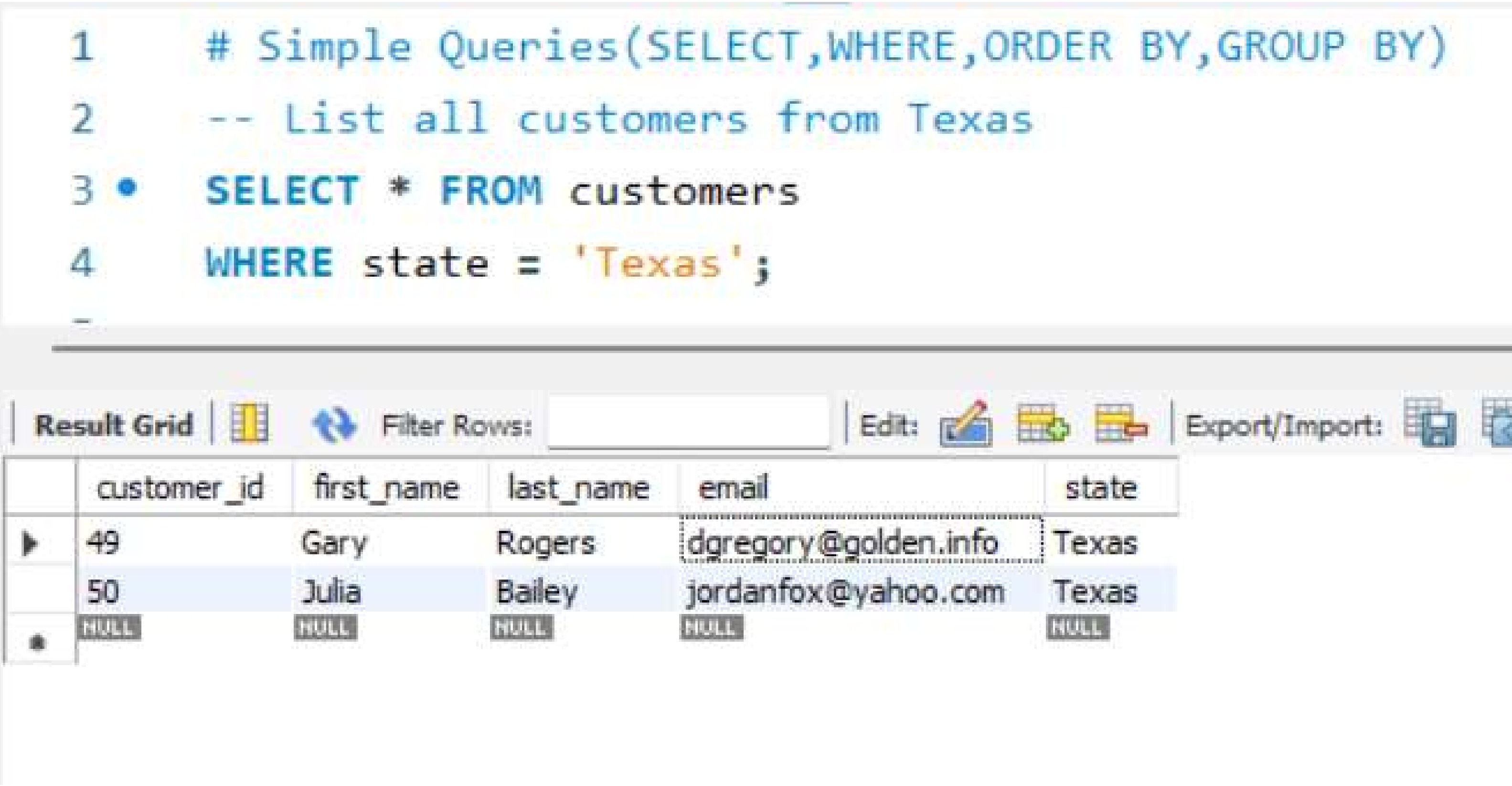
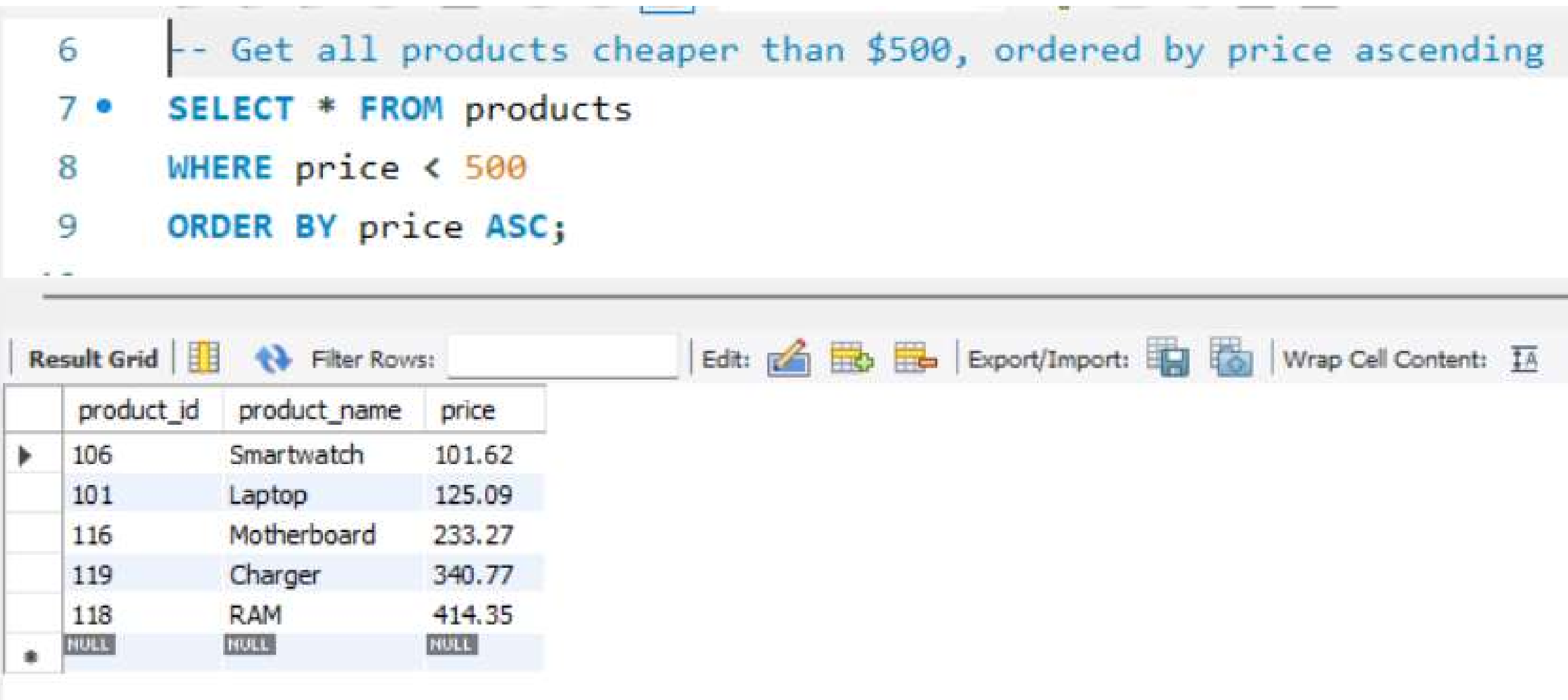


