```
Create database sales12


CREATE TABLE sales12 (

   order_id INT PRIMARY KEY,

   order_date DATE,

   amount DECIMAL(10,2),

   product_id INT

);


INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(1, '2023-01-05',
250.50, 3)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(2, '2023-01-15',
120.00, 5)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(3, '2023-02-02',
450.75, 2)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(4, '2023-02-18',
300.40, 7)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(5, '2023-03-03',
99.99, 1)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(26, '2023-03-20',
175.25, 4)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(7, '2023-04-10',
510.60, 8)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(8, '2023-04-22',
200.00, 2)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(9, '2023-05-05',
320.10, 6)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(10,'2023-05-28',
410.75, 9)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(27,'2024-06-07',
150.30, 1)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(12,'2023-06-18',
220.45, 3)
```

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(13,'2023-07-09', 499.99, 7)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(14,'2023-07-21', 275.00, 5)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(35,'2024-08-12', 600.80, 10)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(16,'2023-08-25', 340.25, 2)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(37,'2023-09-06', 190.75, 4)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(18,'2024-09-27', 420.00, 8)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(19,'2025-10-11', 510.20, 6)

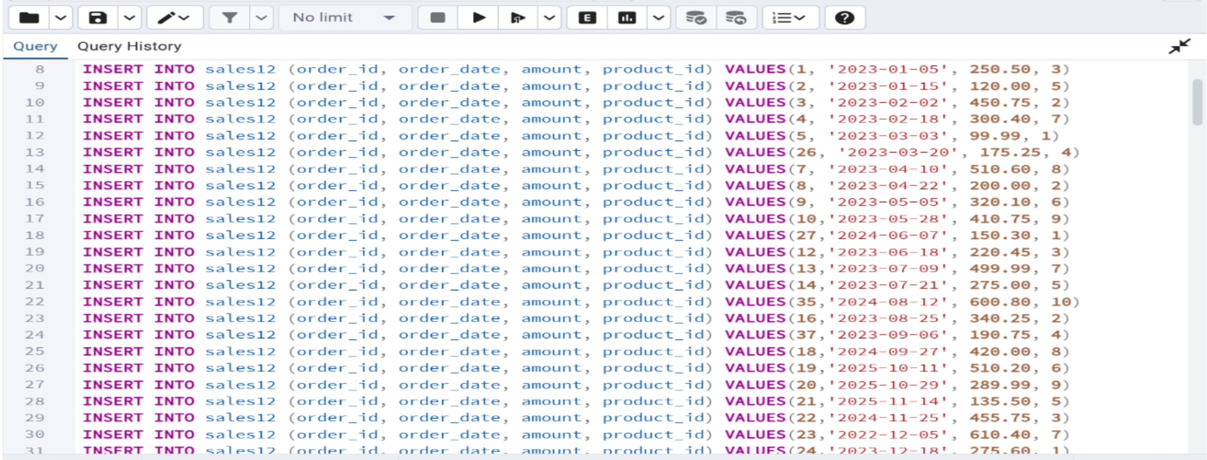
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(20,'2025-10-29', 289.99, 9)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(21,'2025-11-14', 135.50, 5)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(22,'2024-11-25', 455.75, 3)

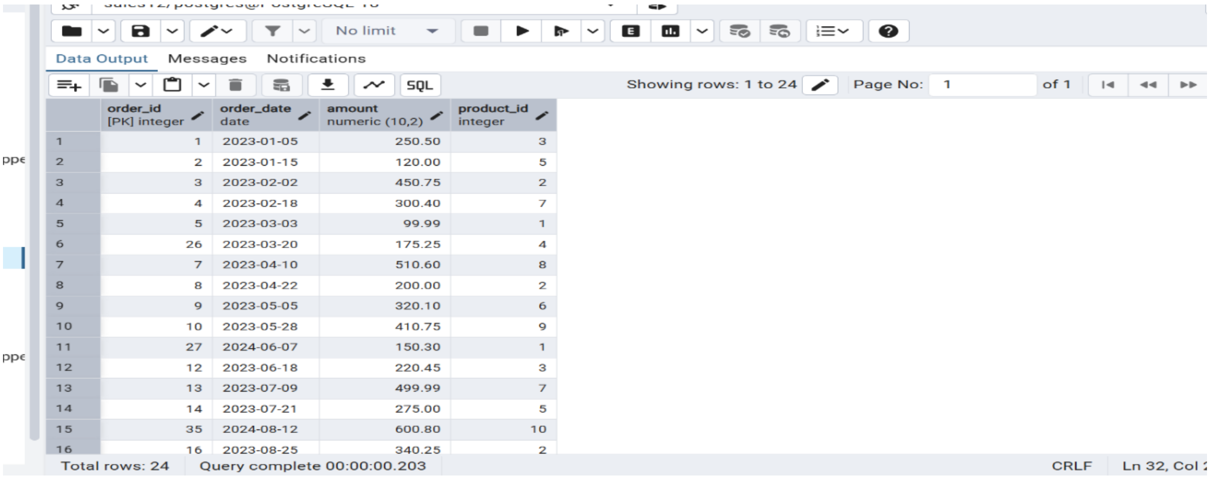
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(23,'2022-12-05', 610.40, 7)

INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(24,'2023-12-18', 275.60, 1)



```
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(1, '2023-01-05', 250.50, 3)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(2, '2023-01-15', 120.00, 5)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(3, '2023-02-02', 450.75, 2)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(4, '2023-02-18', 300.40, 7)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(5, '2023-03-03', 99.99, 1)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(26, '2023-03-20', 175.25, 4)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(7, '2023-04-10', 510.60, 8)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(8, '2023-04-22', 200.00, 2)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(9, '2023-05-05', 320.10, 6)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(10,'2023-05-28', 410.75, 9)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(27,'2024-06-07', 150.30, 1)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(12,'2023-06-18', 220.45, 3)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(13,'2023-07-09', 499.99, 7)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(14,'2023-07-21', 275.00, 5)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(35,'2024-08-12', 600.80, 10)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(16,'2023-08-25', 340.25, 2)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(37,'2023-09-06', 190.75, 4)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(18,'2024-09-27', 420.00, 8)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(19,'2025-10-11', 510.20, 6)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(20,'2025-10-29', 289.99, 9)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(21,'2025-11-14', 135.50, 5)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(22,'2024-11-25', 455.75, 3)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(23,'2022-12-05', 610.40, 7)
INSERT INTO sales12 (order_id, order_date, amount, product_id) VALUES(24,'2023-12-18', 275.60, 1)
```

