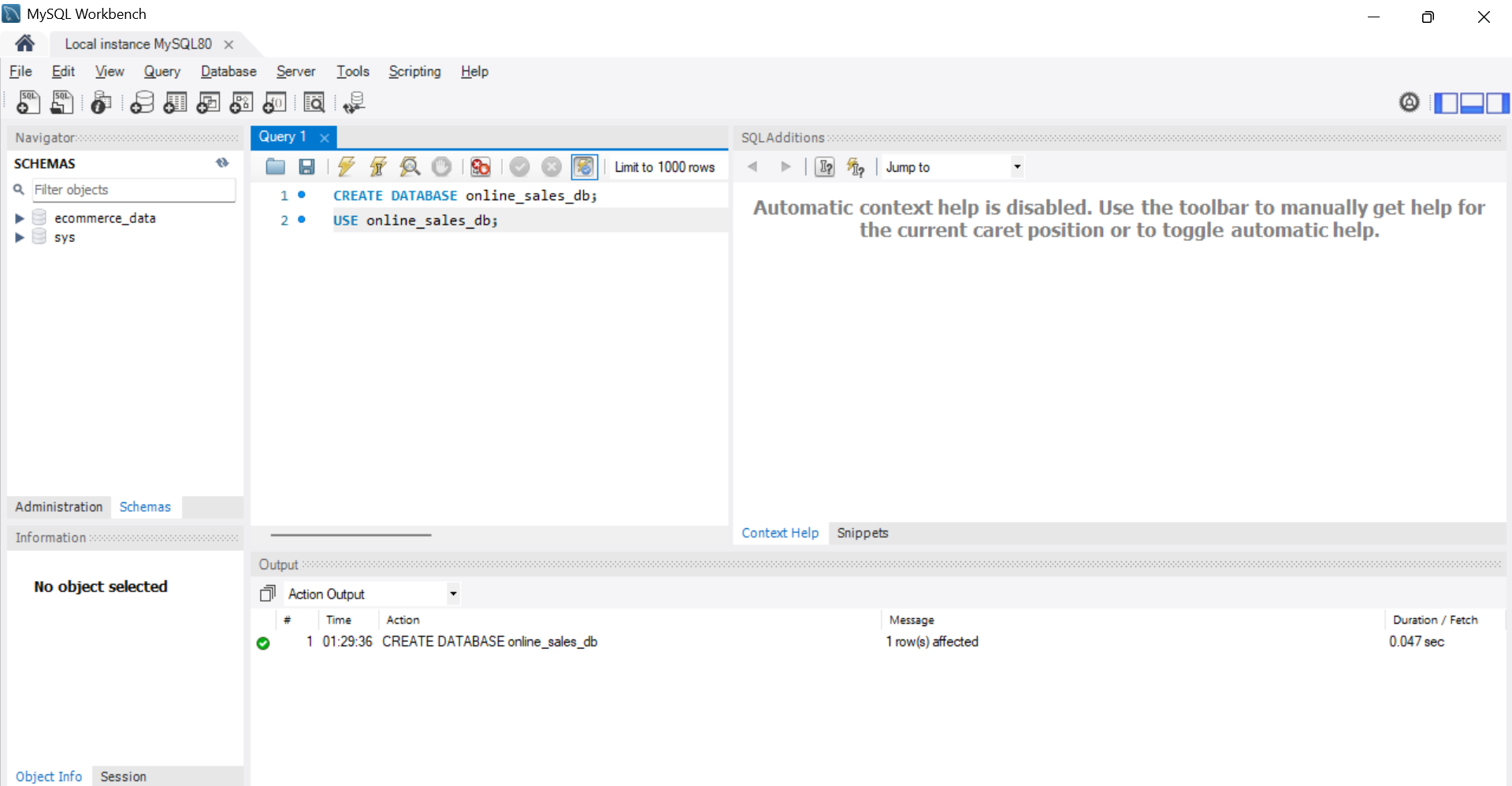
c.Use SUM() for revenue.