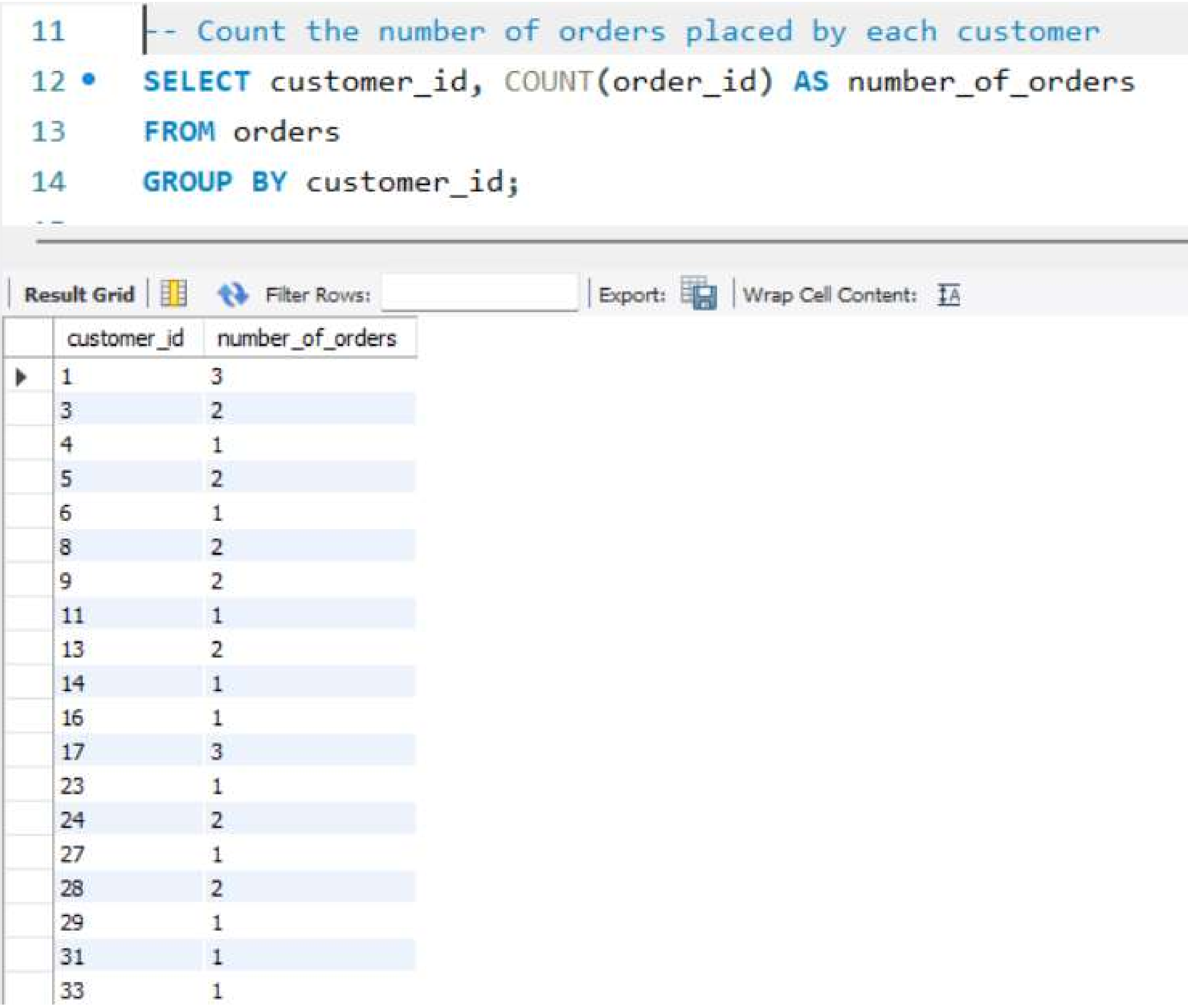
```
# Simple Queries(SELECT,WHERE,ORDER BY,GROUP BY)
-- List all customers from Texas
SELECT * FROM customers
WHERE state = 'Texas';
```