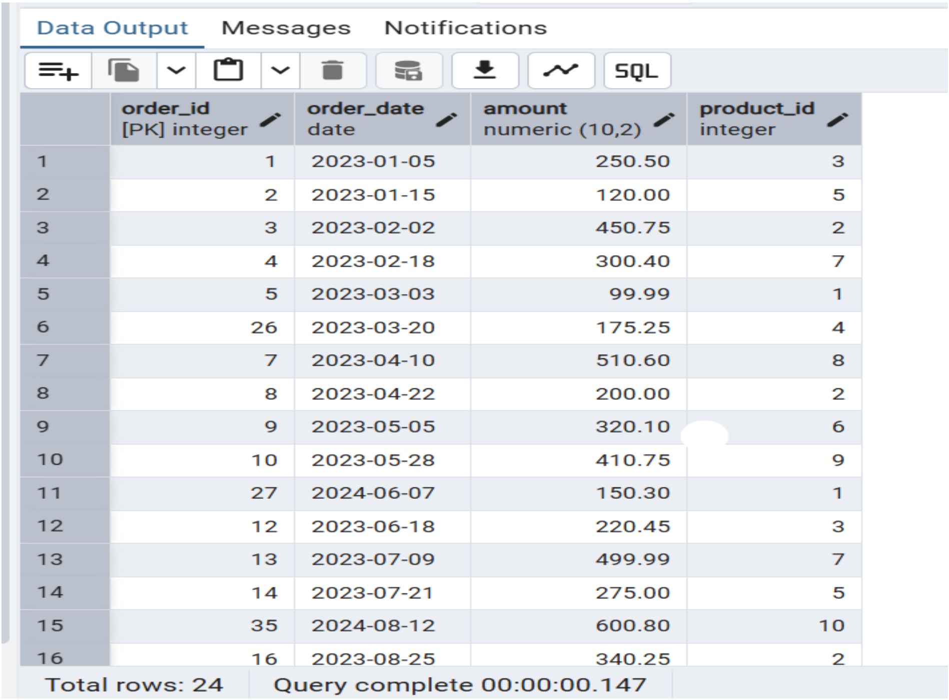
select * from sales12



	order_id [PK] integer	order_date date	amount numeric (10,2)	product_id integer
1	1	2023-01-05	250.50	3
2	2	2023-01-15	120.00	5
3	3	2023-02-02	450.75	2
4	4	2023-02-18	300.40	7
5	5	2023-03-03	99.99	1
6	26	2023-03-20	175.25	4
7	7	2023-04-10	510.60	8
8	8	2023-04-22	200.00	2
9	9	2023-05-05	320.10	6
10	10	2023-05-28	410.75	9
11	27	2024-06-07	150.30	1
12	12	2023-06-18	220.45	3
13	13	2023-07-09	499.99	7
14	14	2023-07-21	275.00	5
15	35	2024-08-12	600.80	10
16	16	2023-08-25	340.25	2

Total rows: 24 Query complete 00:00:00.203

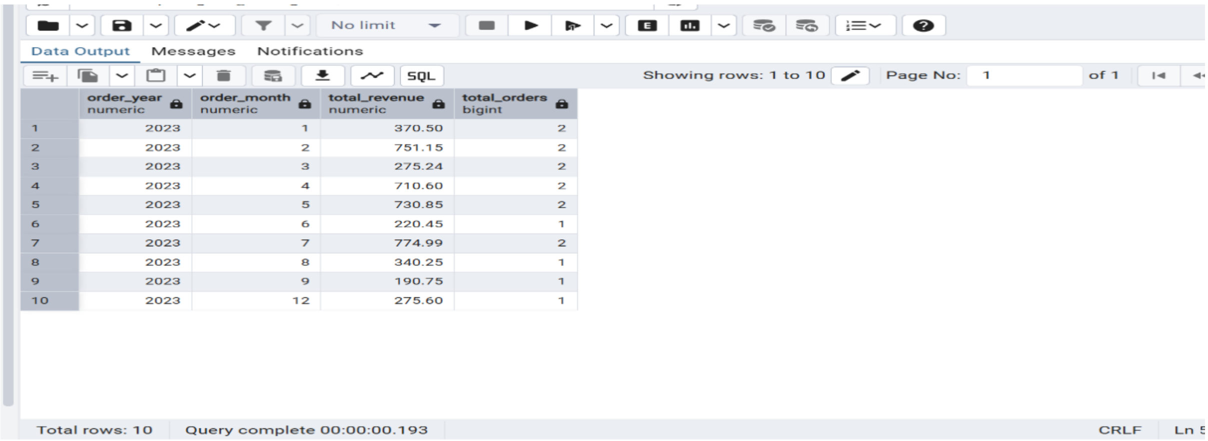
```
SELECT

    EXTRACT(YEAR FROM order_date) AS order_year,

    EXTRACT(MONTH FROM order_date) AS order_month,

    SUM(amount) AS total_revenue,

    COUNT(DISTINCT order_id) AS total_orders

FROM sales12

GROUP BY EXTRACT(YEAR FROM order_date), EXTRACT(MONTH FROM order_date)

ORDER BY order_year, order_month;
```



	order_id [PK] integer	order_date date	amount numeric (10,2)	product_id integer
1	1	2023-01-05	250.50	3
2	2	2023-01-15	120.00	5
3	3	2023-02-02	450.75	2
4	4	2023-02-18	300.40	7
5	5	2023-03-03	99.99	1
6	26	2023-03-20	175.25	4
7	7	2023-04-10	510.60	8
8	8	2023-04-22	200.00	2
9	9	2023-05-05	320.10	6
10	10	2023-05-28	410.75	9
11	27	2024-06-07	150.30	1
12	12	2023-06-18	220.45	3
13	13	2023-07-09	499.99	7
14	14	2023-07-21	275.00	5
15	35	2024-08-12	600.80	10
16	16	2023-08-25	340.25	2

