JENSON USA

ABOUT COMPANY

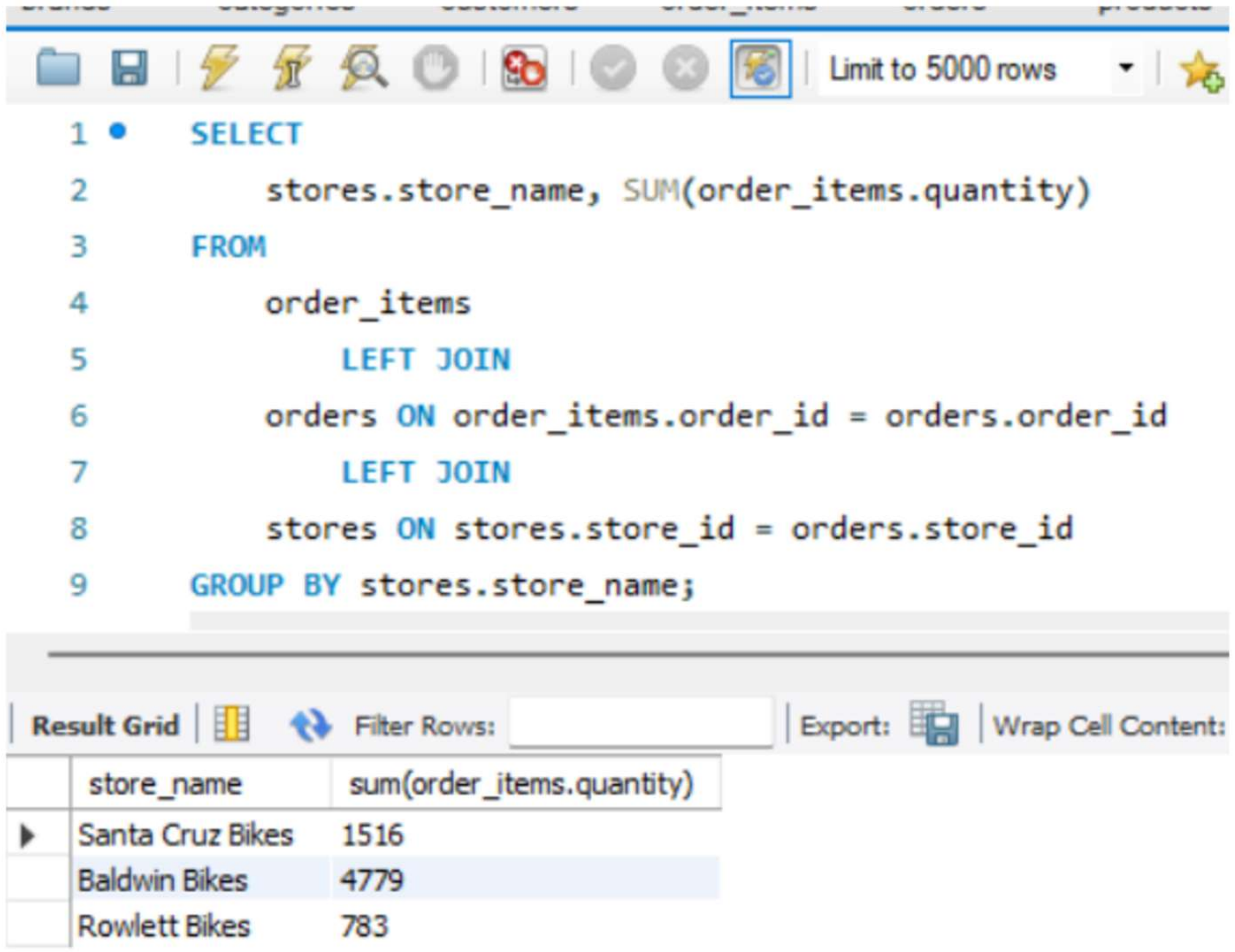
Jenson USA is a trusted American bicycle retailer founded in 1994, offering a wide range of bikes, parts, accessories, and gear both online and through physical stores. Known for its competitive pricing, fast shipping, and strong community involvement, Jenson USA has earned a solid reputation among cycling enthusiasts across the U.S.