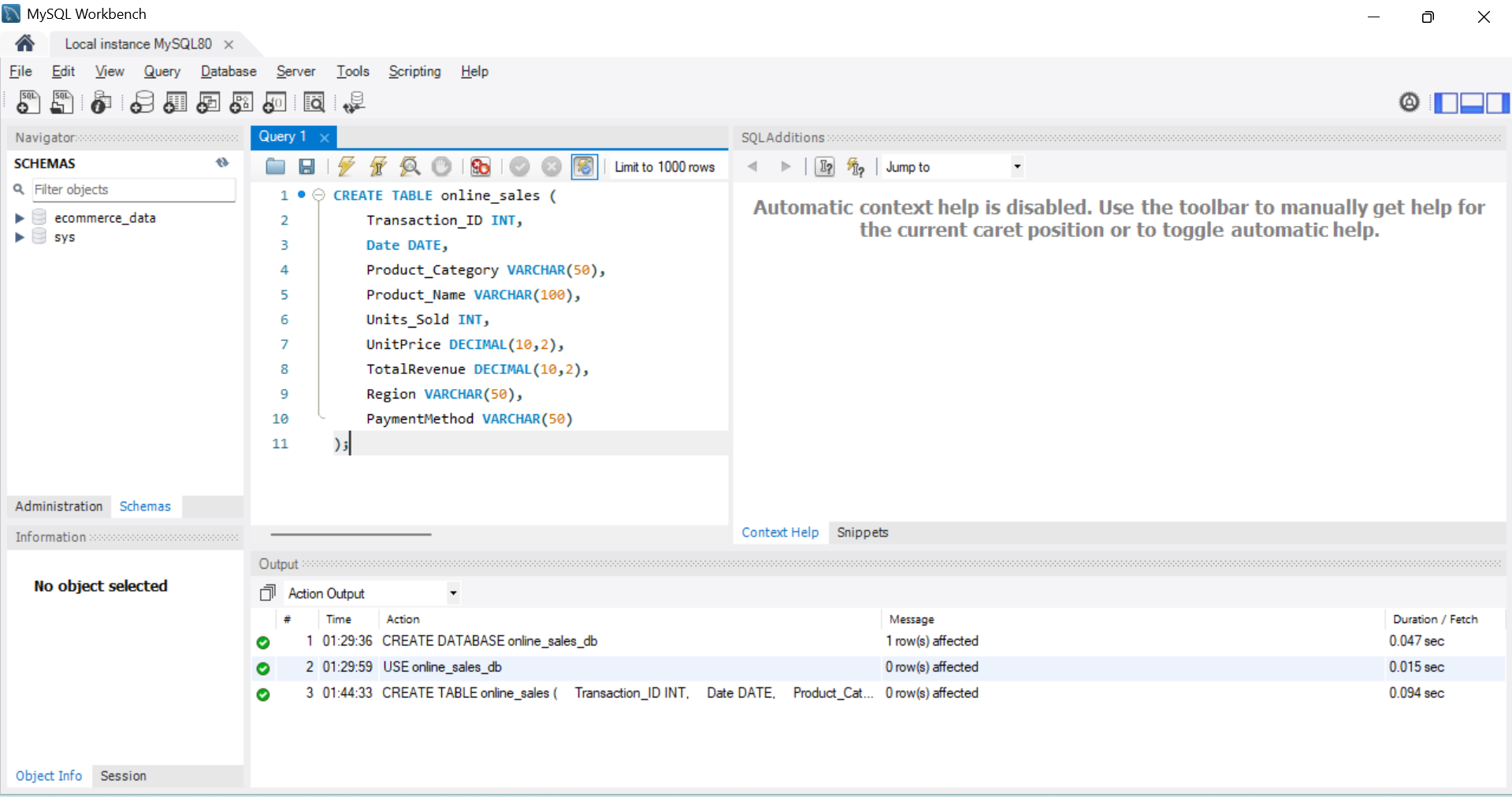
d.COUNT(DISTINCT order\_id) for volume.

e.Use ORDER BY for sorting.

f.Limit results for specific time periods.

