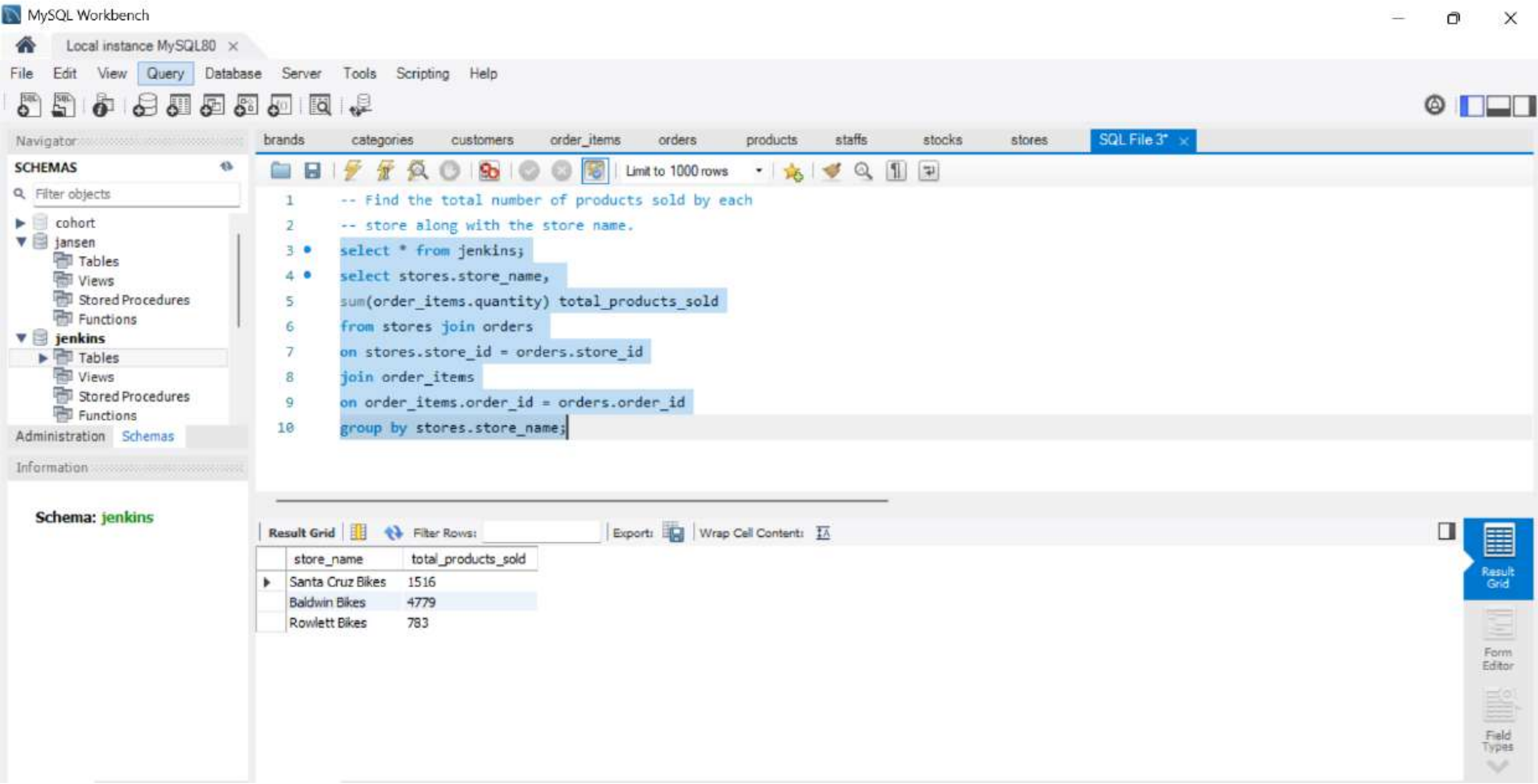
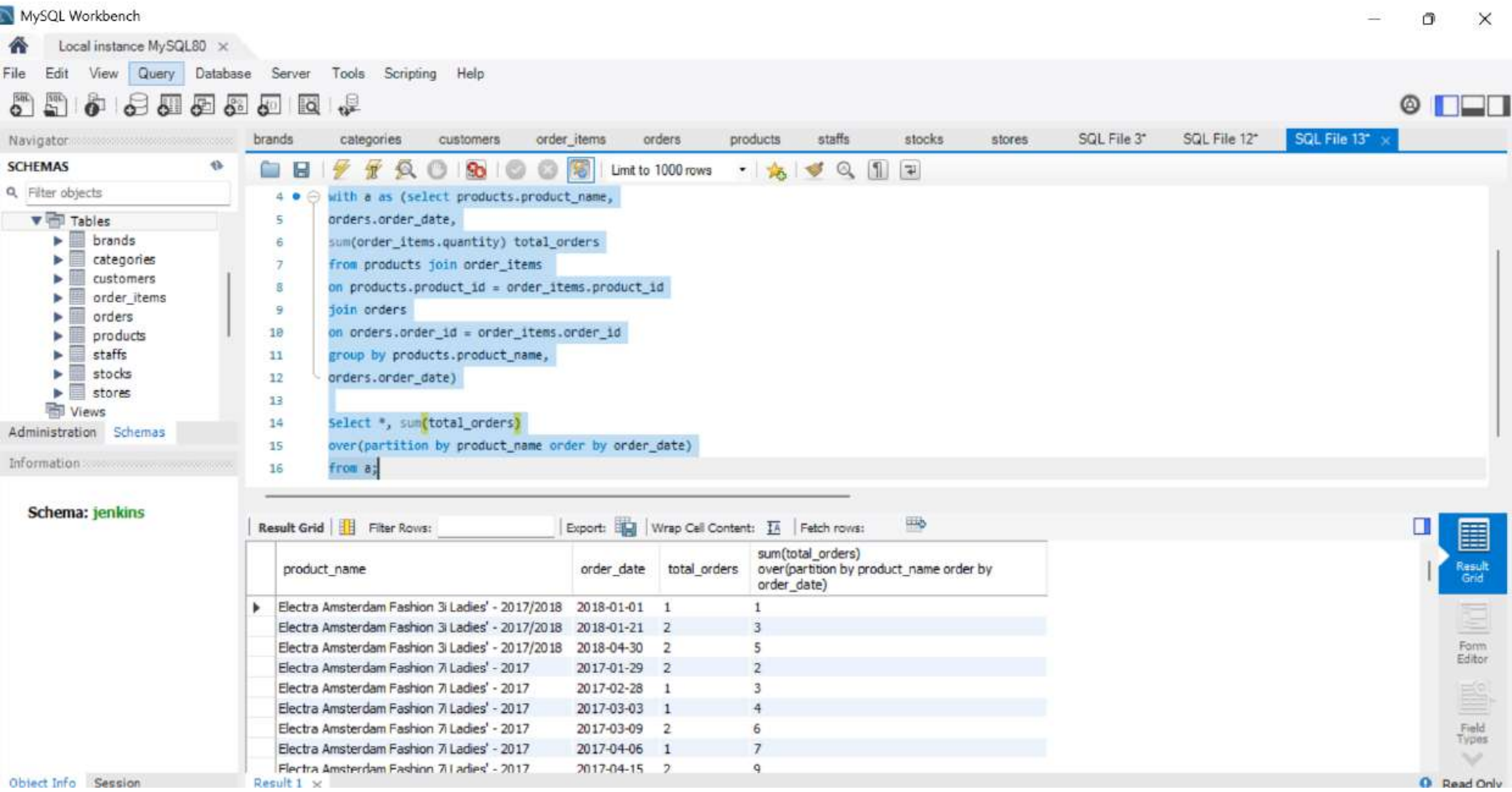