CONTINUE

PROJECT OVERVIEW

This project involves analyzing sales and customer data from Jenson USA using SQL to generate key business insights. By applying advanced SQL techniques such as JOINs to combine data from multiple tables, Common Table Expressions (CTEs) for better query organization, and RANK functions for identifying top-performing products and customers, the project aims to uncover patterns in purchasing behavior, product popularity, and regional sales performance. The goal is to support data-driven decision-making and improve customer engagement strategies.

Find the total number of products sold by each store along with the store name.

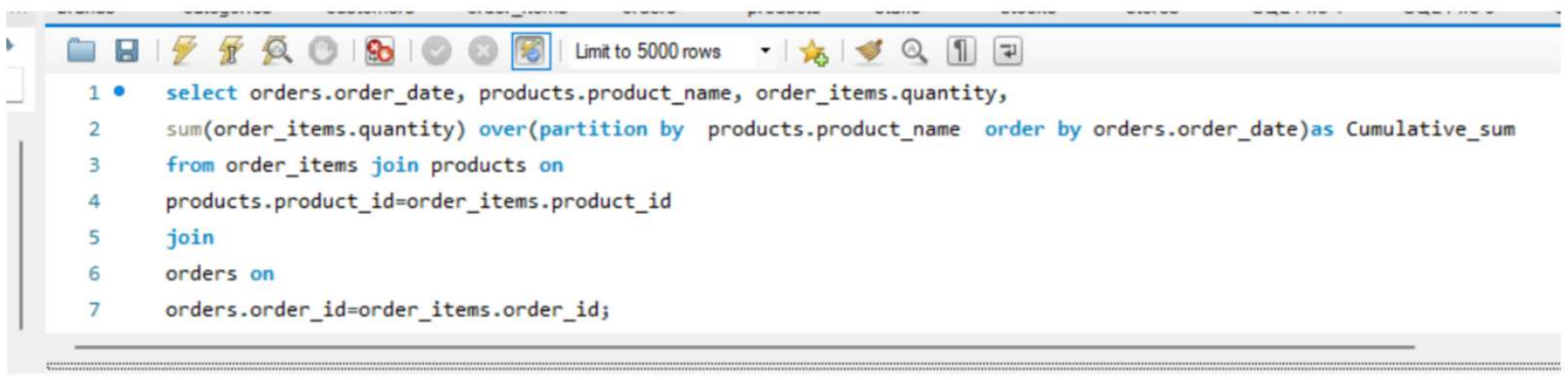

Limit to 5000 rows

```sql
SELECT
    stores.store_name, SUM(order_items.quantity)
FROM
    order_items
        LEFT JOIN
    orders ON order_items.order_id = orders.order_id
        LEFT JOIN
    stores ON stores.store_id = orders.store_id
GROUP BY stores.store_name;
```