customer_id	first_name	last_name	email	state
49	Gary	Rogers	dgregory@golden.info	Texas
50	Julia	Bailey	jordanfox@yahoo.com	Texas
NULL	NULL	NULL	NULL	NULL



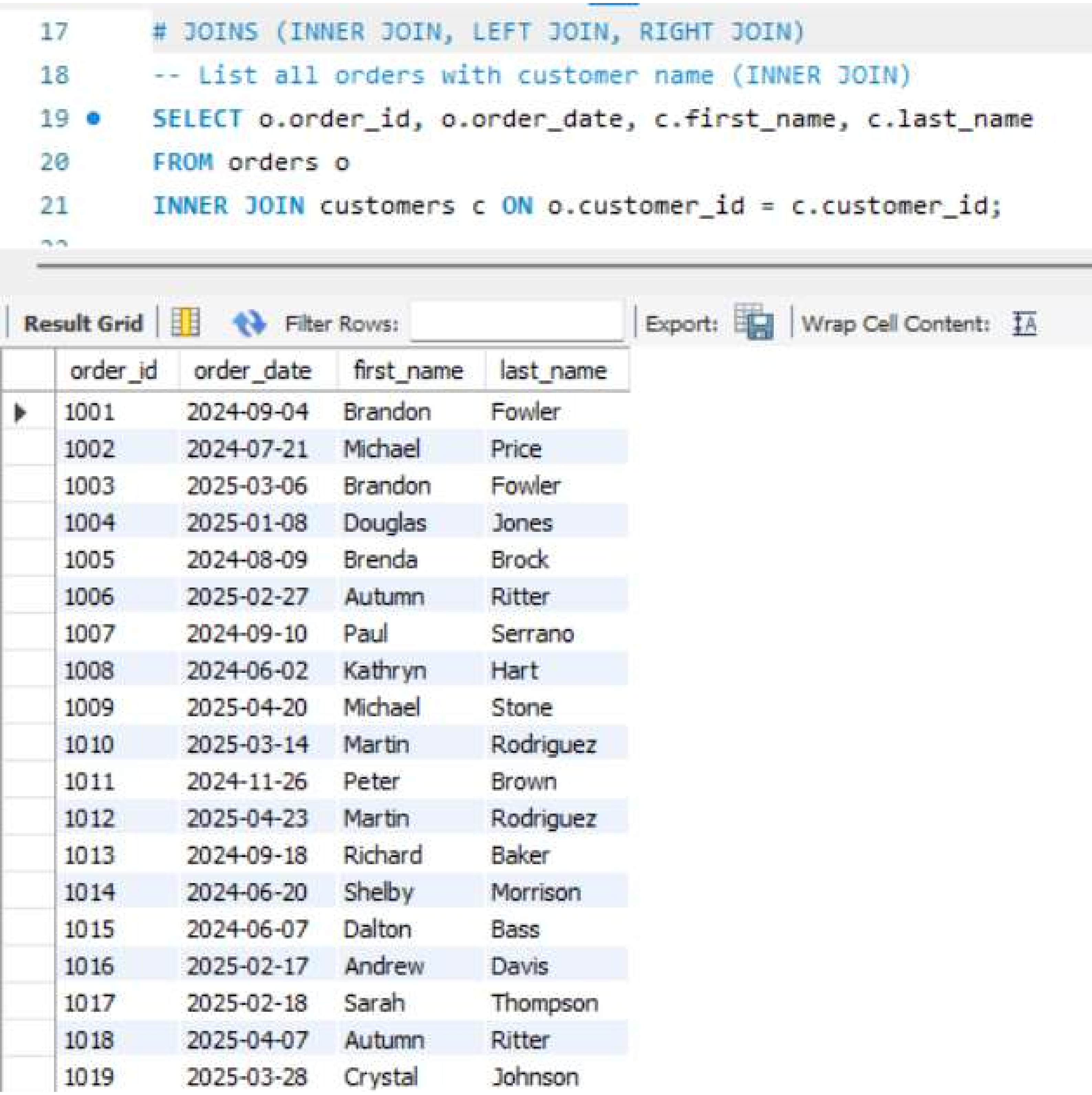
```sql
-- Get all products cheaper than $500, ordered by price ascending
SELECT * FROM products
WHERE price < 500
ORDER BY price ASC;
```