Total rows: 24 Query complete 00:00:00.147

```
SELECT
    EXTRACT(YEAR FROM order_date) AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2023
GROUP BY EXTRACT(YEAR FROM order_date), EXTRACT(MONTH FROM order_date)
ORDER BY order_year, order_month;
```

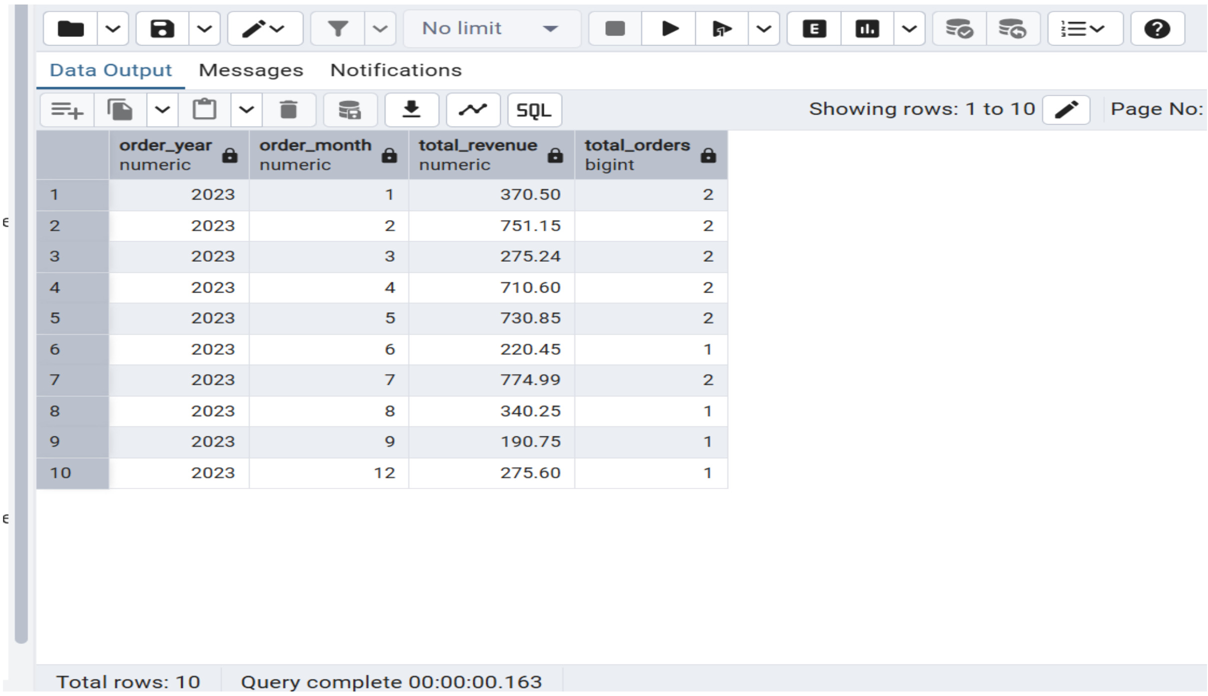


Showing rows: 1 to 10

	order_year numeric	order_month numeric	total_revenue numeric	total_orders bigint
1	2023	1	370.50	2
2	2023	2	751.15	2
3	2023	3	275.24	2
4	2023	4	710.60	2
5	2023	5	730.85	2
6	2023	6	220.45	1
7	2023	7	774.99	2
8	2023	8	340.25	1
9	2023	9	190.75	1
10	2023	12	275.60	1