Schema: jenkins

```sql
-- Find the total number of products sold by each
-- store along with the store name.
select * from jenkins;
select stores.store_name,
sum(order_items.quantity) total_products_sold
from stores join orders
on stores.store_id = orders.store_id
join order_items
on order_items.order_id = orders.order_id
group by stores.store_name;
```

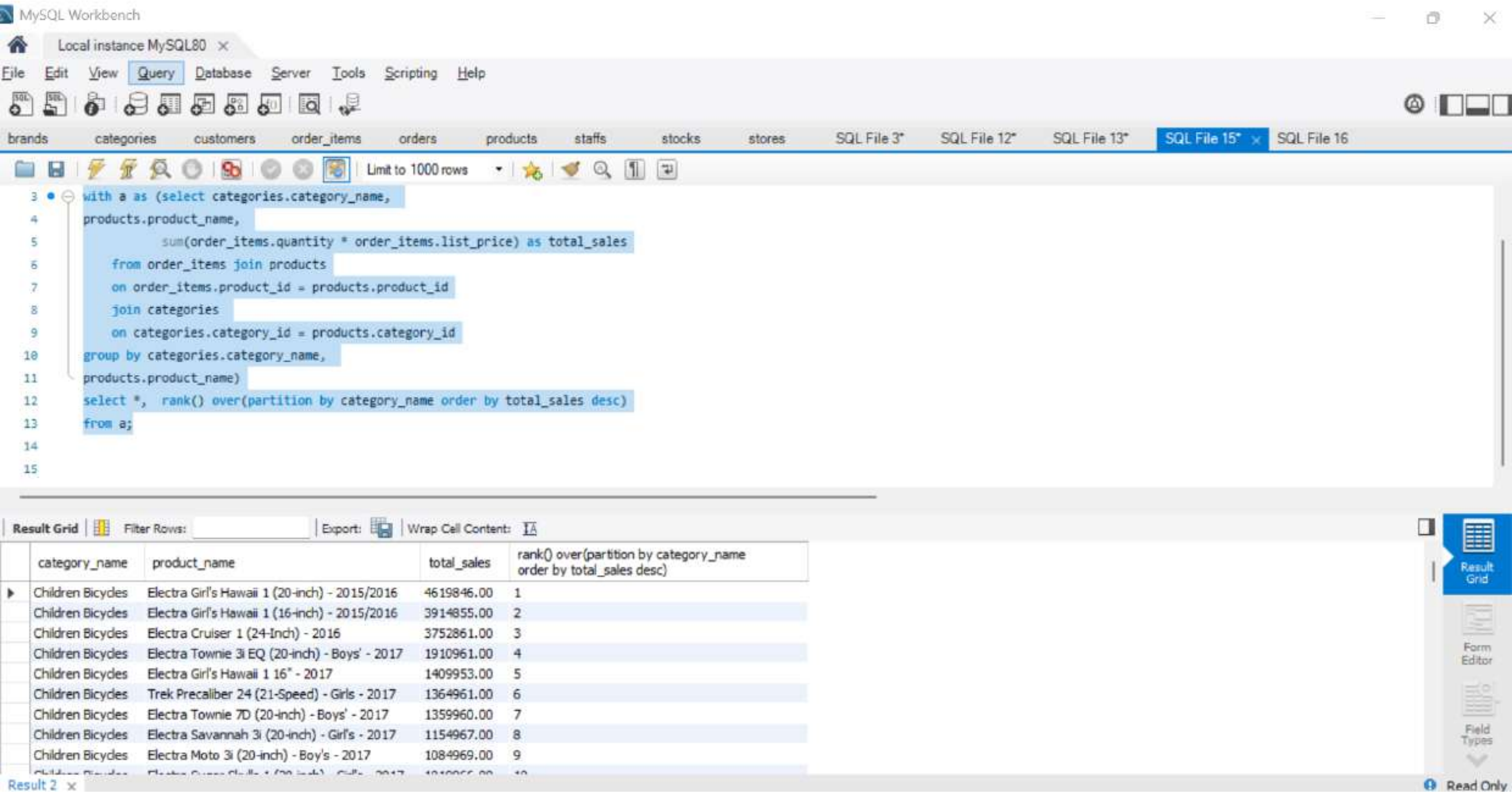
store_name	total_products_sold
Santa Cruz Bikes	1516
Baldwin Bikes	4779
Rowlett Bikes	783



Schema: jenkins

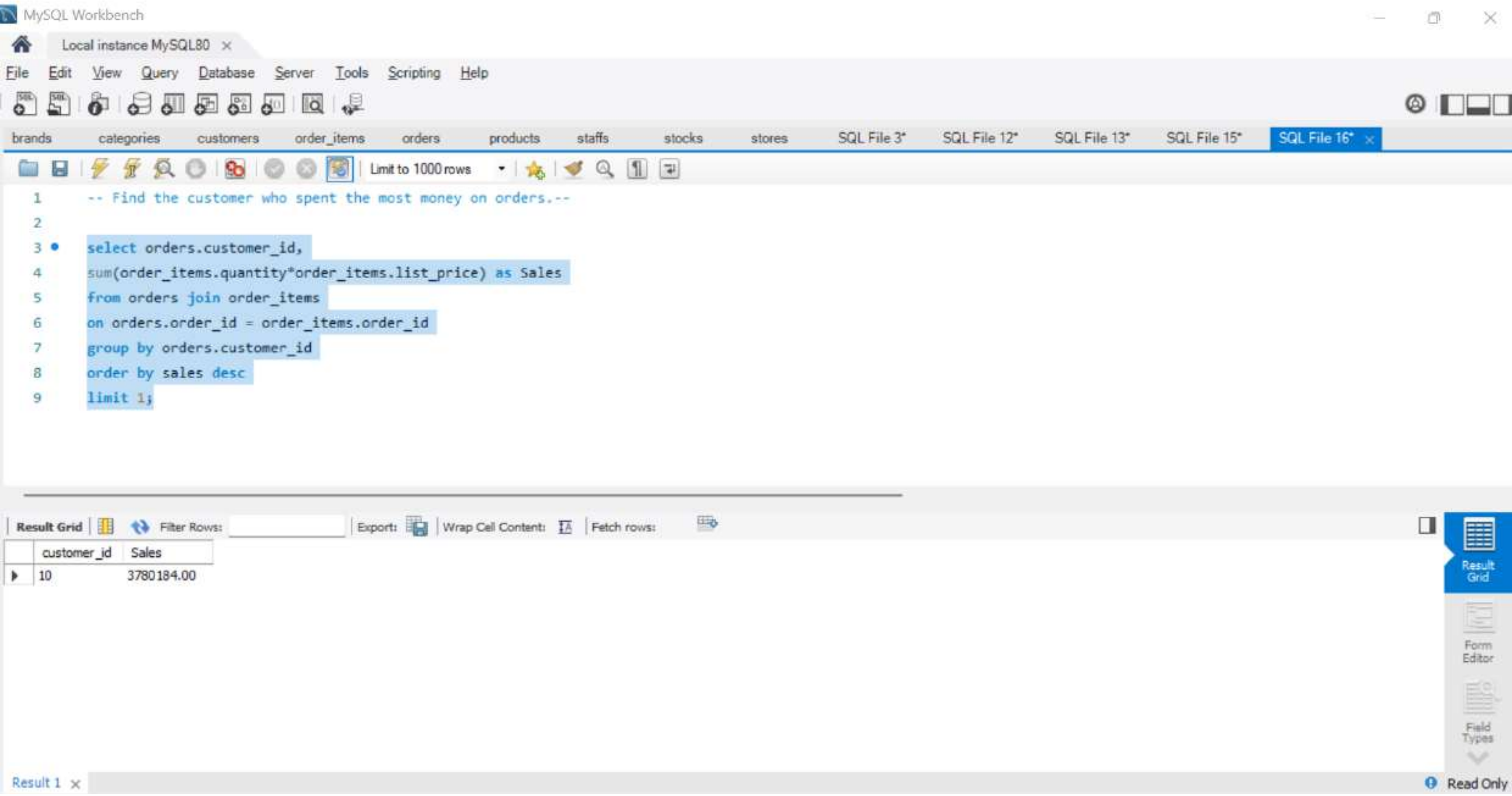
```sql
with a as (select products.product_name,
orders.order_date,
sum(order_items.quantity) total_orders
from products join order_items
on products.product_id = order_items.product_id
join orders
on orders.order_id = order_items.order_id
group by products.product_name,
orders.order_date)

Select *, sum(total_orders)
over(partition by product_name order by order_date)
from a;
```

