

type help for help:

```
postgres=# psql -U postgres
postgres=# CREATE DATABASE sales_demo;
ERROR:  syntax error at or near "psql"
LINE 1: psql -U postgres
        ^
```

```
postgres=# CREATE DATABASE sales_demo;
CREATE DATABASE
```

```
postgres=# \c sales_demo
You are now connected to database "sales_demo" as user "postgres".
```

```
sales_demo=# DROP TABLE IF EXISTS online_sales;
NOTICE:  table "online_sales" does not exist, skipping
DROP TABLE
```

```
sales_demo=# CREATE TABLE online_sales (order_id      BIGINT,order_date    DATE,amount          NUMERIC(10,2),product_id    BI
GINT);
```

```
CREATE TABLE
```

```
sales_demo=# \d online_sales
```

Table "public.online_sales"				
Column	Type	Collation	Nullable	Default
order_id	bigint			
order_date	date			
amount	numeric(10,2)			
product_id	bigint			

```
sales_demo=# INSERT INTO online_sales (order_id, order_date, amount, product_id) VALUES (1001, '2024-01-15', 250.00, 1),
(1002, '2024-01-20', 100.00, 2),(1003, '2024-02-03', 75.00, 3),(1004, '2024-02-15', 500.00, 1),(1005, '2024-02-28', 125
.00, 2),(1006, '2024-03-10', 60.00, 4),(1007, '2024-03-11', 300.00, 1),(1008, '2024-03-12', 450.00, 2),(1009, '2024-05-
05', 600.00, 3),(1010, '2024-05-20', 700.00, 3),(1011, '2024-07-14', 800.00, 2),(1012, '2024-07-20', 200.00, 4);
INSERT 0 12
```

```
sales_demo=# SELECT * FROM online_sales;
```

order_id	order_date	amount	product_id
1001	2024-01-15	250.00	1
1002	2024-01-20	100.00	2
1003	2024-02-03	75.00	3
1004	2024-02-15	500.00	1
1005	2024-02-28	125.00	2
1006	2024-03-10	60.00	4
1007	2024-03-11	300.00	1
1008	2024-03-12	450.00	2
1009	2024-05-05	600.00	3
1010	2024-05-20	700.00	3
1011	2024-07-14	800.00	2
1012	2024-07-20	200.00	4

```
(12 rows)
```

```

sales_demo=# SELECT TO_CHAR(date_trunc('month', order_date), 'YYYY-MM') AS month, COALESCE(SUM(amount), 0) AS month
ly_revenue, COUNT(DISTINCT order_id) AS order_count FROM online_sales GROUP BY date_trunc('month', order_date) ORDE
R BY date_trunc('month', order_date);

```

month	monthly_revenue	order_count
2024-01	350.00	2
2024-02	700.00	3
2024-03	810.00	3
2024-05	1300.00	2
2024-07	1000.00	2

(5 rows)

```

sales_demo=# WITH monthly AS (SELECT date_trunc('month', order_date) AS month_start, SUM(amount) AS monthly_revenue FROM
online_sales GROUP BY month_start) SELECT TO_CHAR(month_start, 'YYYY-MM') AS month, monthly_revenue FROM (SELECT *, RANK
() OVER (ORDER BY monthly_revenue DESC) AS rnk FROM monthly ) t WHERE rnk <= 3 ORDER BY monthly_revenue DESC;

```

month	monthly_revenue
2024-05	1300.00
2024-07	1000.00
2024-03	810.00

(3 rows)

```
sales_demo=# WITH months AS (SELECT generate_series((SELECT date_trunc('month', MIN(order_date)) FROM online_sales),(SELECT date_trunc('month', MAX(order_date)) FROM online_sales),interval '1 month') AS month_start)SELECT TO_CHAR(m.month_start,'YYYY-MM') AS month,COALESCE(SUM(os.amount),0) AS monthly_revenue,COUNT(DISTINCT os.order_id) AS order_count FROM months m LEFT JOIN online_sales os ON date_trunc('month', os.order_date) = m.month_start GROUP BY m.month_start ORDER BY m.month_start;
```

month	monthly_revenue	order_count
2024-01	350.00	2
2024-02	700.00	3
2024-03	810.00	3
2024-04	0	0
2024-05	1300.00	2
2024-06	0	0
2024-07	1000.00	2

(7 rows)

```
sales_demo=# \d online_sales
```

Column	Type	Collation	Nullable	Default
order_id	bigint			
order_date	date			
amount	numeric(10,2)			
product_id	bigint			

```
sales_demo=# SELECT COUNT(*) FROM online_sales;
```

```
count
```

```
-----
```

```
12
```

```
(1 row)
```

```
sales_demo=# TRUNCATE TABLE online_sales;
```

```
TRUNCATE TABLE
```