Total rows: 10 Query complete 00:00:00.193

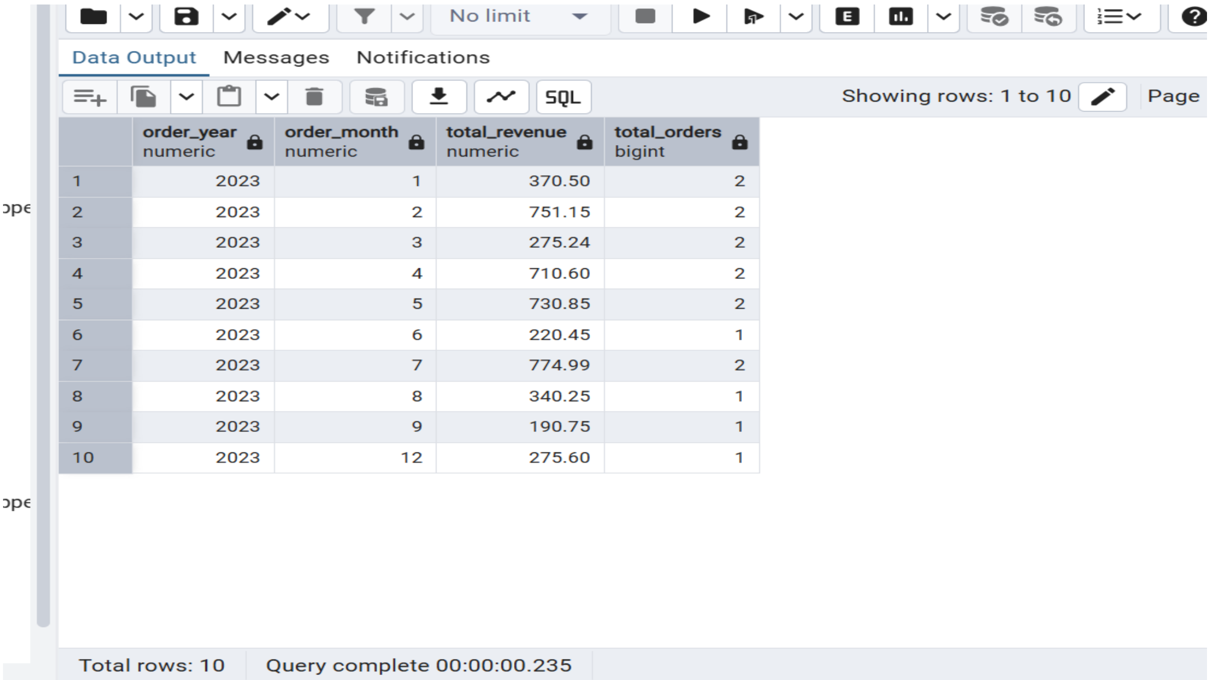
```
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2023
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```



	order_year numeric	order_month numeric	total_revenue numeric	total_orders bigint
1	2023	1	370.50	2
2	2023	2	751.15	2
3	2023	3	275.24	2
4	2023	4	710.60	2
5	2023	5	730.85	2
6	2023	6	220.45	1
7	2023	7	774.99	2
8	2023	8	340.25	1
9	2023	9	190.75	1
10	2023	12	275.60	1

Total rows: 10   Query complete 00:00:00.163

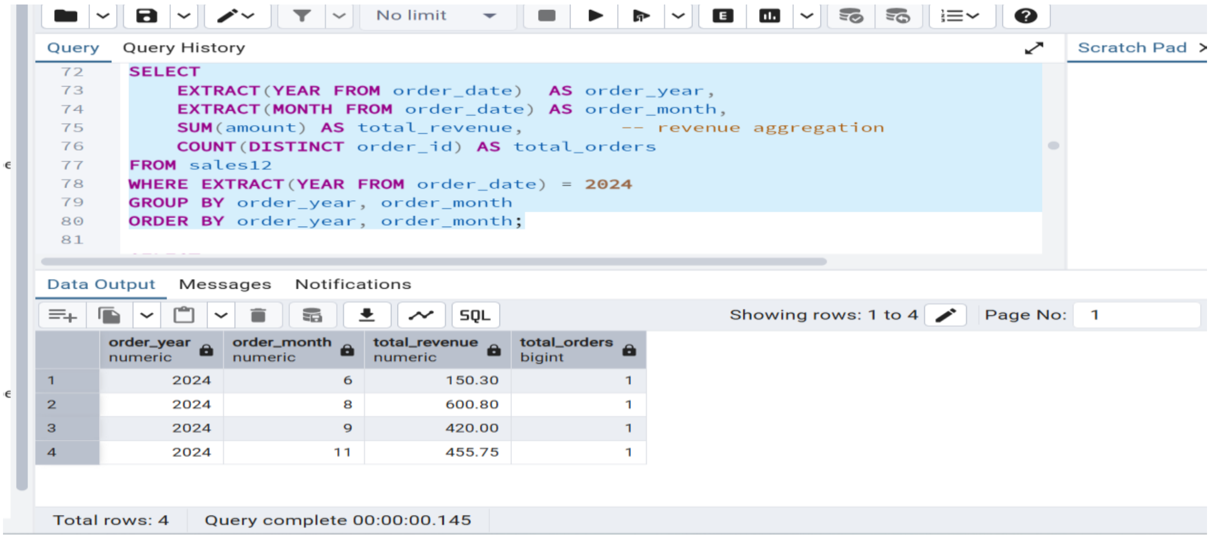
```
SELECT
   EXTRACT(YEAR FROM order_date)  AS order_year,
   EXTRACT(MONTH FROM order_date) AS order_month,
   SUM(amount) AS total_revenue,        -- revenue aggregation
   COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2023
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```



	order_year numeric	order_month numeric	total_revenue numeric	total_orders bigint
1	2023	1	370.50	2
2	2023	2	751.15	2
3	2023	3	275.24	2
4	2023	4	710.60	2
5	2023	5	730.85	2
6	2023	6	220.45	1
7	2023	7	774.99	2
8	2023	8	340.25	1
9	2023	9	190.75	1
10	2023	12	275.60	1

Total rows: 10   Query complete 00:00:00.235

```
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,         -- revenue aggregation
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2024
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```

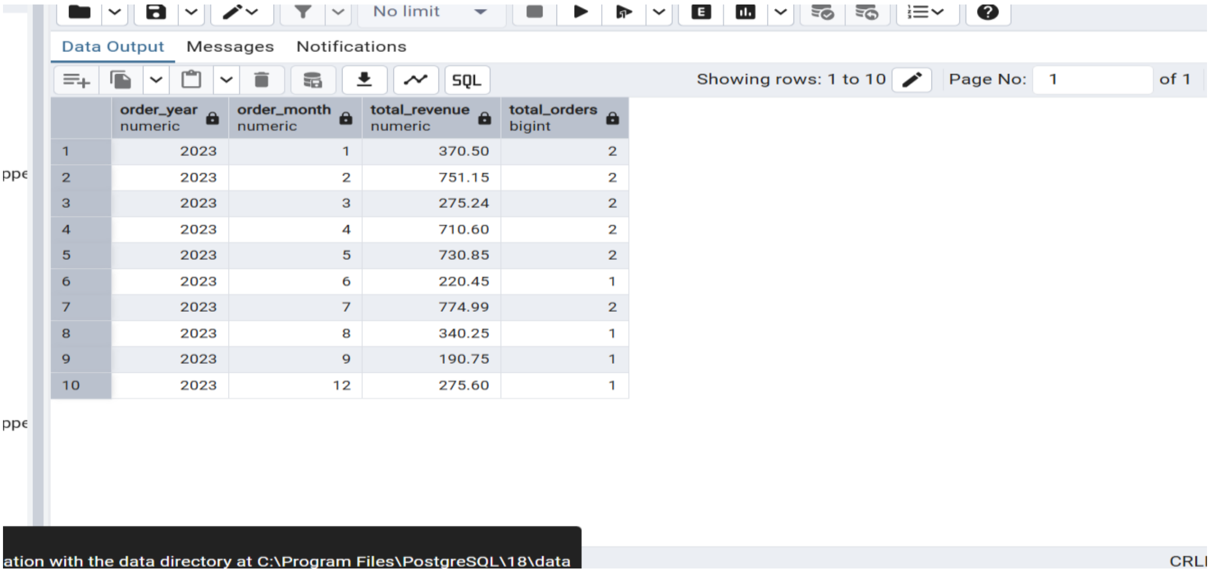