product_name	order_date	total_orders	sum(total_orders) over(partition by product_name order by order_date)
Electra Amsterdam Fashion 3i Ladies' - 2017/2018	2018-01-01	1	1
Electra Amsterdam Fashion 3i Ladies' - 2017/2018	2018-01-21	2	3
Electra Amsterdam Fashion 3i Ladies' - 2017/2018	2018-04-30	2	5
Electra Amsterdam Fashion 7i Ladies' - 2017	2017-01-29	2	2
Electra Amsterdam Fashion 7i Ladies' - 2017	2017-02-28	1	3
Electra Amsterdam Fashion 7i Ladies' - 2017	2017-03-03	1	4
Electra Amsterdam Fashion 7i Ladies' - 2017	2017-03-09	2	6
Electra Amsterdam Fashion 7i Ladies' - 2017	2017-04-06	1	7
Electra Amsterdam Fashion 7i Ladies' - 2017	2017-04-15	2	9


MySQL Workbench
Local instance MySQL80
File Edit View Query Database Server Tools Scripting Help
brands categories customers order_items orders products staffs stocks stores SQL File 3* SQL File 12* SQL File 13* SQL File 15* SQL File 16
Limit to 1000 rows
Result Grid
Filter Rows:
Export:
Wrap Cell Content:
Result Grid
Form Editor
Field Types
Result 2
Read Only

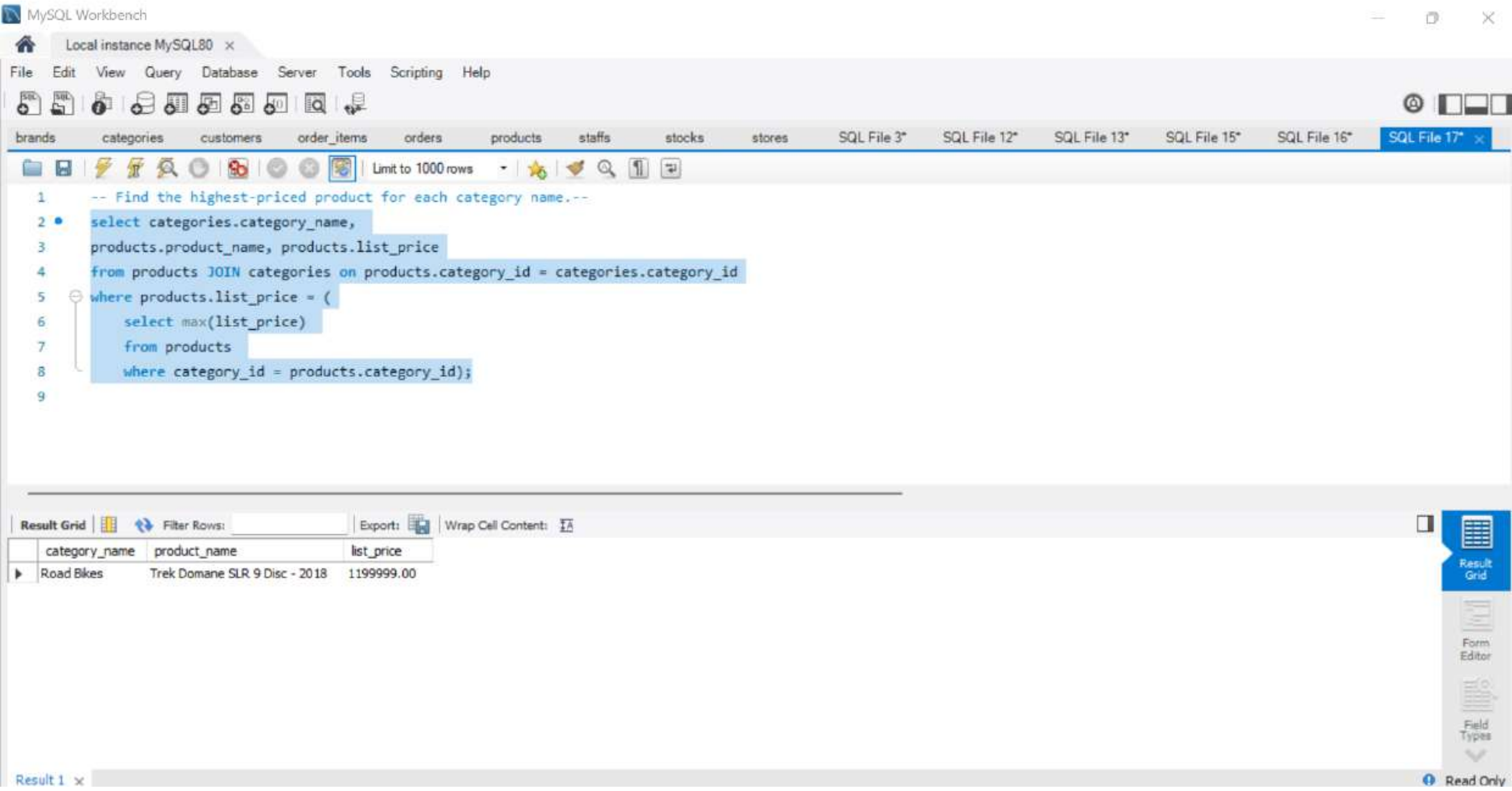
```
with a as (select categories.category_name,
products.product_name,
            sum(order_items.quantity * order_items.list_price) as total_sales
    from order_items join products
    on order_items.product_id = products.product_id
    join categories
    on categories.category_id = products.category_id
group by categories.category_name,
products.product_name)
select *,  rank() over(partition by category_name order by total_sales desc)
from a;
```