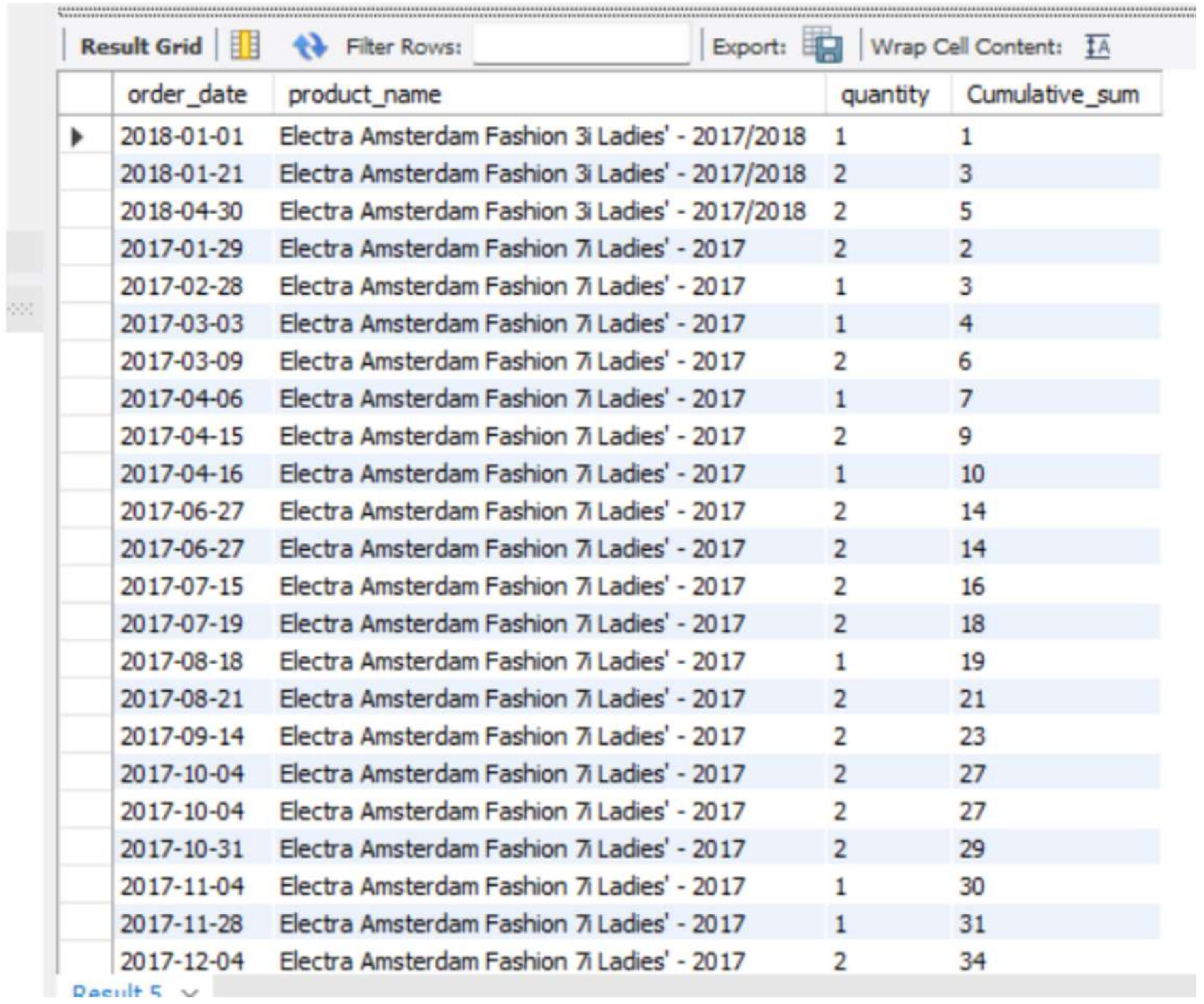
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

store_name	sum(order_items.quantity)
Santa Cruz Bikes	1516
Baldwin Bikes	4779
Rowlett Bikes	783

Calculate the cumulative sum of quantities sold for each product over time.