```
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,         -- revenue aggregation
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2024
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```

	order_year numeric	order_month numeric	total_revenue numeric	total_orders bigint
1	2024	6	150.30	1
2	2024	8	600.80	1
3	2024	9	420.00	1
4	2024	11	455.75	1

Total rows: 4   Query complete 00:00:00.145

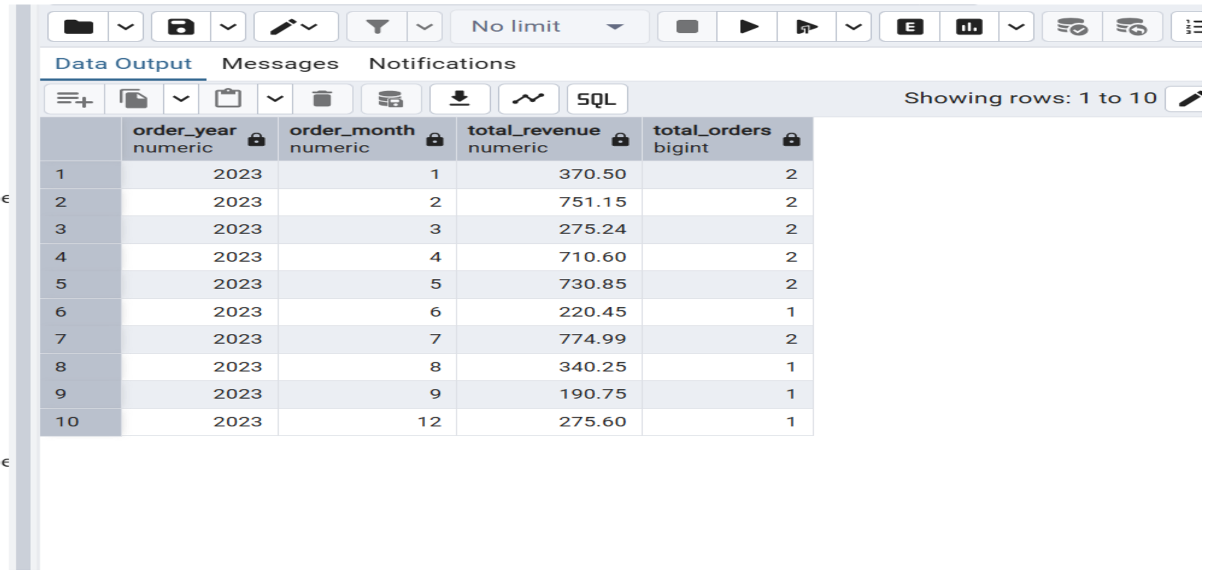
```sql
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2023
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```



	order_year numeric	order_month numeric	total_revenue numeric	total_orders bigint
1	2023	1	370.50	2
2	2023	2	751.15	2
3	2023	3	275.24	2
4	2023	4	710.60	2
5	2023	5	730.85	2
6	2023	6	220.45	1
7	2023	7	774.99	2
8	2023	8	340.25	1
9	2023	9	190.75	1
10	2023	12	275.60	1

ation with the data directory at C:\Program Files\PostgreSQL\18\data

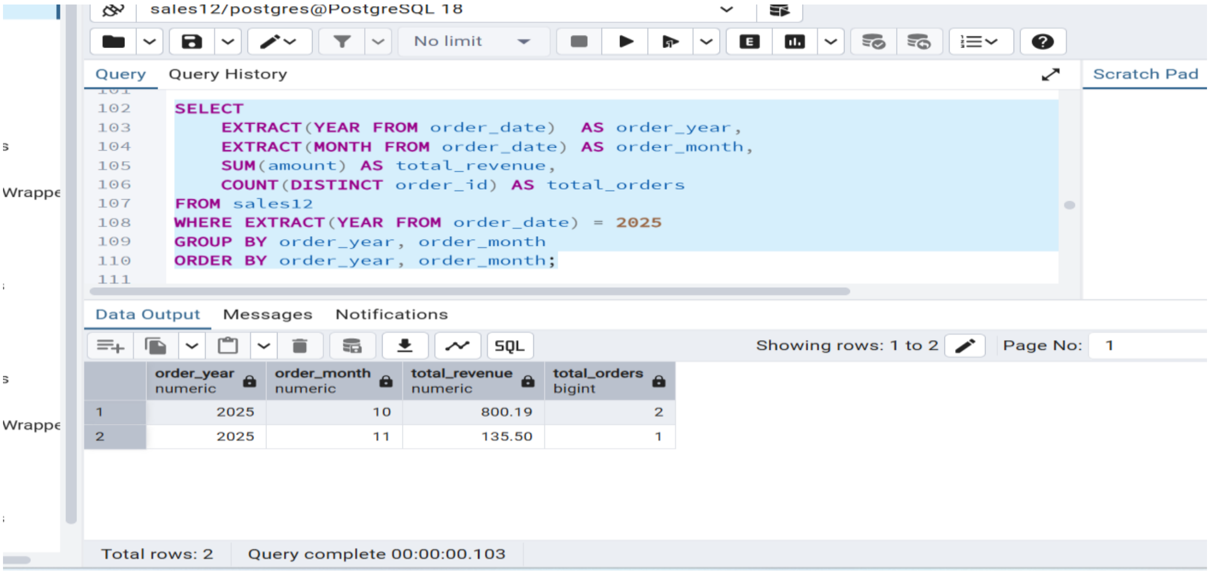
```sql
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2023
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```