category_name	product_name	total_sales	rank() over(partition by category_name order by total_sales desc)
Children Bicycles	Electra Girl's Hawaii 1 (20-inch) - 2015/2016	4619846.00	1
Children Bicycles	Electra Girl's Hawaii 1 (16-inch) - 2015/2016	3914855.00	2
Children Bicycles	Electra Cruiser 1 (24-Inch) - 2016	3752861.00	3
Children Bicycles	Electra Townie 3i EQ (20-inch) - Boys' - 2017	1910961.00	4
Children Bicycles	Electra Girl's Hawaii 1 16" - 2017	1409953.00	5
Children Bicycles	Trek Precaliber 24 (21-Speed) - Girls - 2017	1364961.00	6
Children Bicycles	Electra Townie 7D (20-inch) - Boys' - 2017	1359960.00	7
Children Bicycles	Electra Savannah 3i (20-inch) - Girl's - 2017	1154967.00	8
Children Bicycles	Electra Moto 3i (20-inch) - Boy's - 2017	1084969.00	9
]


MySQL Workbench
Local instance MySQL80
File Edit View Query Database Server Tools Scripting Help
brands categories customers order_items orders products staffs stocks stores SQL File 3* SQL File 12* SQL File 13* SQL File 15* SQL File 16*
Limit to 1000 rows
Result Grid Filter Rows: Export: Wrap Cell Content: Fetch rows:
Result Grid
Form Editor
Field Types
Result 1
Read Only

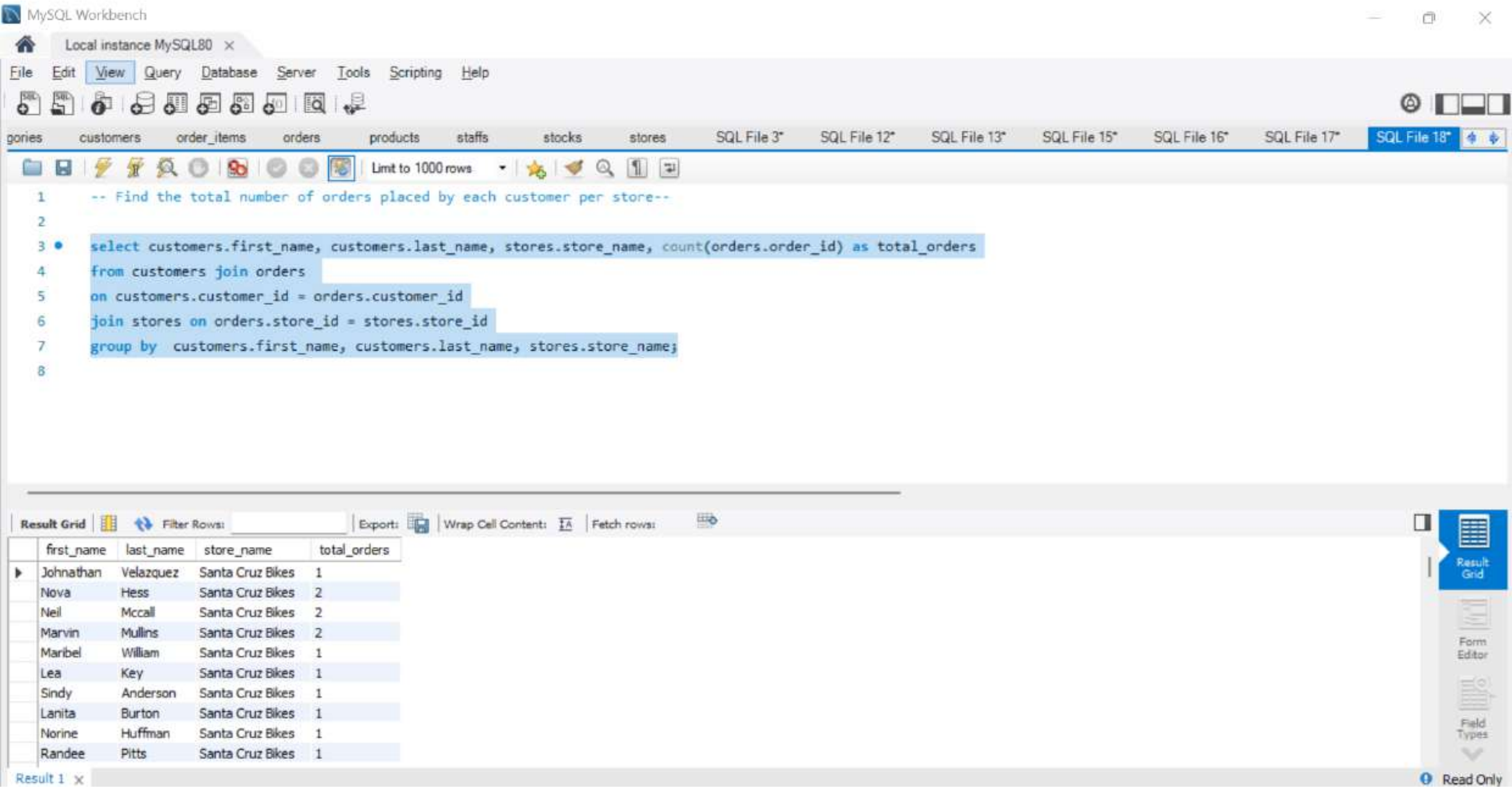
```
-- Find the customer who spent the most money on orders.--

select orders.customer_id,
sum(order_items.quantity*order_items.list_price) as Sales
from orders join order_items
on orders.order_id = order_items.order_id
group by orders.customer_id
order by sales desc
limit 1;
```

customer_id	Sales
10	3780184.00


MySQL Workbench
Local instance MySQL80
File Edit View Query Database Server Tools Scripting Help
brands categories customers order_items orders products staffs stocks stores SQL File 3* SQL File 12* SQL File 13* SQL File 15* SQL File 16* SQL File 17*
Limit to 1000 rows
Result Grid
Filter Rows:
Export:
Wrap Cell Content:
Result Grid
Form Editor
Field Types
Result 1
Read Only

```sql
-- Find the highest-priced product for each category name.--
select categories.category_name,
products.product_name, products.list_price
from products JOIN categories on products.category_id = categories.category_id
where products.list_price = (
    select max(list_price)
    from products
    where category_id = products.category_id);
```

category_name	product_name	list_price
Road Bikes	Trek Domane SLR 9 Disc - 2018	1199999.00