**a.Use EXTRACT(MONTH FROM order\_date) for month.**

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**CREATE TABLE online\_sales (**

**Transaction\_ID INT,**

**Date DATE,**

**Product\_Category VARCHAR(50),**

**Product\_Name VARCHAR(100),**

**Units\_Sold INT,**

**UnitPrice DECIMAL(10,2),**

**TotalRevenue DECIMAL(10,2),**

**Region VARCHAR(50),**

**PaymentMethod VARCHAR(50)**

**);**

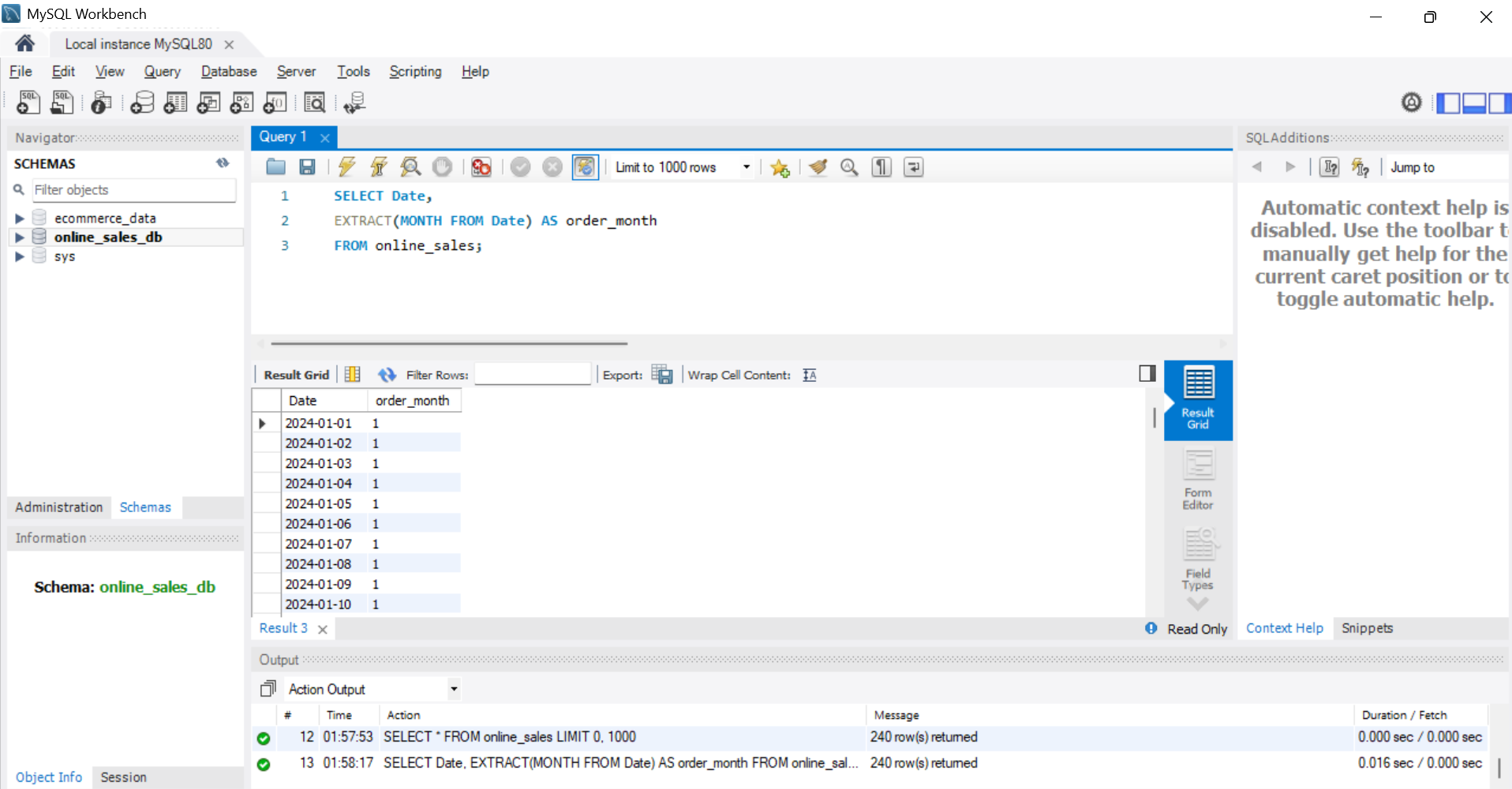
**a.Use EXTRACT(MONTH FROM order\_date) for month.**

SELECT COUNT(\*) FROM online\_sales;

SELECT Date,

EXTRACT(MONTH FROM Date) AS order\_month

FROM online\_sales;