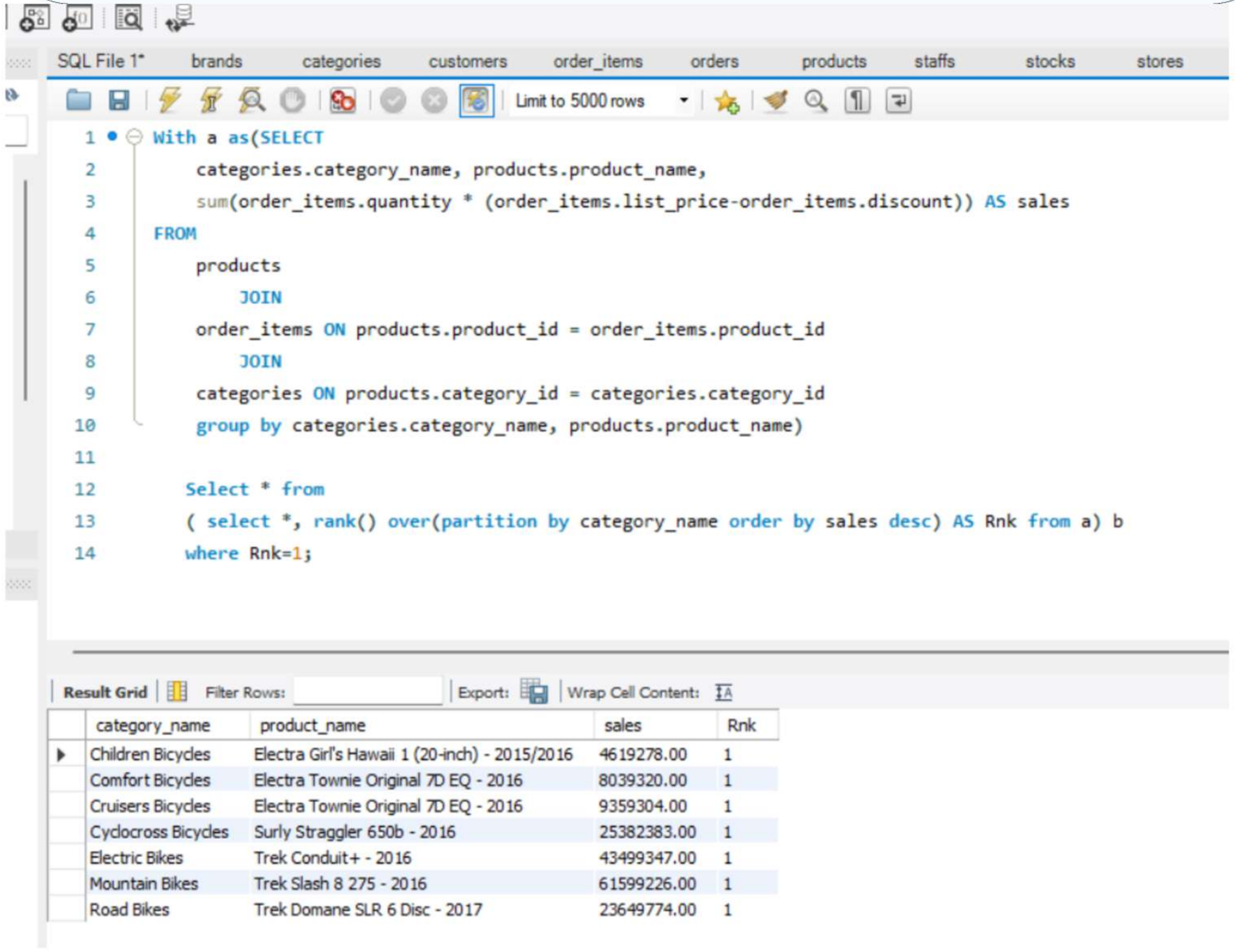


```sql
select orders.order_date, products.product_name, order_items.quantity,
sum(order_items.quantity) over(partition by  products.product_name  order by orders.order_date)as Cumulative_sum
from order_items join products on
products.product_id=order_items.product_id
join
orders on
orders.order_id=order_items.order_id;
```