MySQL Workbench
Local instance MySQL80
File Edit View Query Database Server Tools Scripting Help
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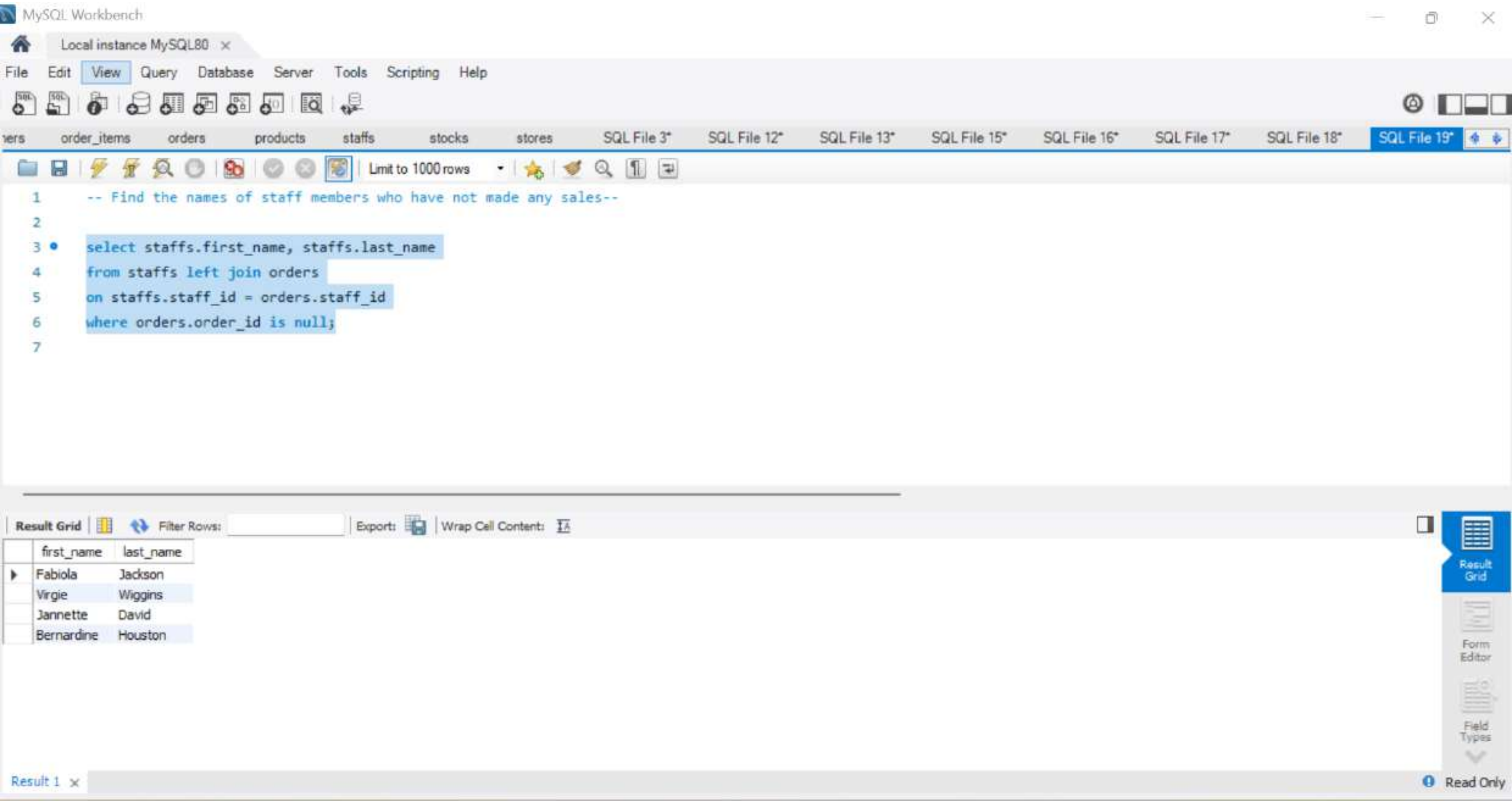
Limit to 1000 rows
Result Grid Filter Rows: Export: Wrap Cell Content: Fetch rows:
Result Grid
Form Editor
Field Types
Result 1
Read Only

```sql
-- Find the total number of orders placed by each customer per store--

select customers.first_name, customers.last_name, stores.store_name, count(orders.order_id) as total_orders
from customers join orders
on customers.customer_id = orders.customer_id
join stores on orders.store_id = stores.store_id
group by  customers.first_name, customers.last_name, stores.store_name;
```

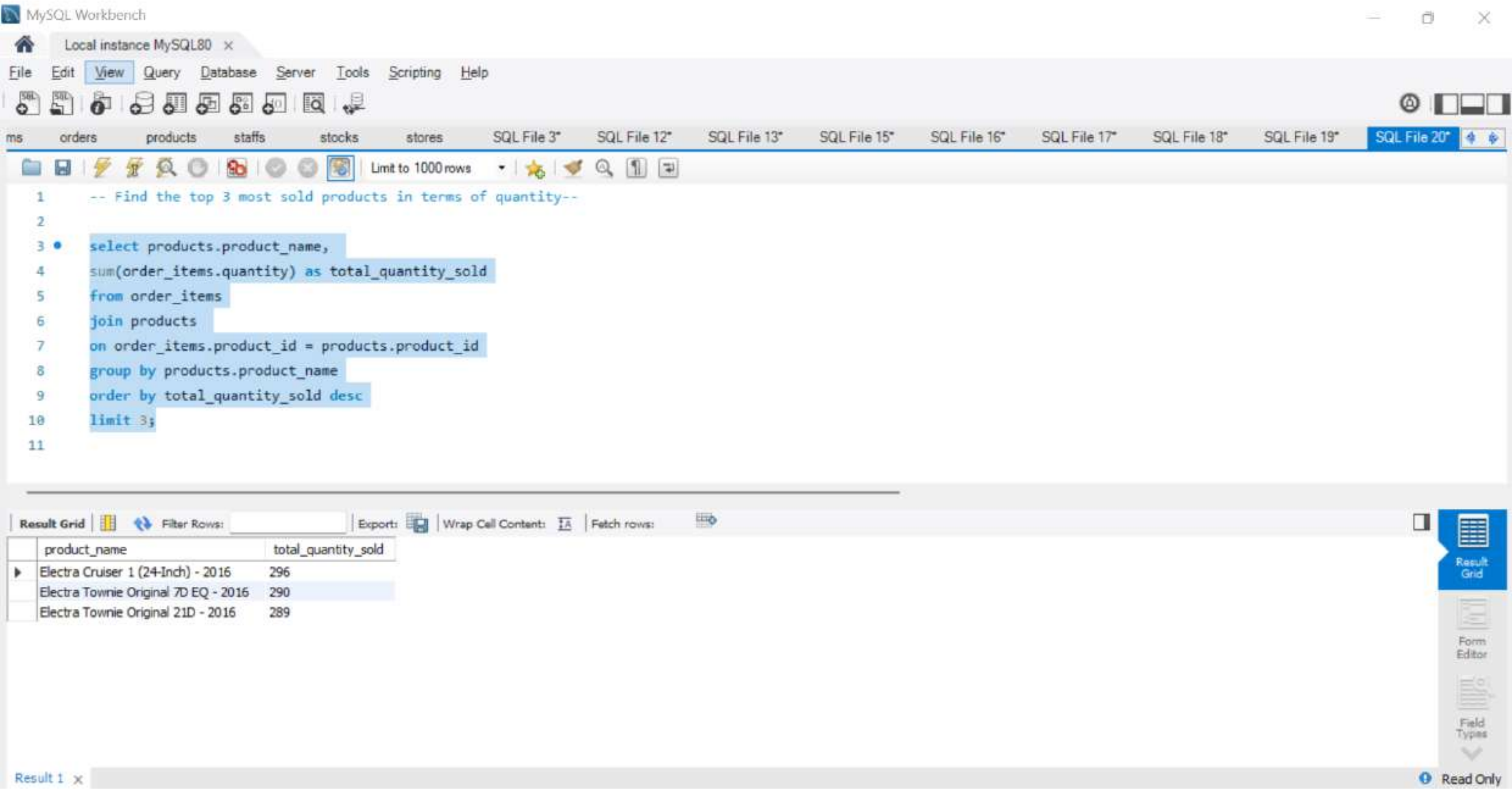
first_name	last_name	store_name	total_orders
Johnathan	Velazquez	Santa Cruz Bikes	1
Nova	Hess	Santa Cruz Bikes	2
Neil	Mccall	Santa Cruz Bikes	2
Marvin	Mullins	Santa Cruz Bikes	2
Maribel	William	Santa Cruz Bikes	1
Lea	Key	Santa Cruz Bikes	1
Sindy	Anderson	Santa Cruz Bikes	1
Lanita	Burton	Santa Cruz Bikes	1
Norine	Huffman	Santa Cruz Bikes	1
Randee	Pitts	Santa Cruz Bikes	1



```sql
-- Find the names of staff members who have not made any sales--

select staffs.first_name, staffs.last_name
from staffs left join orders
on staffs.staff_id = orders.staff_id
where orders.order_id is null;
```