**b. GROUP BY year/month.**

SELECT

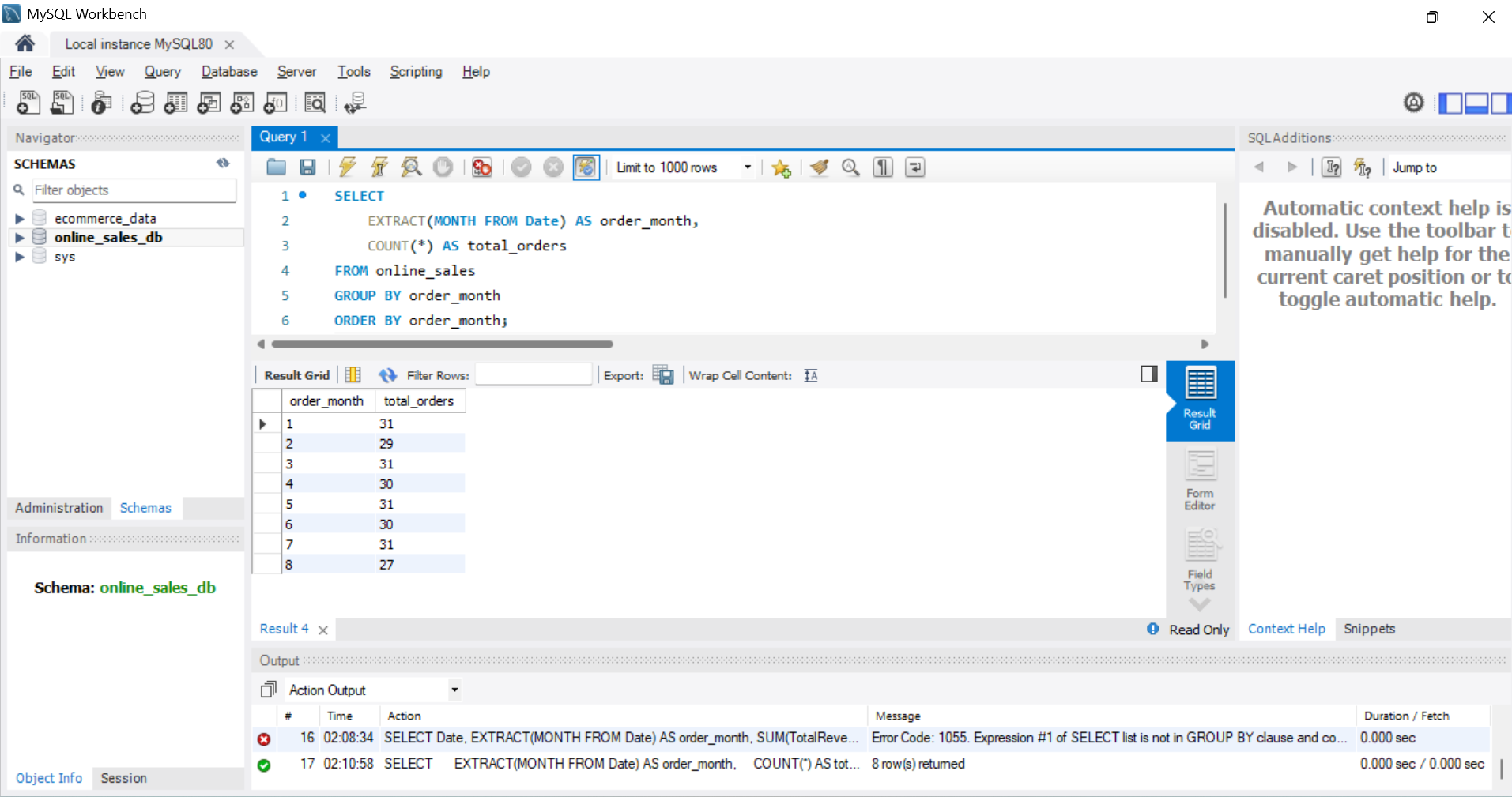
EXTRACT(MONTH FROM Date) AS order\_month,

COUNT(\*) AS total\_orders

FROM online\_sales

GROUP BY order\_month

ORDER BY order\_month;

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c.Use SUM() for revenue.