product_id	product_name	price
106	Smartwatch	101.62
101	Laptop	125.09
116	Motherboard	233.27
119	Charger	340.77
118	RAM	414.35
NULL	NULL	NULL



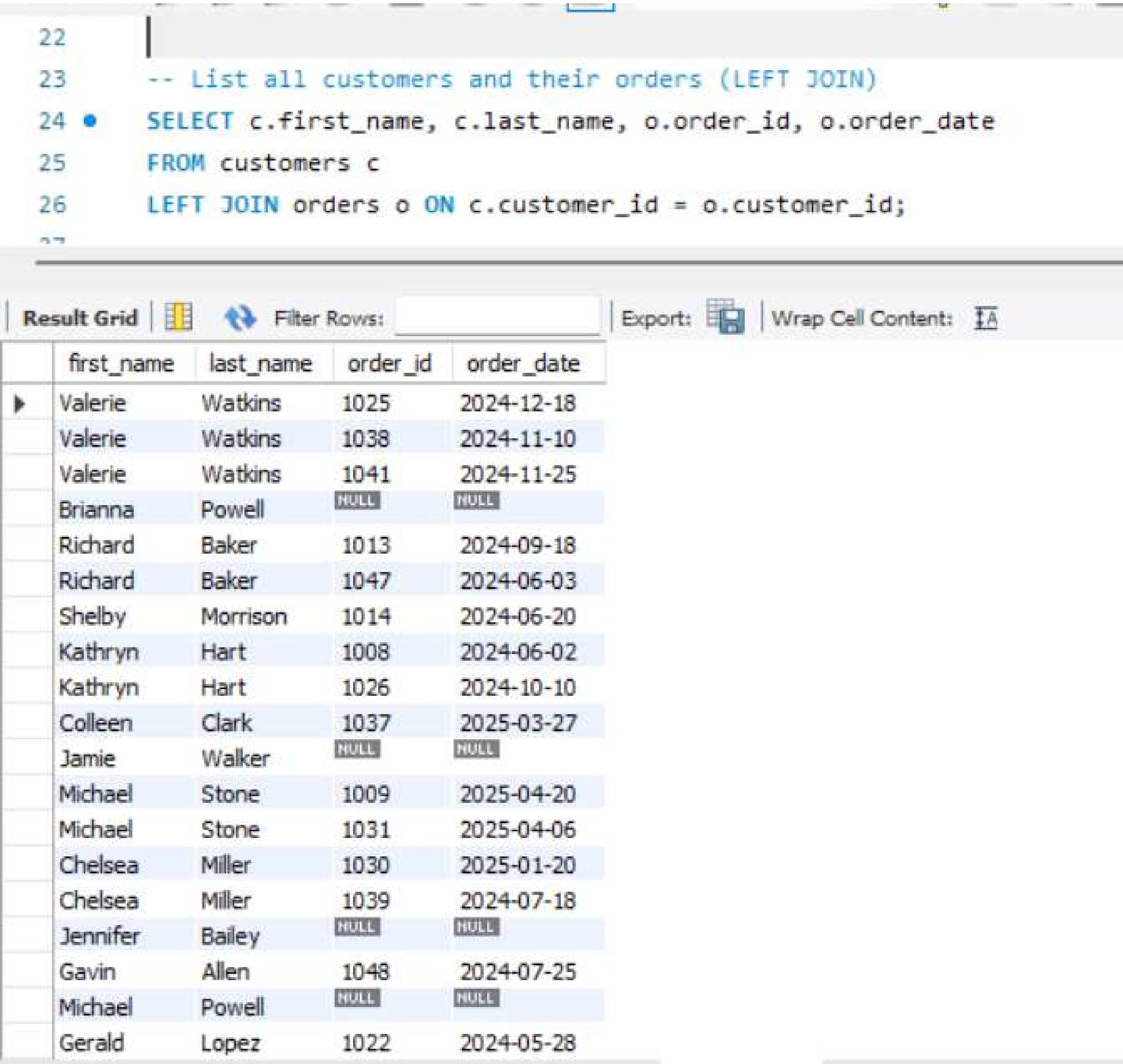
```sql
-- Count the number of orders placed by each customer
SELECT customer_id, COUNT(order_id) AS number_of_orders
FROM orders
GROUP BY customer_id;
```