first_name	last_name
Fabiola	Jackson
Virgie	Wiggins
Jannette	David
Bernardine	Houston


MySQL Workbench
Local instance MySQL80
File Edit View Query Database Server Tools Scripting Help
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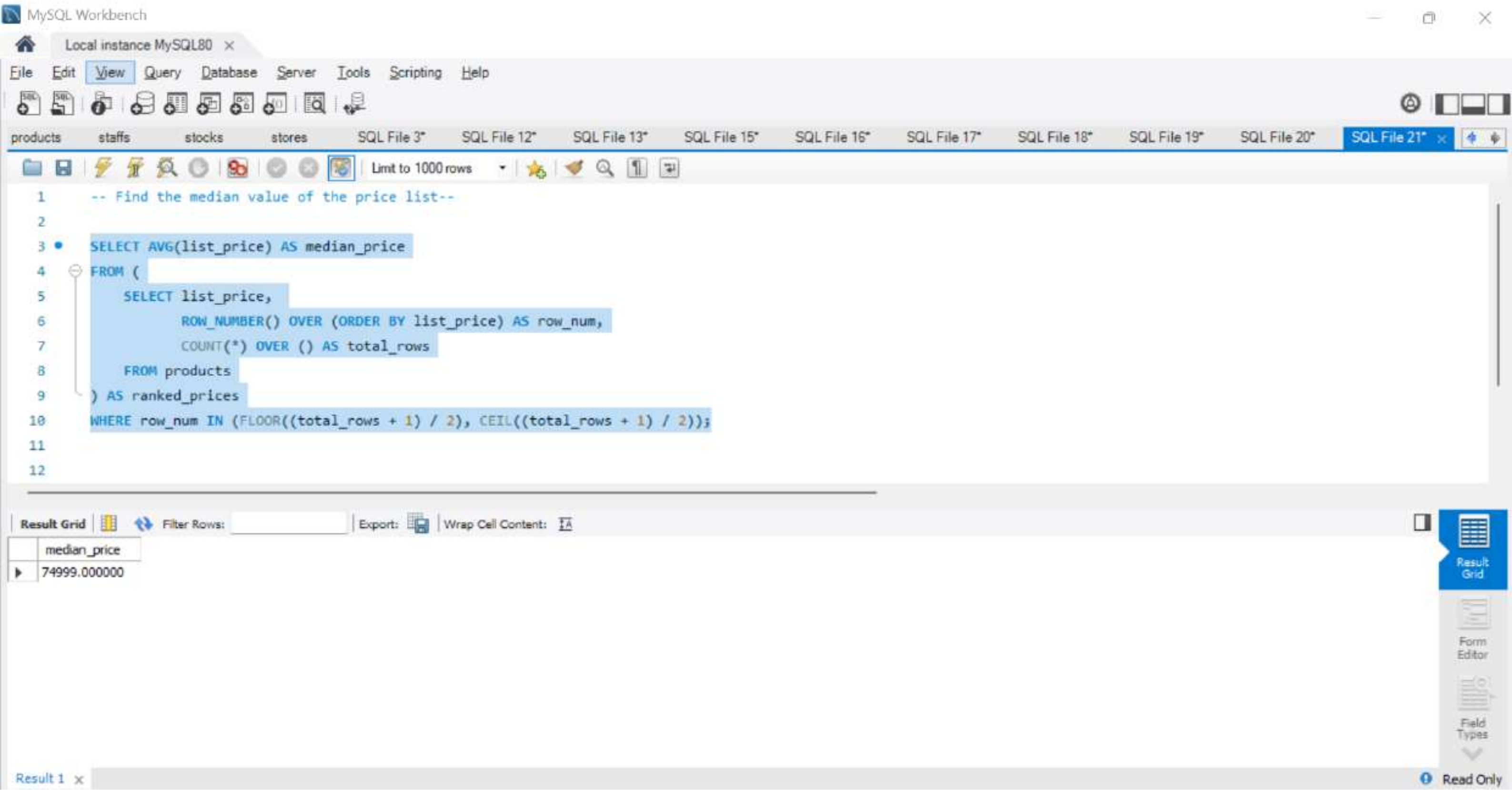
Limit to 1000 rows
Result Grid Filter Rows: Export: Wrap Cell Content: Fetch rows:
Result Grid
Form Editor
Field Types
Result 1
Read Only

```
-- Find the top 3 most sold products in terms of quantity--

select products.product_name,
sum(order_items.quantity) as total_quantity_sold
from order_items
join products
on order_items.product_id = products.product_id
group by products.product_name
order by total_quantity_sold desc
limit 3;
```

product_name	total_quantity_sold
Electra Cruiser 1 (24-Inch) - 2016	296
Electra Townie Original 7D EQ - 2016	290
Electra Townie Original 21D - 2016	289