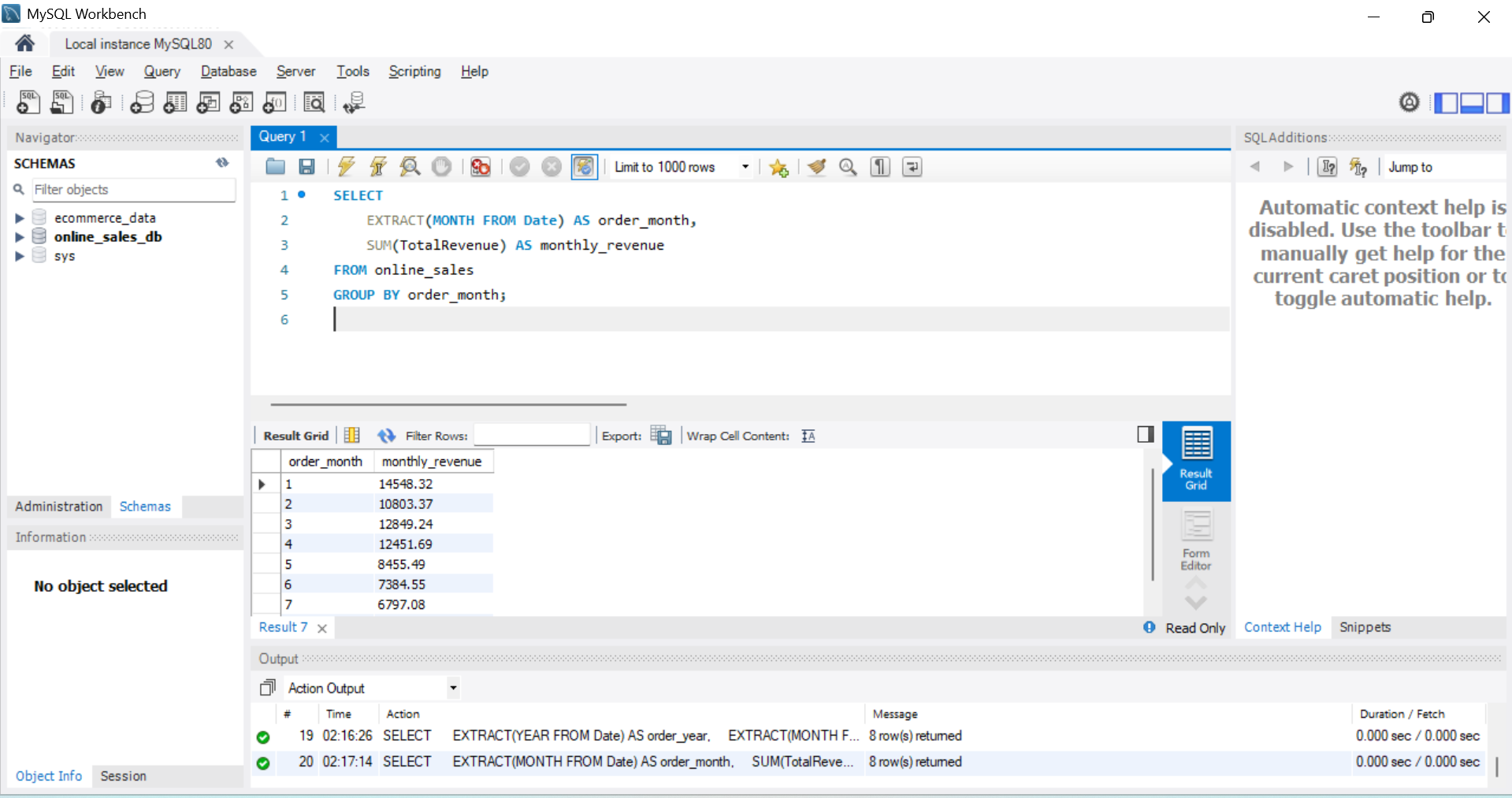
**SELECT**

**EXTRACT(MONTH FROM Date) AS order\_month,**

**SUM(TotalRevenue) AS monthly\_revenue**

**FROM online\_sales**

**GROUP BY order\_month;**

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d.COUNT(DISTINCT order\_id) for volume.