Showing rows: 1 to 10

	order_year numeric	order_month numeric	total_revenue numeric	total_orders bigint
1	2023	1	370.50	2
2	2023	2	751.15	2
3	2023	3	275.24	2
4	2023	4	710.60	2
5	2023	5	730.85	2
6	2023	6	220.45	1
7	2023	7	774.99	2
8	2023	8	340.25	1
9	2023	9	190.75	1
10	2023	12	275.60	1

```
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2025
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```



sales12/postgres@PostgreSQL 18

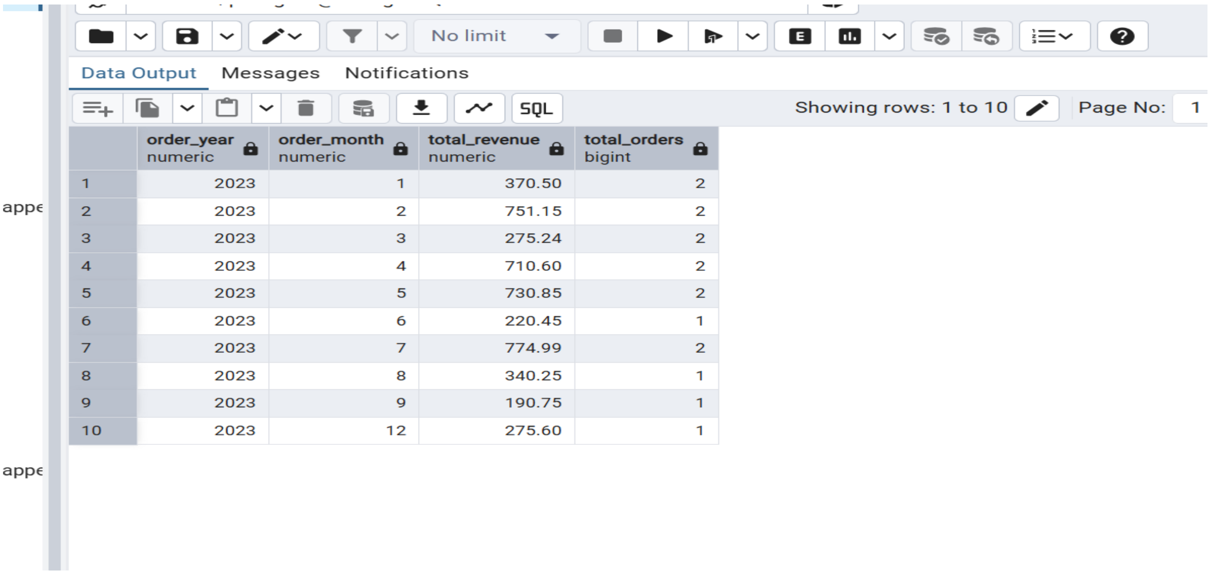
```
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2025
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```

Showing rows: 1 to 2   Page No: 1

	order_year numeric	order_month numeric	total_revenue numeric	total_orders bigint
1	2025	10	800.19	2
2	2025	11	135.50	1

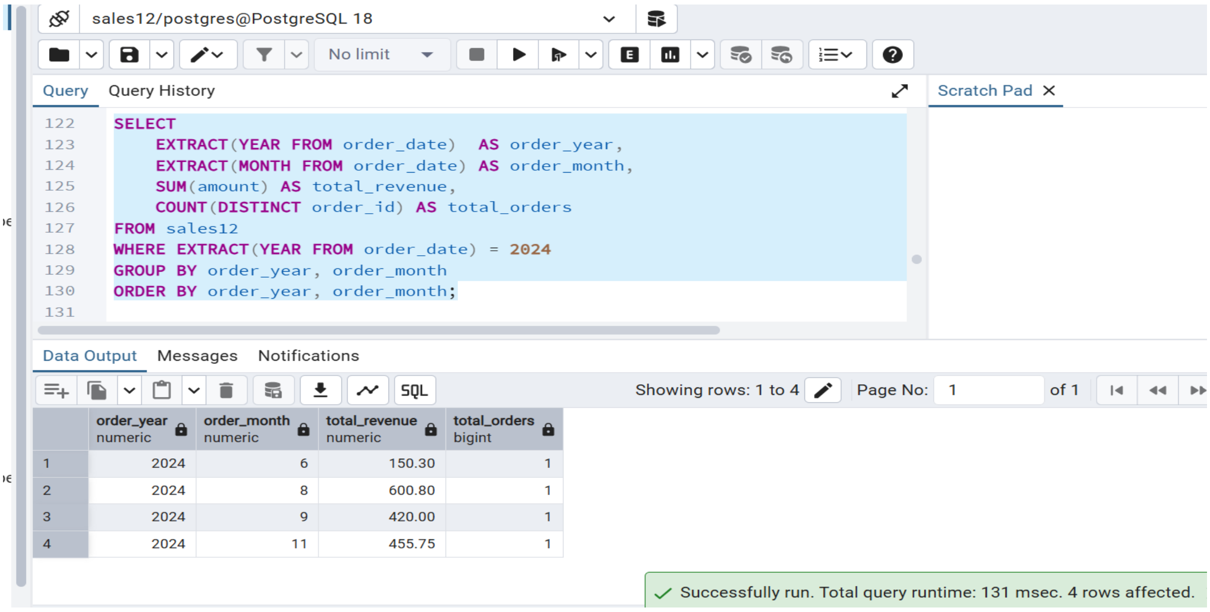
Total rows: 2   Query complete 00:00:00.103

```
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2023
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```



	order_year numeric	order_month numeric	total_revenue numeric	total_orders bigint
1	2023	1	370.50	2
2	2023	2	751.15	2
3	2023	3	275.24	2
4	2023	4	710.60	2
5	2023	5	730.85	2
6	2023	6	220.45	1
7	2023	7	774.99	2
8	2023	8	340.25	1
9	2023	9	190.75	1
10	2023	12	275.60	1

```
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2024
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```