customer_id	number_of_orders
1	3
3	2
4	1
5	2
6	1
8	2
9	2
11	1
13	2
14	1
16	1
17	3
23	1
24	2
27	1
28	2
29	1
31	1
33	1



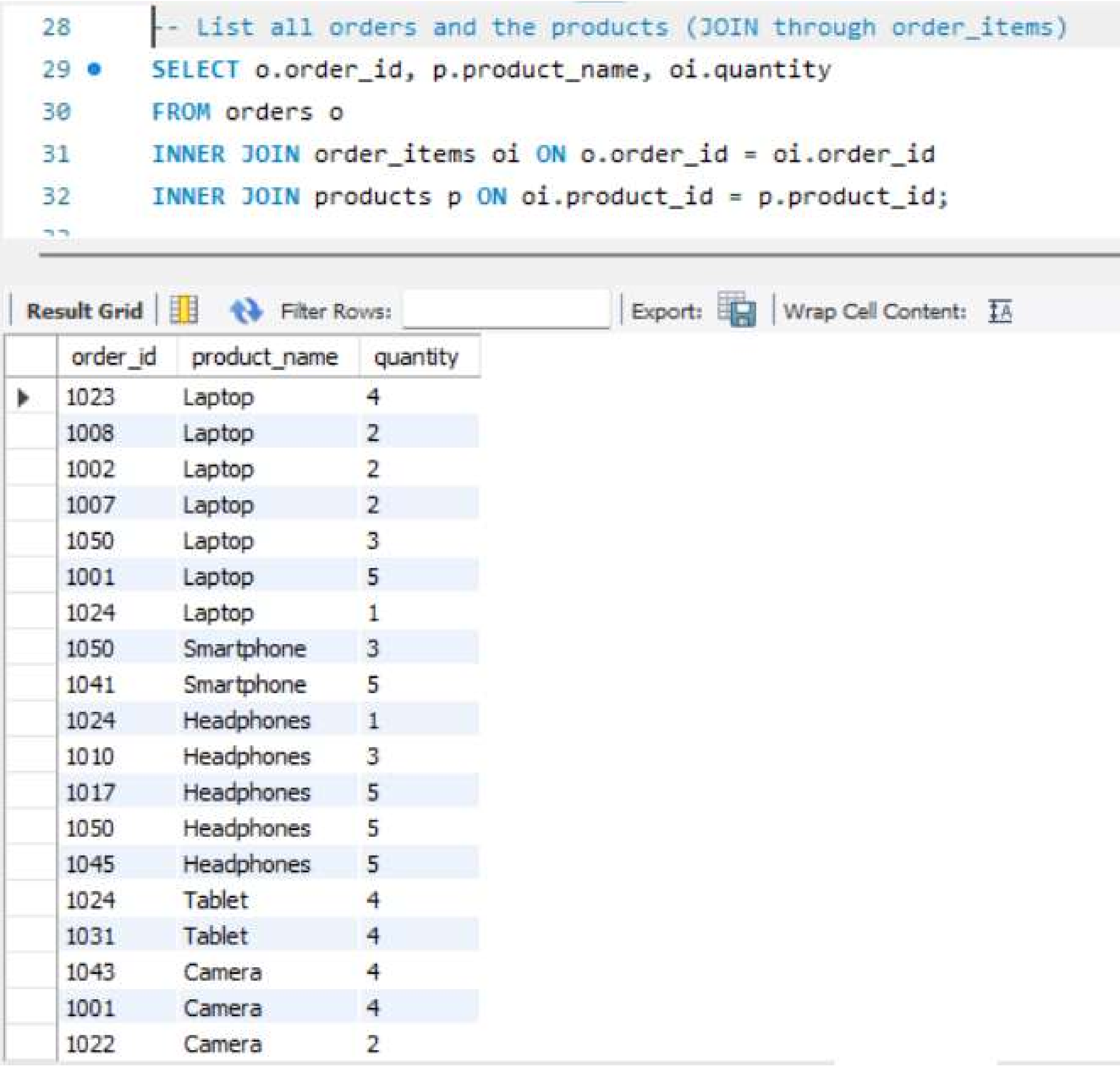
```
# JOINS (INNER JOIN, LEFT JOIN, RIGHT JOIN)
-- List all orders with customer name (INNER JOIN)
SELECT o.order_id, o.order_date, c.first_name, c.last_name
FROM orders o
INNER JOIN customers c ON o.customer_id = c.customer_id;
```