**SELECT**

**EXTRACT(YEAR FROM Date) AS order\_year,**

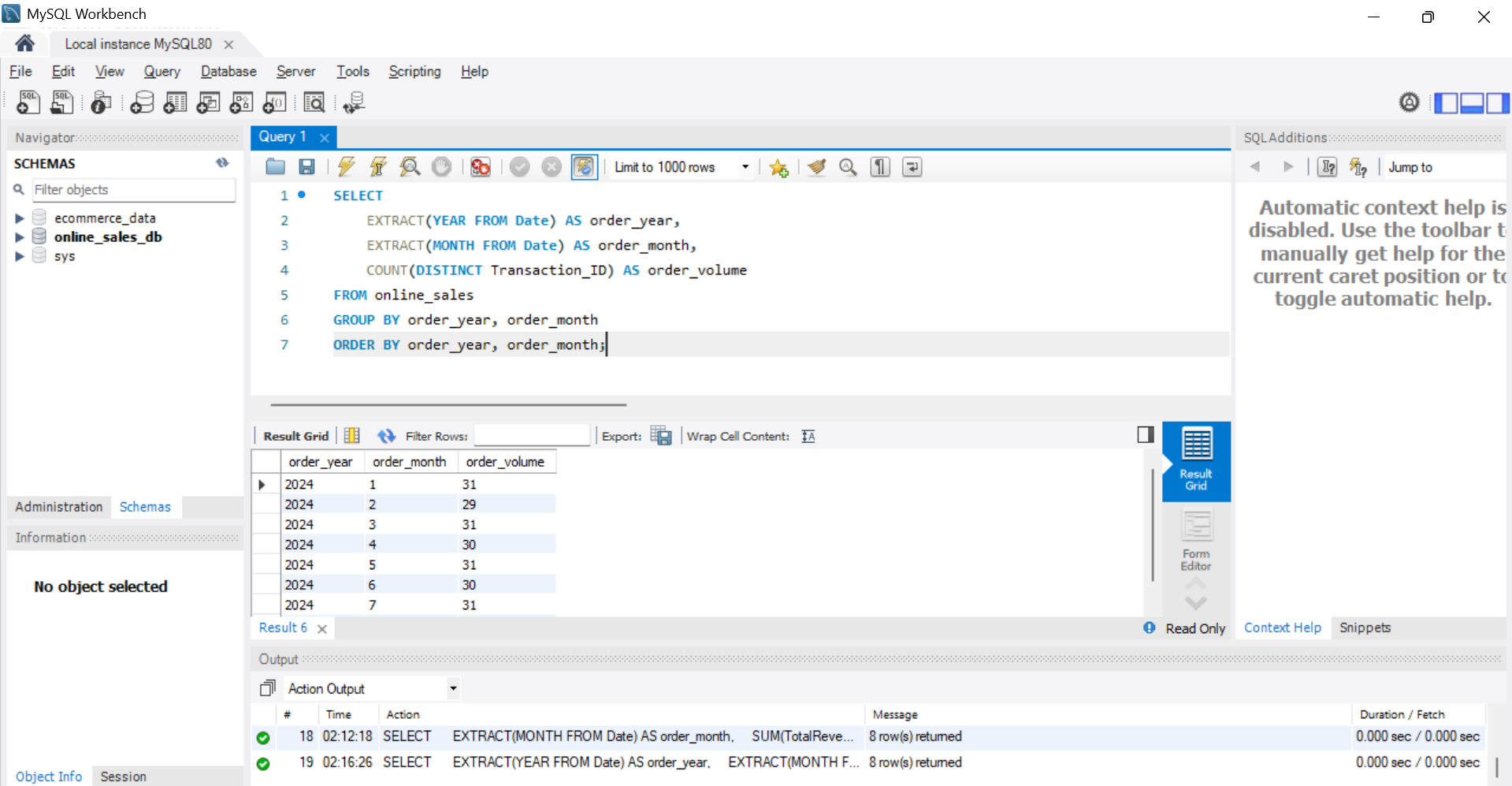
**EXTRACT(MONTH FROM Date) AS order\_month,**

**COUNT(DISTINCT Transaction\_ID) AS order\_volume**

**FROM online\_sales**

**GROUP BY order\_year, order\_month**

**ORDER BY order\_year, order\_month;**

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**e.Use ORDER BY for sorting.**