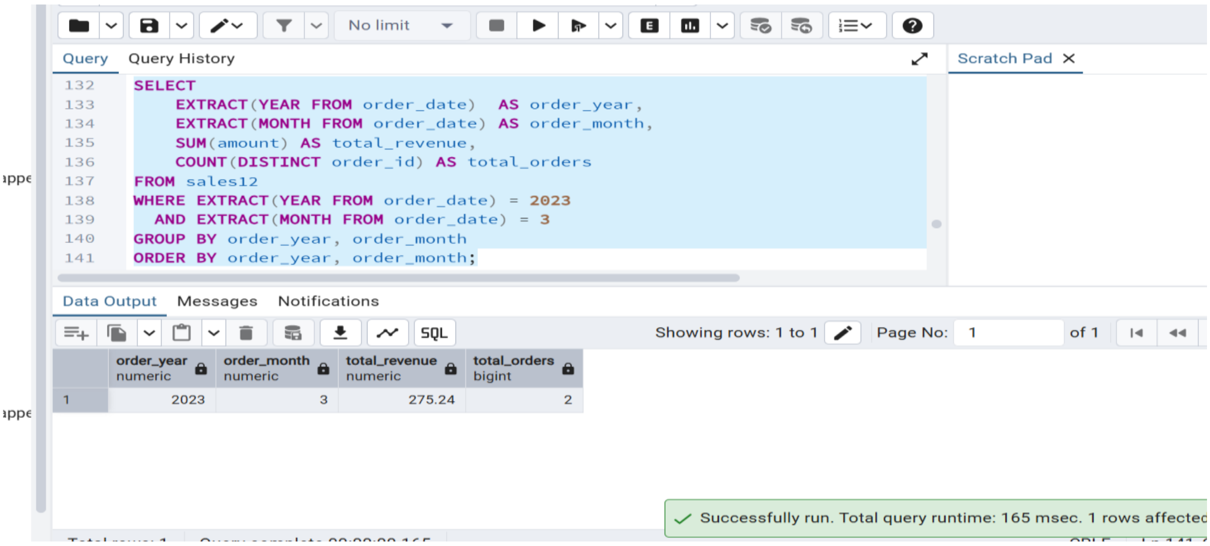


```sql
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2024
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```

	order_year numeric	order_month numeric	total_revenue numeric	total_orders bigint
1	2024	6	150.30	1
2	2024	8	600.80	1
3	2024	9	420.00	1
4	2024	11	455.75	1

✓ Successfully run. Total query runtime: 131 msec. 4 rows affected.

```
SELECT
   EXTRACT(YEAR FROM order_date)  AS order_year,
   EXTRACT(MONTH FROM order_date) AS order_month,
   SUM(amount) AS total_revenue,
   COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2023
  AND EXTRACT(MONTH FROM order_date) = 3
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```

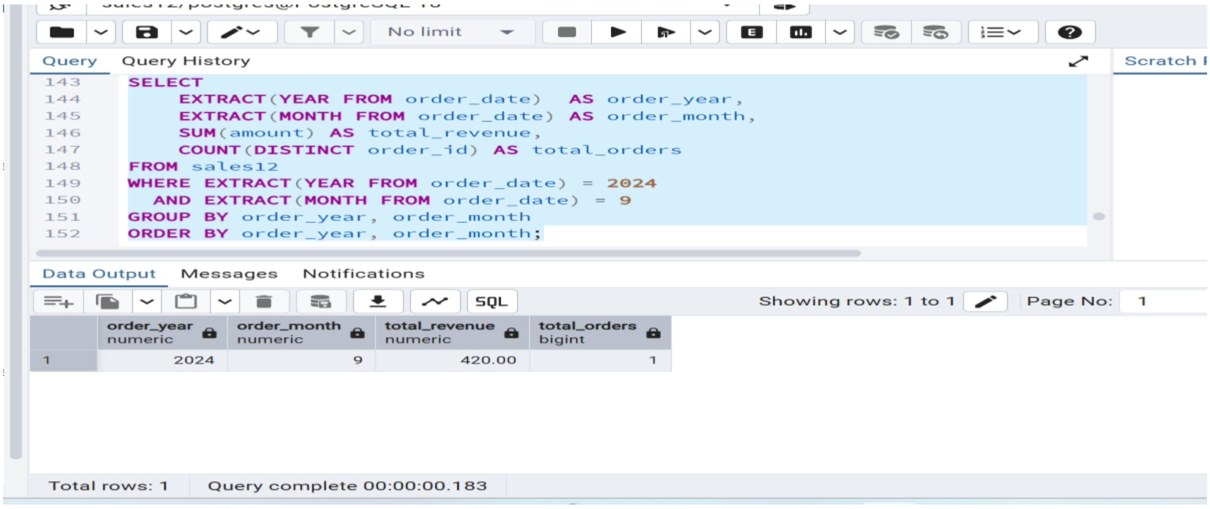


```sql
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2023
  AND EXTRACT(MONTH FROM order_date) = 3
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```

	order_year numeric	order_month numeric	total_revenue numeric	total_orders bigint
1	2023	3	275.24	2

✓ Successfully run. Total query runtime: 165 msec. 1 rows affectec

```
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2024
  AND EXTRACT(MONTH FROM order_date) = 9
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```