order_id	order_date	first_name	last_name
1001	2024-09-04	Brandon	Fowler
1002	2024-07-21	Michael	Price
1003	2025-03-06	Brandon	Fowler
1004	2025-01-08	Douglas	Jones
1005	2024-08-09	Brenda	Brock
1006	2025-02-27	Autumn	Ritter
1007	2024-09-10	Paul	Serrano
1008	2024-06-02	Kathryn	Hart
1009	2025-04-20	Michael	Stone
1010	2025-03-14	Martin	Rodriguez
1011	2024-11-26	Peter	Brown
1012	2025-04-23	Martin	Rodriguez
1013	2024-09-18	Richard	Baker
1014	2024-06-20	Shelby	Morrison
1015	2024-06-07	Dalton	Bass
1016	2025-02-17	Andrew	Davis
1017	2025-02-18	Sarah	Thompson
1018	2025-04-07	Autumn	Ritter
1019	2025-03-28	Crystal	Johnson



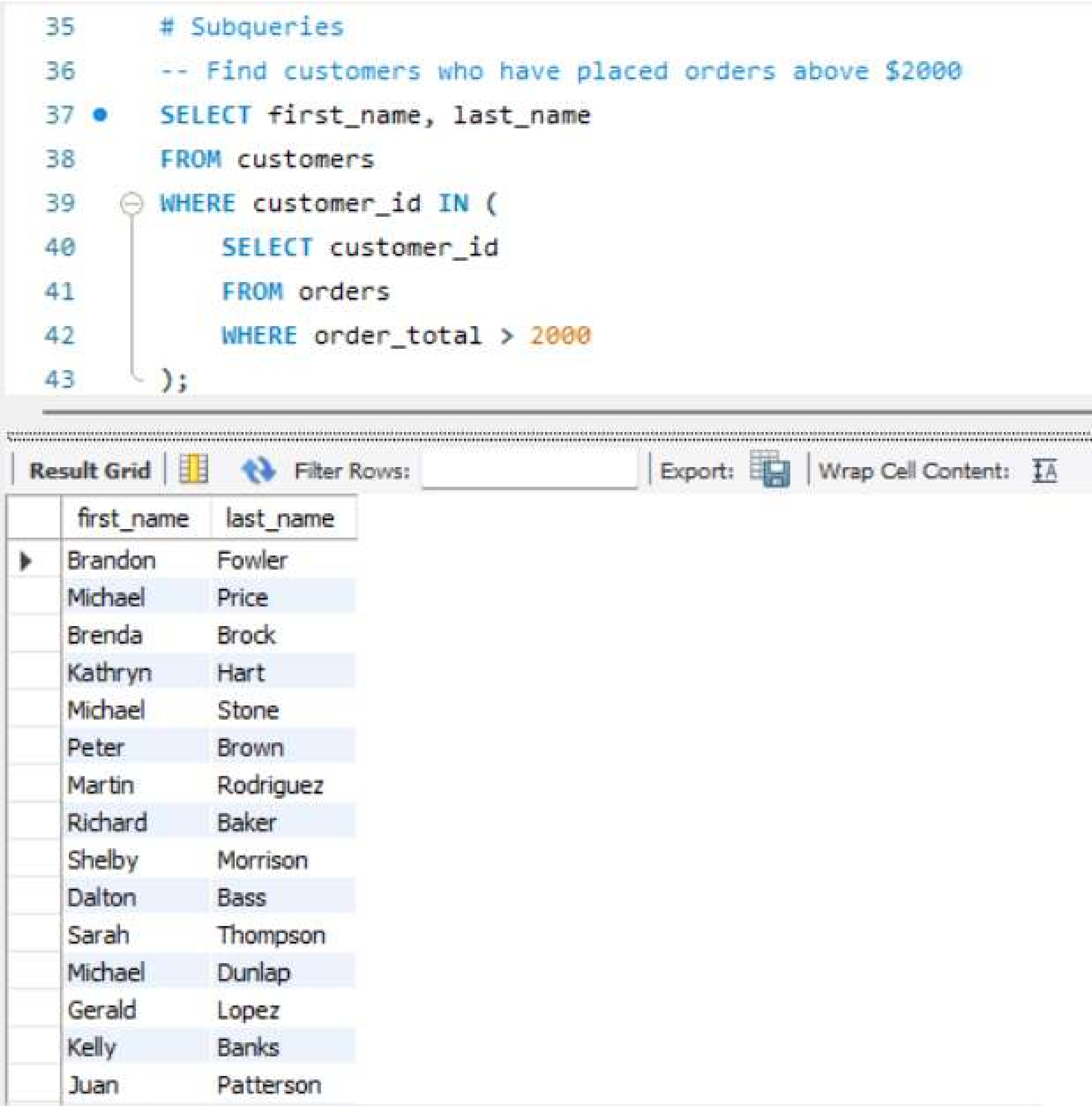
```sql

-- List all customers and their orders (LEFT JOIN)
SELECT c.first_name, c.last_name, o.order_id, o.order_date
FROM customers c
LEFT JOIN orders o ON c.customer_id = o.customer_id;
```