MySQL Workbench
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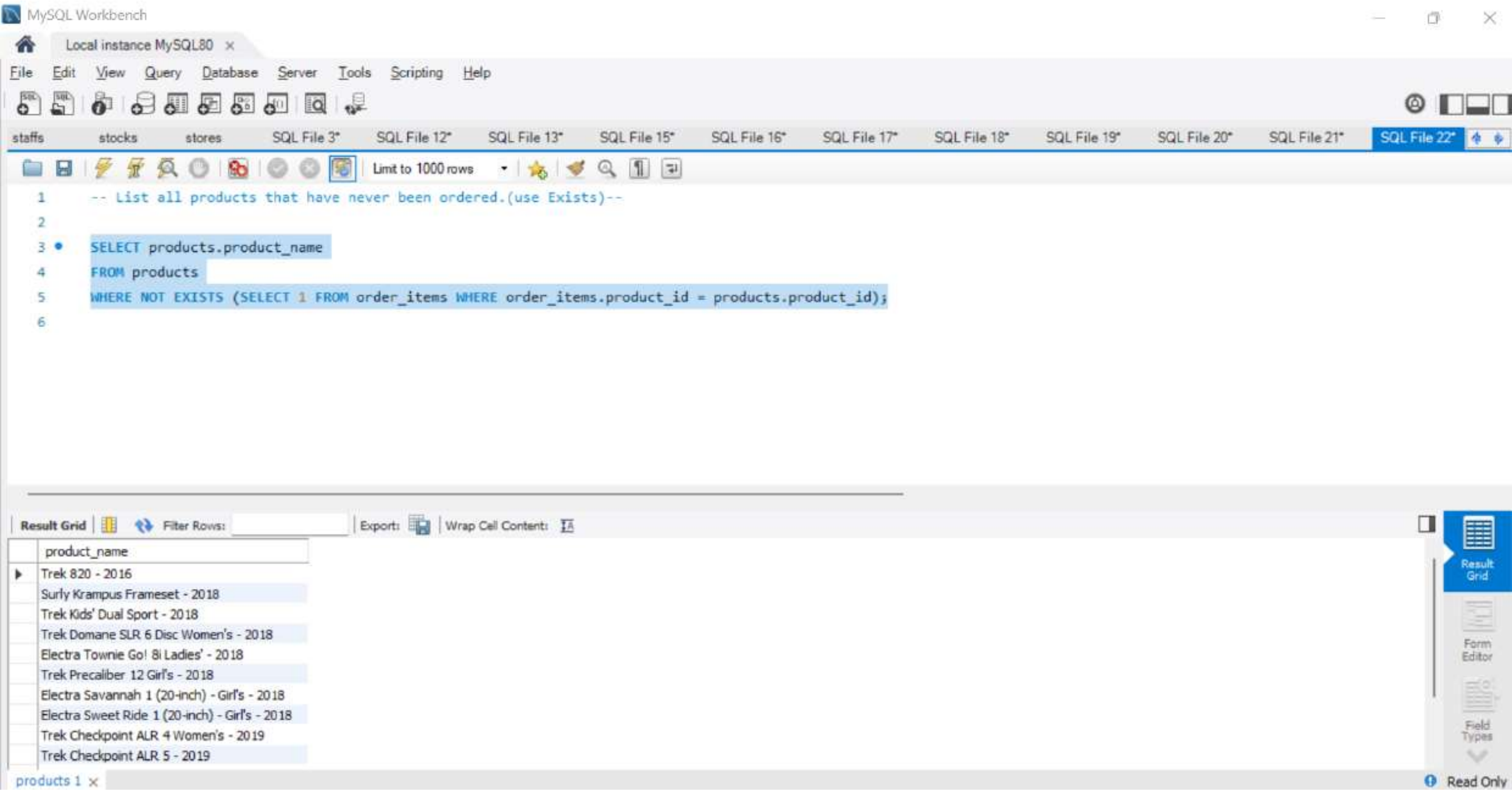
products staffs stocks stores SQL File 3* SQL File 12* SQL File 13* SQL File 15* SQL File 16* SQL File 17* SQL File 18* SQL File 19* SQL File 20* SQL File 21*
Limit to 1000 rows
Result Grid Filter Rows: Export: Wrap Cell Content:
Result Grid
Form Editor
Field Types
Result 1
Read Only

```
-- Find the median value of the price list--

SELECT AVG(list_price) AS median_price
FROM (
    SELECT list_price,
           ROW_NUMBER() OVER (ORDER BY list_price) AS row_num,
           COUNT(*) OVER () AS total_rows
    FROM products
) AS ranked_prices
WHERE row_num IN (FLOOR((total_rows + 1) / 2), CEIL((total_rows + 1) / 2));
```

```
median_price
74999.000000
```



MySQL Workbench
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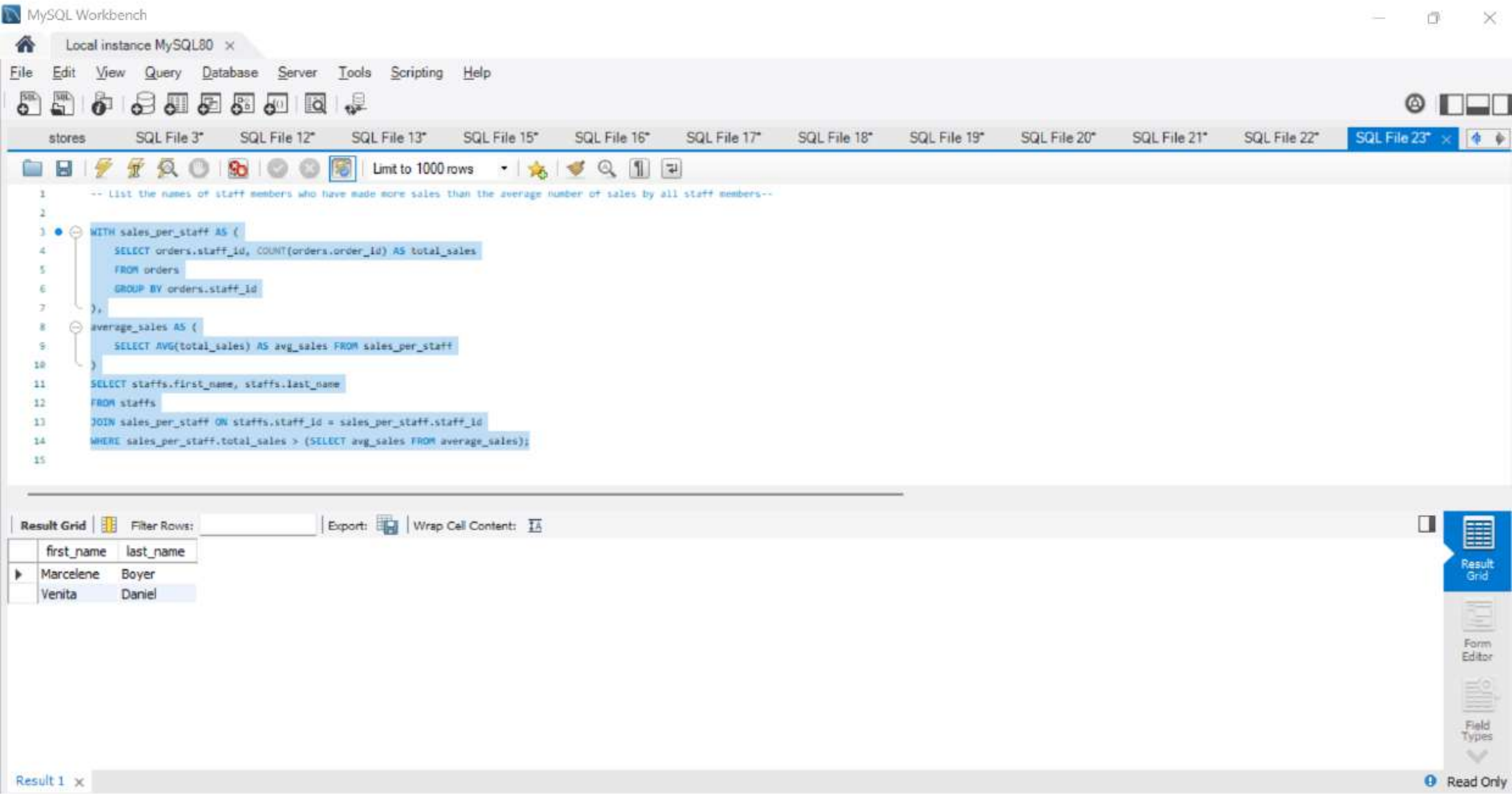
staffs stocks stores SQL File 3* SQL File 12* SQL File 13* SQL File 15* SQL File 16* SQL File 17* SQL File 18* SQL File 19* SQL File 20* SQL File 21* SQL File 22*
Limit to 1000 rows
Result Grid
Filter Rows:
Export:
Wrap Cell Content:
Result Grid
Form Editor
Field Types
products 1
Read Only

```sql
-- List all products that have never been ordered.(use Exists)--

SELECT products.product_name
FROM products
WHERE NOT EXISTS (SELECT 1 FROM order_items WHERE order_items.product_id = products.product_id);
```