order_date	product_name	quantity	Cumulative_sum
2018-01-01	Electra Amsterdam Fashion 3i Ladies' - 2017/2018	1	1
2018-01-21	Electra Amsterdam Fashion 3i Ladies' - 2017/2018	2	3
2018-04-30	Electra Amsterdam Fashion 3i Ladies' - 2017/2018	2	5
2017-01-29	Electra Amsterdam Fashion 7i Ladies' - 2017	2	2
2017-02-28	Electra Amsterdam Fashion 7i Ladies' - 2017	1	3
2017-03-03	Electra Amsterdam Fashion 7i Ladies' - 2017	1	4
2017-03-09	Electra Amsterdam Fashion 7i Ladies' - 2017	2	6
2017-04-06	Electra Amsterdam Fashion 7i Ladies' - 2017	1	7
2017-04-15	Electra Amsterdam Fashion 7i Ladies' - 2017	2	9
2017-04-16	Electra Amsterdam Fashion 7i Ladies' - 2017	1	10
2017-06-27	Electra Amsterdam Fashion 7i Ladies' - 2017	2	14
2017-06-27	Electra Amsterdam Fashion 7i Ladies' - 2017	2	14
2017-07-15	Electra Amsterdam Fashion 7i Ladies' - 2017	2	16
2017-07-19	Electra Amsterdam Fashion 7i Ladies' - 2017	2	18
2017-08-18	Electra Amsterdam Fashion 7i Ladies' - 2017	1	19
2017-08-21	Electra Amsterdam Fashion 7i Ladies' - 2017	2	21
2017-09-14	Electra Amsterdam Fashion 7i Ladies' - 2017	2	23
2017-10-04	Electra Amsterdam Fashion 7i Ladies' - 2017	2	27
2017-10-04	Electra Amsterdam Fashion 7i Ladies' - 2017	2	27
2017-10-31	Electra Amsterdam Fashion 7i Ladies' - 2017	2	29
2017-11-04	Electra Amsterdam Fashion 7i Ladies' - 2017	1	30
2017-11-28	Electra Amsterdam Fashion 7i Ladies' - 2017	1	31
2017-12-04	Electra Amsterdam Fashion 7i Ladies' - 2017	2	34

Find the product with the highest total sales (quantity * price) for each category.



SQL File 1* brands categories customers order_items orders products staffs stocks stores