first_name	last_name	order_id	order_date
Valerie	Watkins	1025	2024-12-18
Valerie	Watkins	1038	2024-11-10
Valerie	Watkins	1041	2024-11-25
Brianna	Powell	NULL	NULL
Richard	Baker	1013	2024-09-18
Richard	Baker	1047	2024-06-03
Shelby	Morrison	1014	2024-06-20
Kathryn	Hart	1008	2024-06-02
Kathryn	Hart	1026	2024-10-10
Colleen	Clark	1037	2025-03-27
Jamie	Walker	NULL	NULL
Michael	Stone	1009	2025-04-20
Michael	Stone	1031	2025-04-06
Chelsea	Miller	1030	2025-01-20
Chelsea	Miller	1039	2024-07-18
Jennifer	Bailey	NULL	NULL
Gavin	Allen	1048	2024-07-25
Michael	Powell	NULL	NULL
Gerald	Lopez	1022	2024-05-28



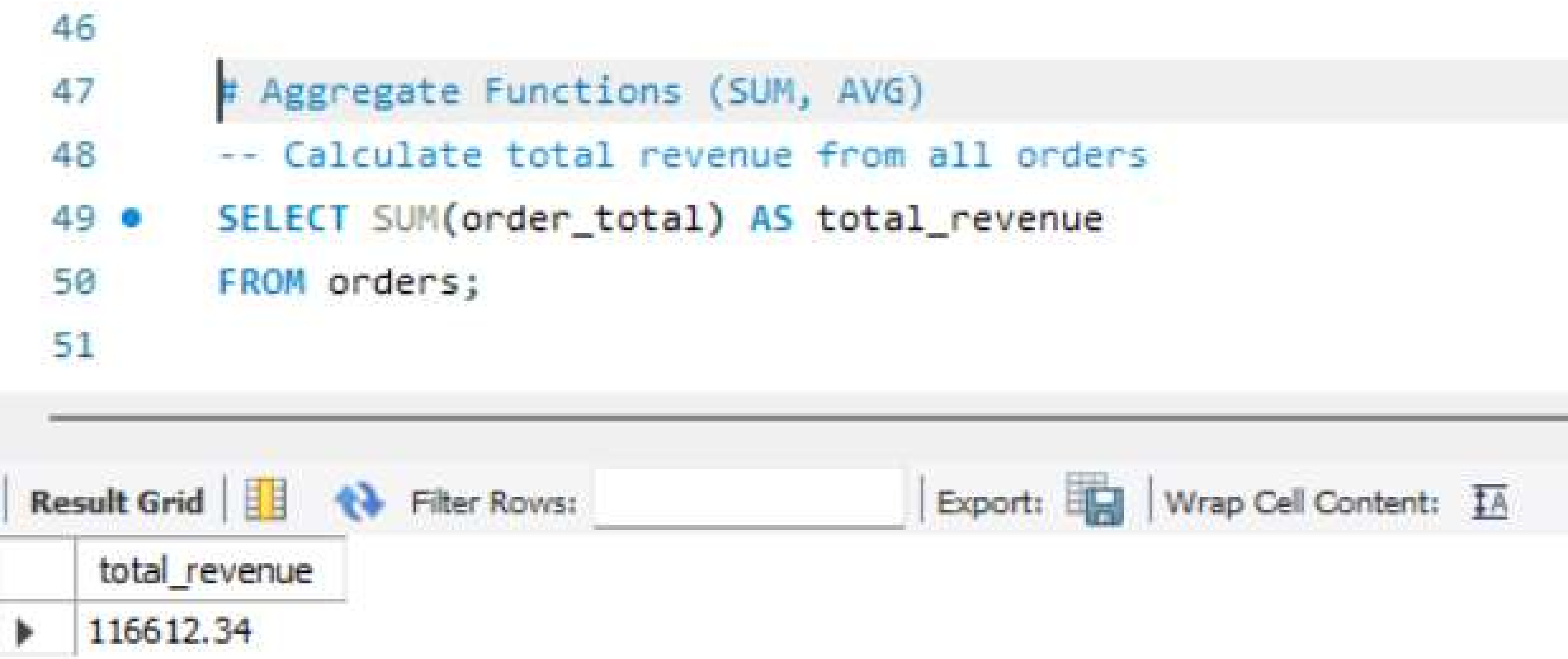
```
-- List all orders and the products (JOIN through order_items)
SELECT o.order_id, p.product_name, oi.quantity
FROM orders o
INNER JOIN order_items oi ON o.order_id = oi.order_id
INNER JOIN products p ON oi.product_id = p.product_id;
```

order_id	product_name	quantity
1023	Laptop	4
1008	Laptop	2
1002	Laptop	2
1007	Laptop	2
1050	Laptop	3
1001	Laptop	5
1024	Laptop	1
1050	Smartphone	3
1041	Smartphone	5
1024	Headphones	1
1010	Headphones	3
1017	Headphones	5
1050	Headphones	5
1045	Headphones	5
1024	Tablet	4
1031	Tablet	4
1043	Camera	4
1001	Camera	4
1022	Camera	2