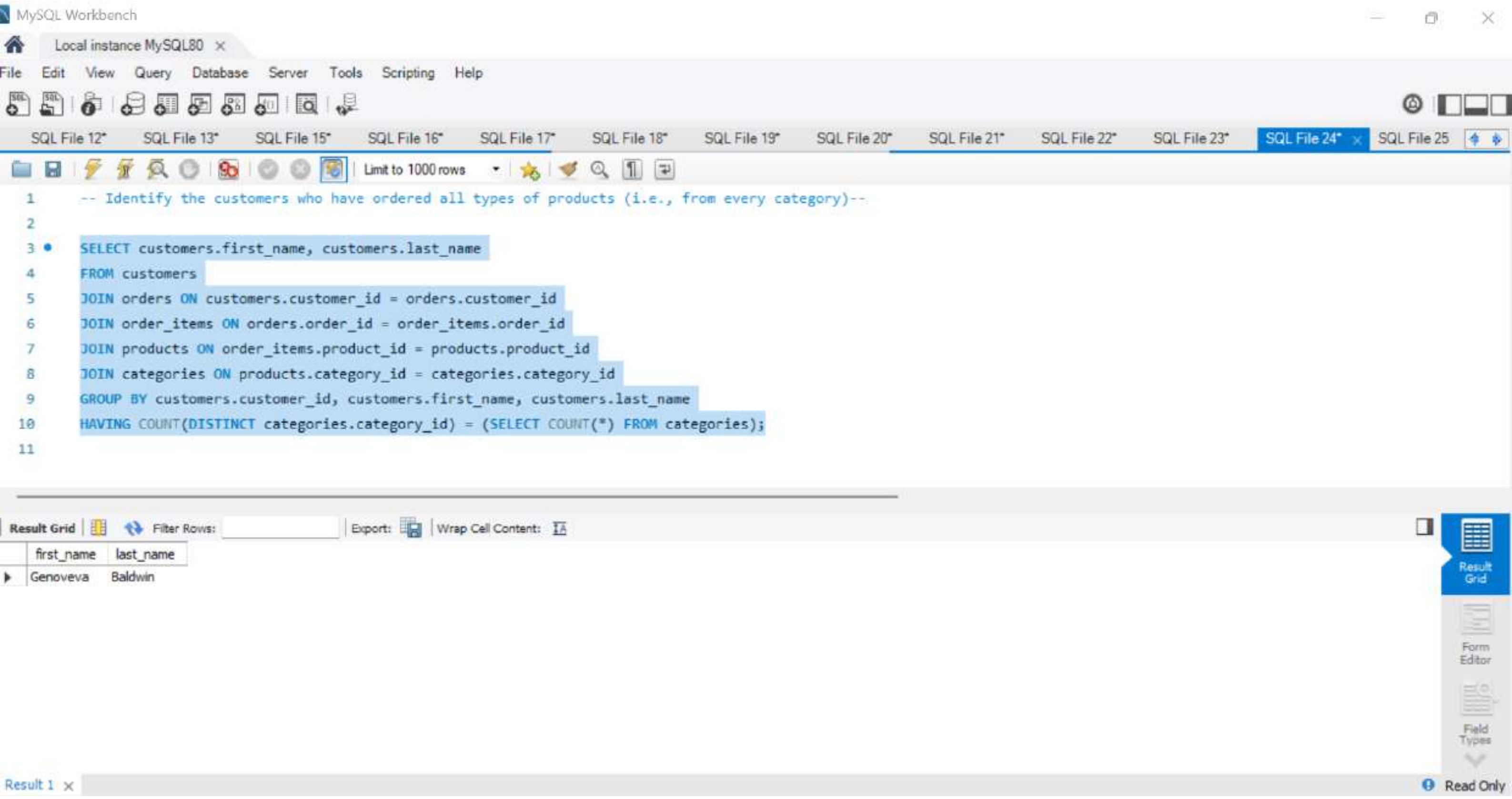
product_name
Trek 820 - 2016
Surly Krampus Frameset - 2018
Trek Kids' Dual Sport - 2018
Trek Domane SLR 6 Disc Women's - 2018
Electra Townie Go! 8i Ladies' - 2018
Trek Precaliber 12 Girl's - 2018
Electra Savannah 1 (20-inch) - Girl's - 2018
Electra Sweet Ride 1 (20-inch) - Girl's - 2018
Trek Checkpoint ALR 4 Women's - 2019
Trek Checkpoint ALR 5 - 2019



```sql
-- List the names of staff members who have made more sales than the average number of sales by all staff members--

WITH sales_per_staff AS (
    SELECT orders.staff_id, COUNT(orders.order_id) AS total_sales
    FROM orders
    GROUP BY orders.staff_id
),
average_sales AS (
    SELECT AVG(total_sales) AS avg_sales FROM sales_per_staff
)
SELECT staffs.first_name, staffs.last_name
FROM staffs
JOIN sales_per_staff ON staffs.staff_id = sales_per_staff.staff_id
WHERE sales_per_staff.total_sales > (SELECT avg_sales FROM average_sales);
```

first_name	last_name
Marcelene	Boyer
Venita	Daniel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Limit to 1000 rows
Result Grid
Filter Rows:
Export:
Wrap Cell Content:
Result Grid
Form Editor
Field Types
Result 1
Read Only

```
-- Identify the customers who have ordered all types of products (i.e., from every category)--

SELECT customers.first_name, customers.last_name
FROM customers
JOIN orders ON customers.customer_id = orders.customer_id
JOIN order_items ON orders.order_id = order_items.order_id
JOIN products ON order_items.product_id = products.product_id
JOIN categories ON products.category_id = categories.category_id
GROUP BY customers.customer_id, customers.first_name, customers.last_name
HAVING COUNT(DISTINCT categories.category_id) = (SELECT COUNT(*) FROM categories);
```

first_name	last_name
Genoveva	Baldwin