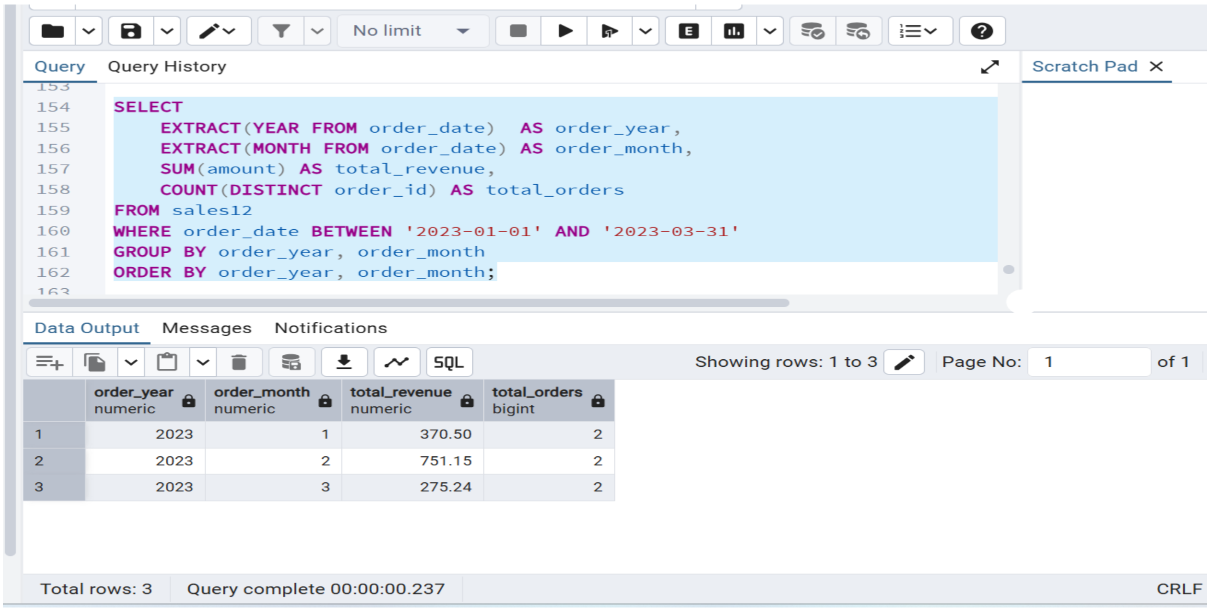
```
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE EXTRACT(YEAR FROM order_date) = 2024
  AND EXTRACT(MONTH FROM order_date) = 9
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```

Showing rows: 1 to 1   Page No: 1

	order_year numeric	order_month numeric	total_revenue numeric	total_orders bigint
1	2024	9	420.00	1

Total rows: 1   Query complete 00:00:00.183

```
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE order_date BETWEEN '2023-01-01' AND '2023-03-31'
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```



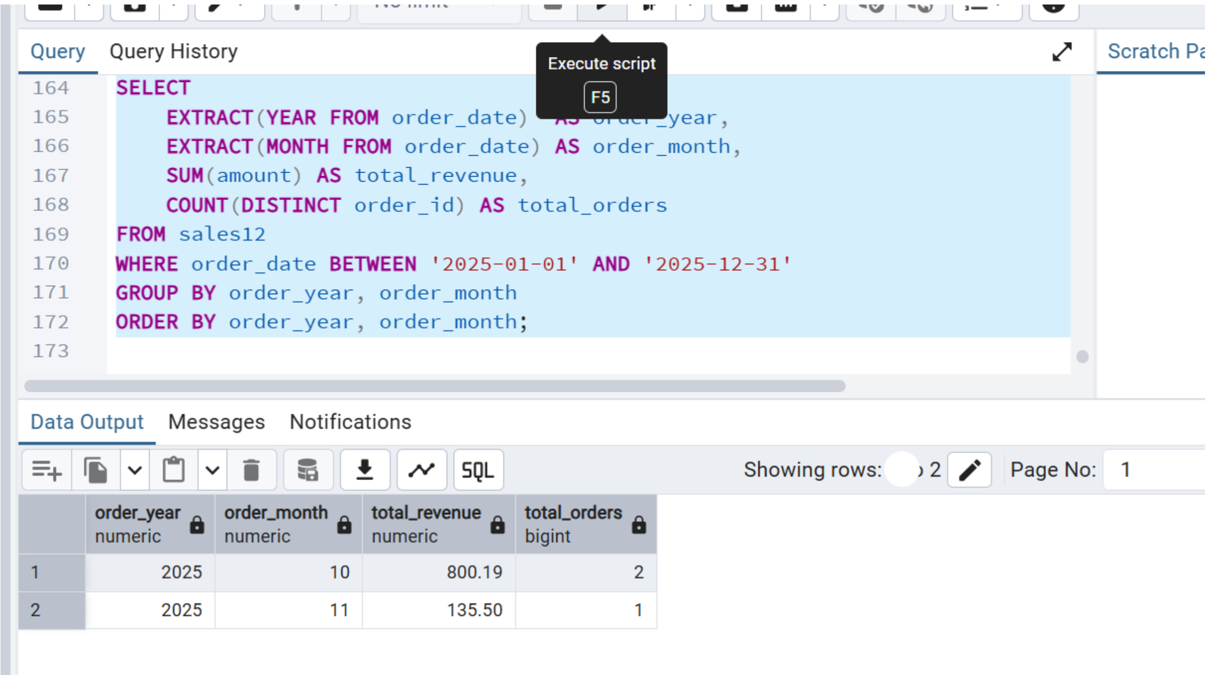
```
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE order_date BETWEEN '2023-01-01' AND '2023-03-31'
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```

Showing rows: 1 to 3 Page No: 1 of 1

	order_year numeric	order_month numeric	total_revenue numeric	total_orders bigint
1	2023	1	370.50	2
2	2023	2	751.15	2
3	2023	3	275.24	2

Total rows: 3 Query complete 00:00:00.237 CRLF

```
SELECT
    EXTRACT(YEAR FROM order_date)  AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE order_date BETWEEN '2025-01-01' AND '2025-12-31'
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```



```sql
SELECT
    EXTRACT(YEAR FROM order_date) AS order_year,
    EXTRACT(MONTH FROM order_date) AS order_month,
    SUM(amount) AS total_revenue,
    COUNT(DISTINCT order_id) AS total_orders
FROM sales12
WHERE order_date BETWEEN '2025-01-01' AND '2025-12-31'
GROUP BY order_year, order_month
ORDER BY order_year, order_month;
```

	order_year numeric	order_month numeric	total_revenue numeric	total_orders bigint
1	2025	10	800.19	2
2	2025	11	135.50	1