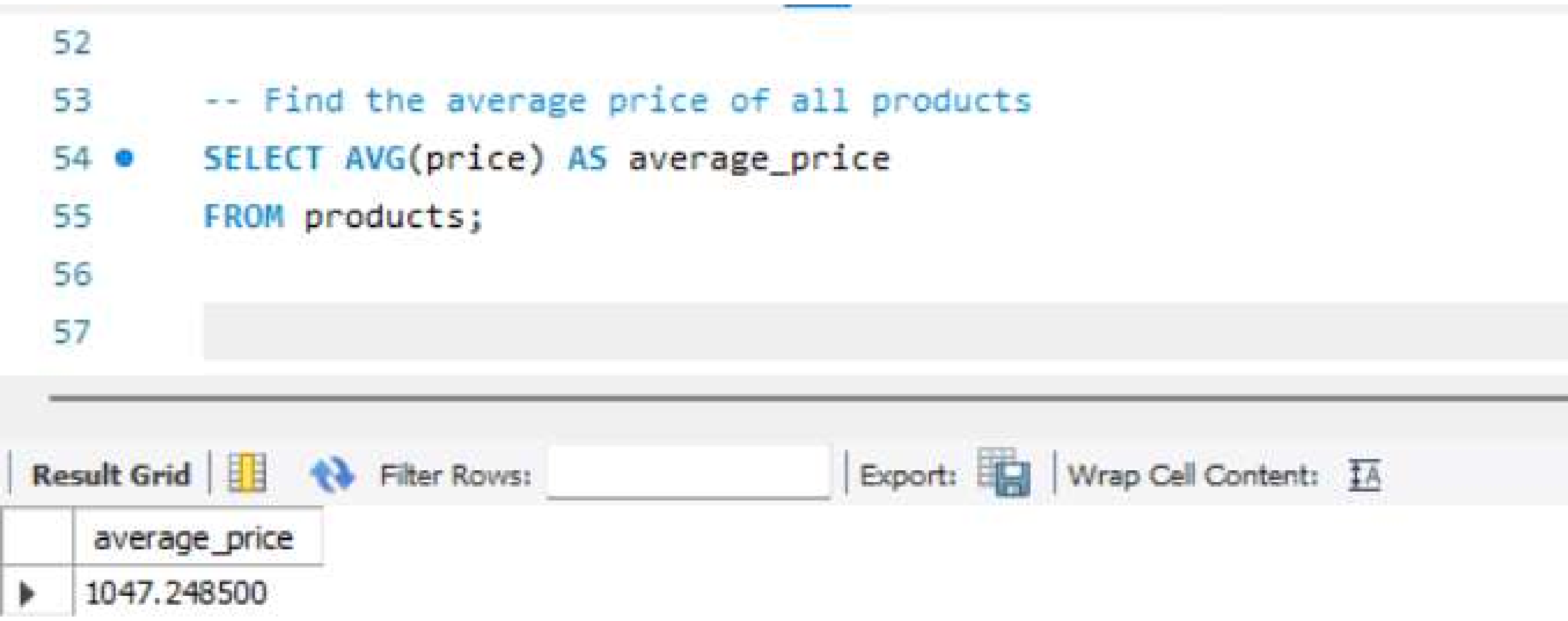
```sql
# Subqueries
-- Find customers who have placed orders above $2000
SELECT first_name, last_name
FROM customers
WHERE customer_id IN (
    SELECT customer_id
    FROM orders
    WHERE order_total > 2000
);
```

first_name	last_name
Brandon	Fowler
Michael	Price
Brenda	Brock
Kathryn	Hart
Michael	Stone
Peter	Brown
Martin	Rodriguez
Richard	Baker
Shelby	Morrison
Dalton	Bass
Sarah	Thompson
Michael	Dunlap
Gerald	Lopez
Kelly	Banks
Juan	Patterson



```sql
# Aggregate Functions (SUM, AVG)
-- Calculate total revenue from all orders
SELECT SUM(order_total) AS total_revenue
FROM orders;
```

```
total_revenue
116612.34
```



```sql

-- Find the average price of all products
SELECT AVG(price) AS average_price
FROM products;


```

average_price
1047.248500