**SELECT**

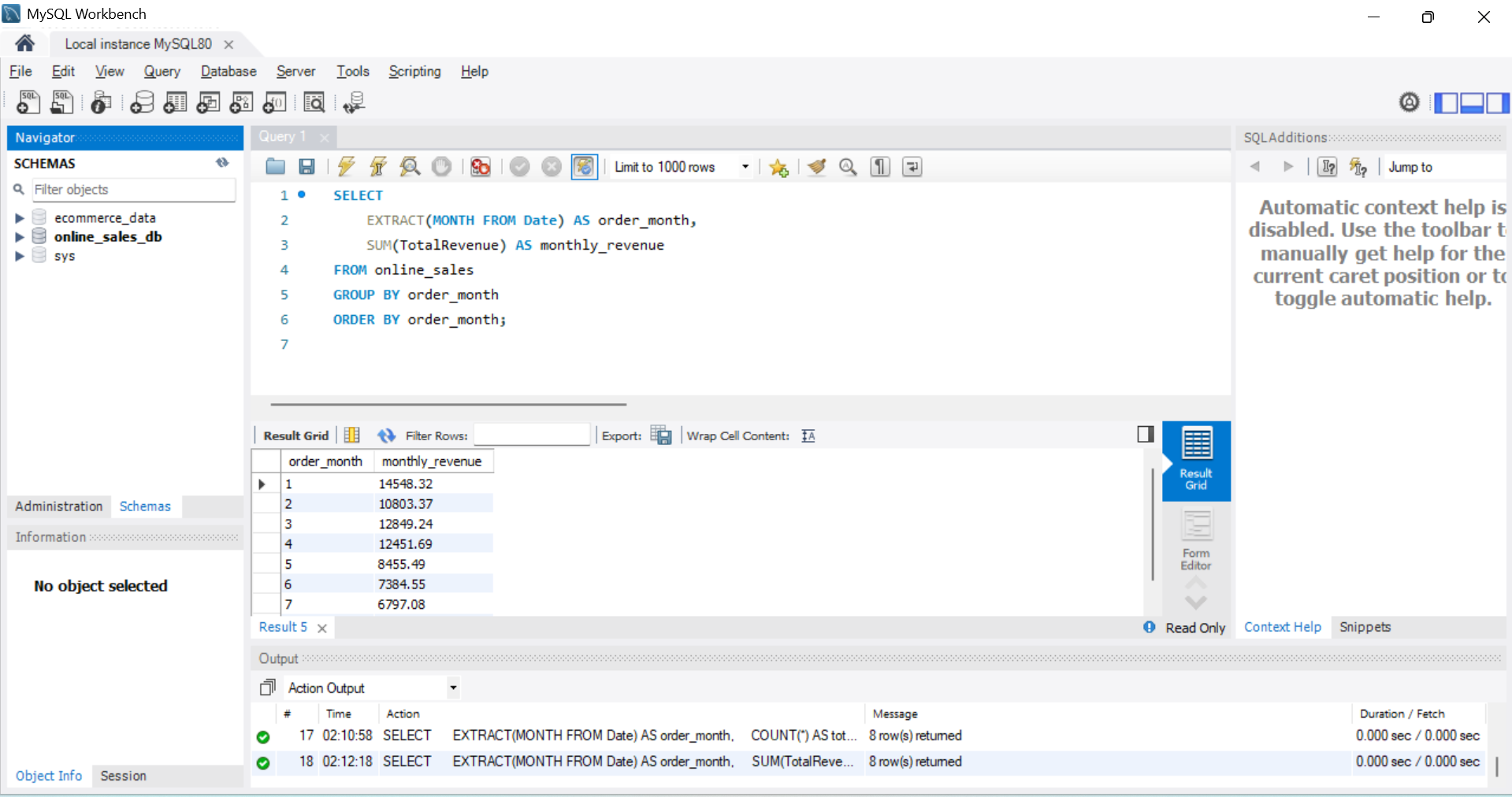
**EXTRACT(MONTH FROM Date) AS order\_month,**