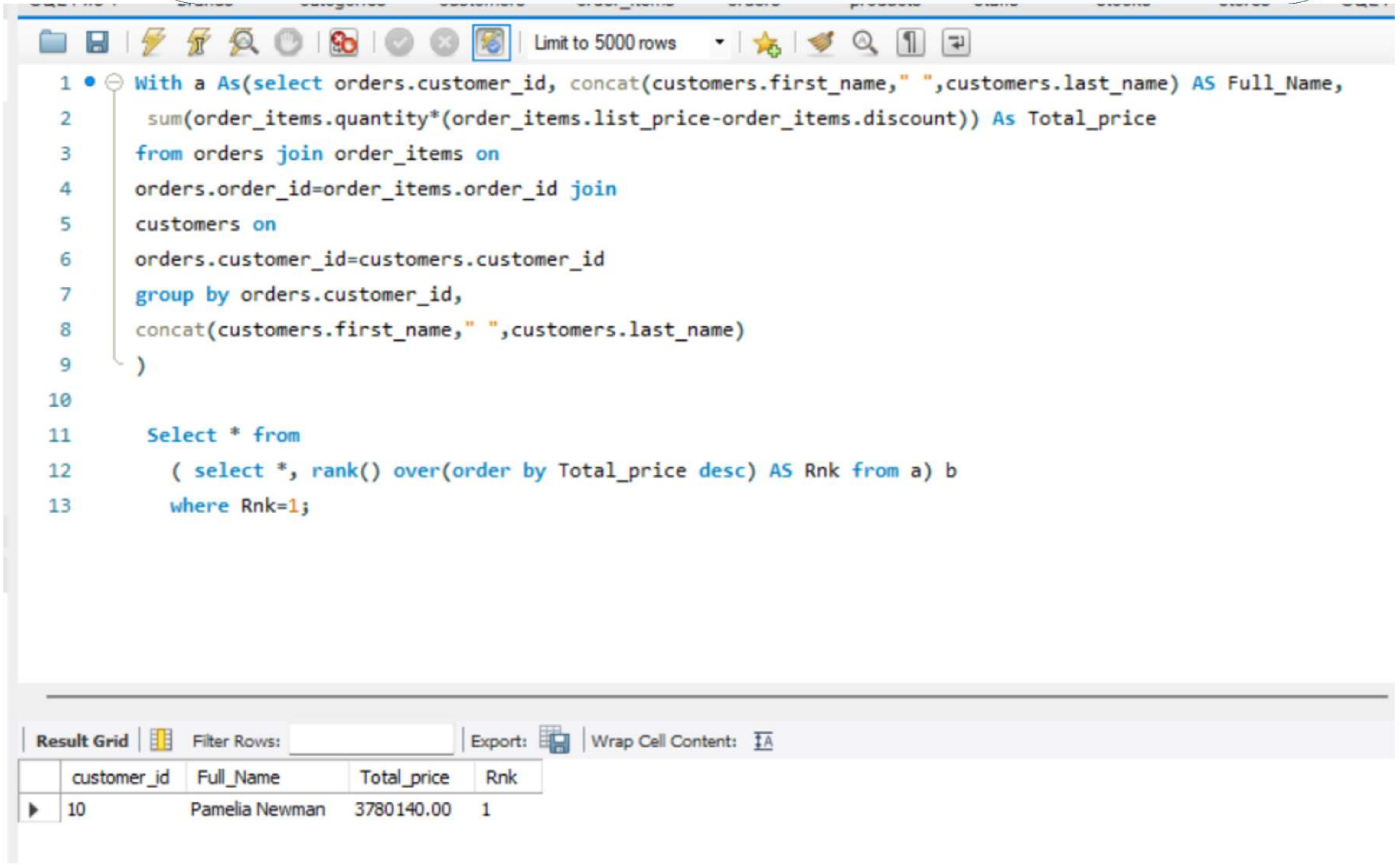
Limit to 5000 rows

```
With a as(SELECT
    categories.category_name, products.product_name,
    sum(order_items.quantity * (order_items.list_price-order_items.discount)) AS sales
FROM
    products
        JOIN
    order_items ON products.product_id = order_items.product_id
        JOIN
    categories ON products.category_id = categories.category_id
    group by categories.category_name, products.product_name)

   Select * from
   ( select *, rank() over(partition by category_name order by sales desc) AS Rnk from a) b
   where Rnk=1;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