**SUM(TotalRevenue) AS monthly\_revenue**

**FROM online\_sales**

**GROUP BY order\_month**

**ORDER BY order\_month;**

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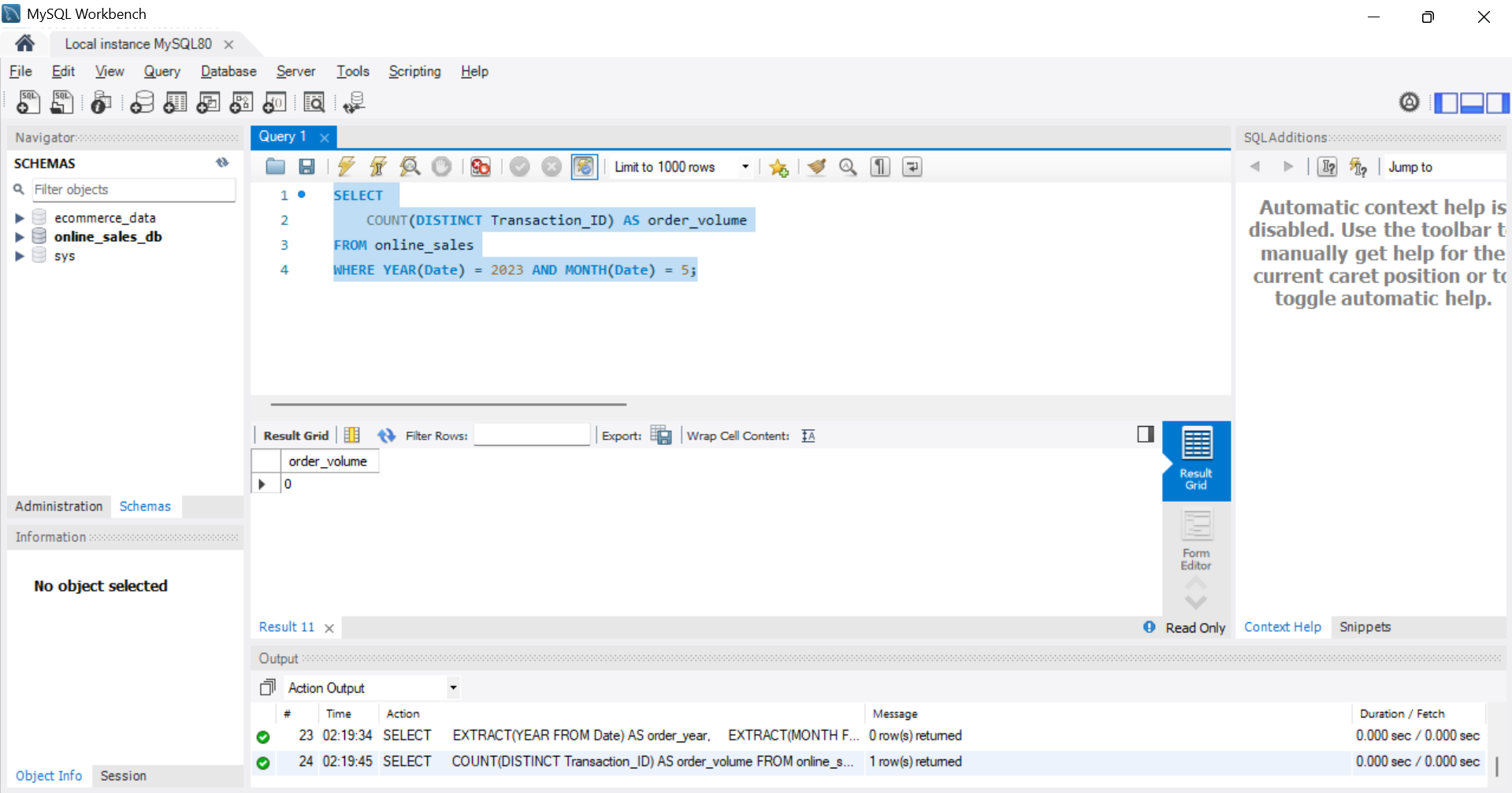
**f.Limit results for specific time periods.**

**SELECT**

**COUNT(DISTINCT Transaction\_ID) AS order\_volume**

**FROM online\_sales**

**WHERE YEAR(Date) = 2023 AND MONTH(Date) = 5;**

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