category_name	product_name	sales	Rnk
Children Bicycles	Electra Girl's Hawaii 1 (20-inch) - 2015/2016	4619278.00	1
Comfort Bicycles	Electra Townie Original 7D EQ - 2016	8039320.00	1
Cruisers Bicycles	Electra Townie Original 7D EQ - 2016	9359304.00	1
Cyclocross Bicycles	Surly Straggler 650b - 2016	25382383.00	1
Electric Bikes	Trek Conduit+ - 2016	43499347.00	1
Mountain Bikes	Trek Slash 8 275 - 2016	61599226.00	1
Road Bikes	Trek Domane SLR 6 Disc - 2017	23649774.00	1

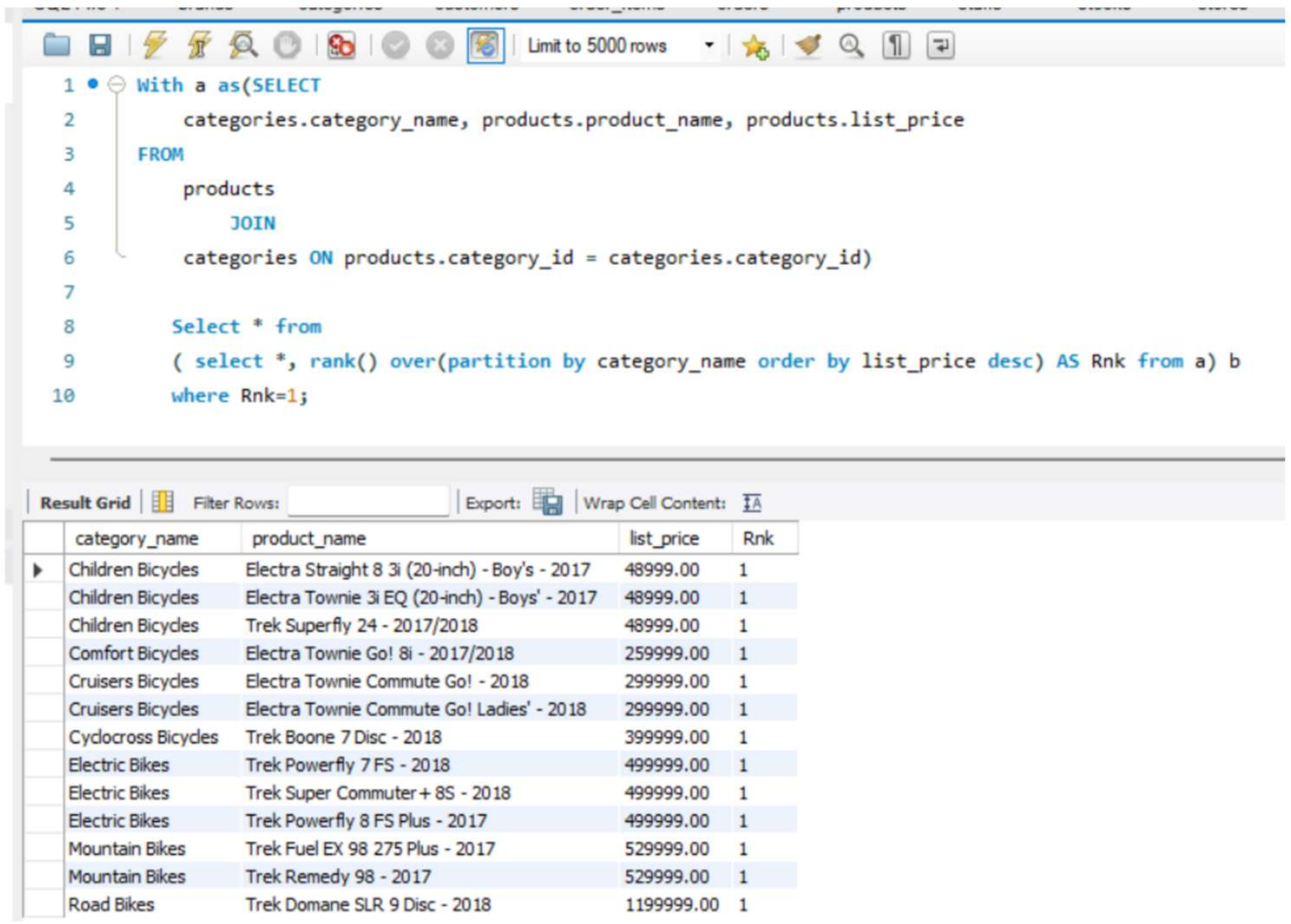
Find the customer who spent the most money on orders.



```
With a As(select orders.customer_id, concat(customers.first_name," ",customers.last_name) AS Full_Name,
 sum(order_items.quantity*(order_items.list_price-order_items.discount)) As Total_price
from orders join order_items on
orders.order_id=order_items.order_id join
customers on
orders.customer_id=customers.customer_id
group by orders.customer_id,
concat(customers.first_name," ",customers.last_name)
)

 Select * from
   ( select *, rank() over(order by Total_price desc) AS Rnk from a) b
   where Rnk=1;
```

customer_id	Full_Name	Total_price	Rnk
10	Pamelia Newman	3780140.00	1

Find the highest-priced product for each category name.

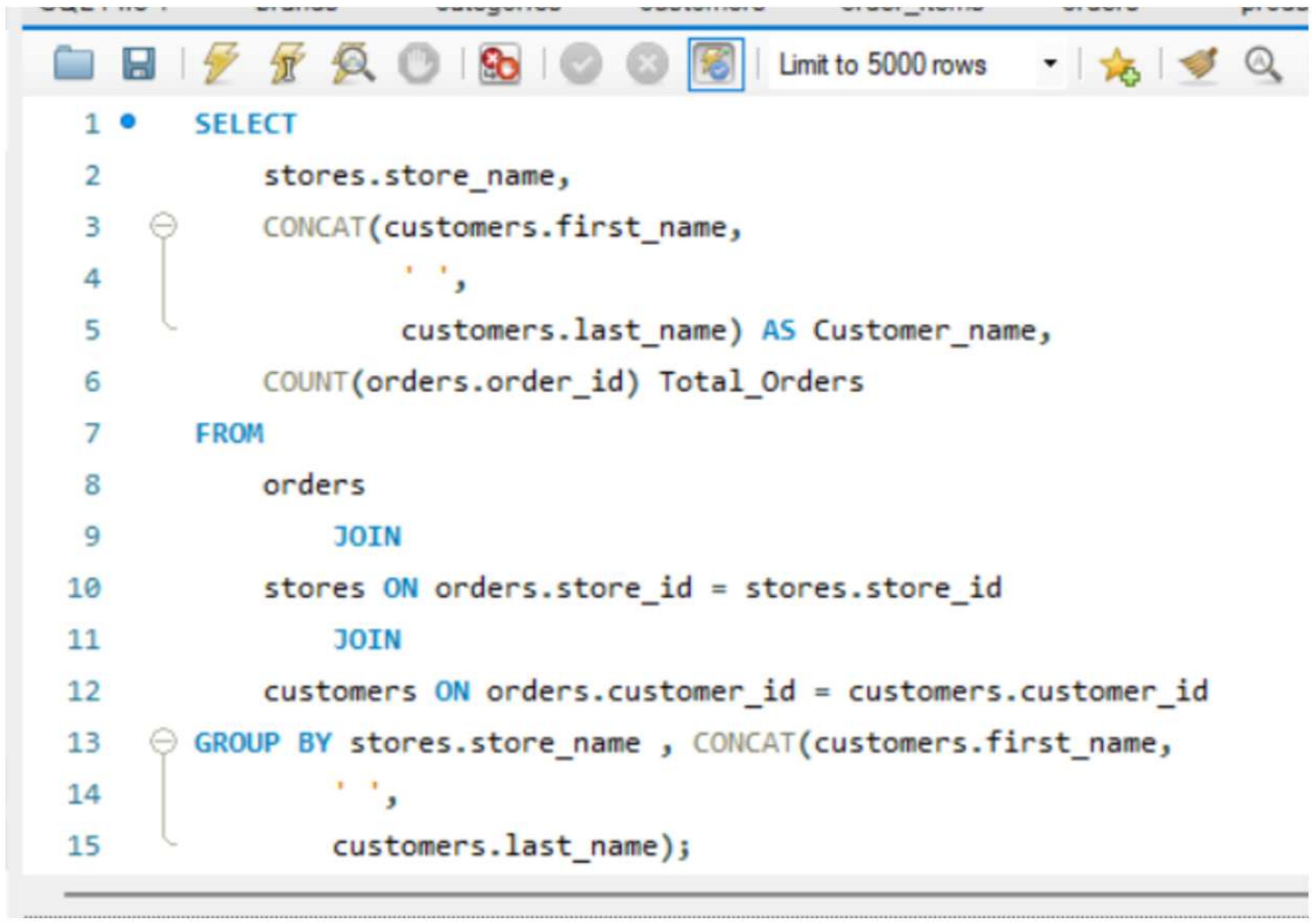


Limit to 5000 rows

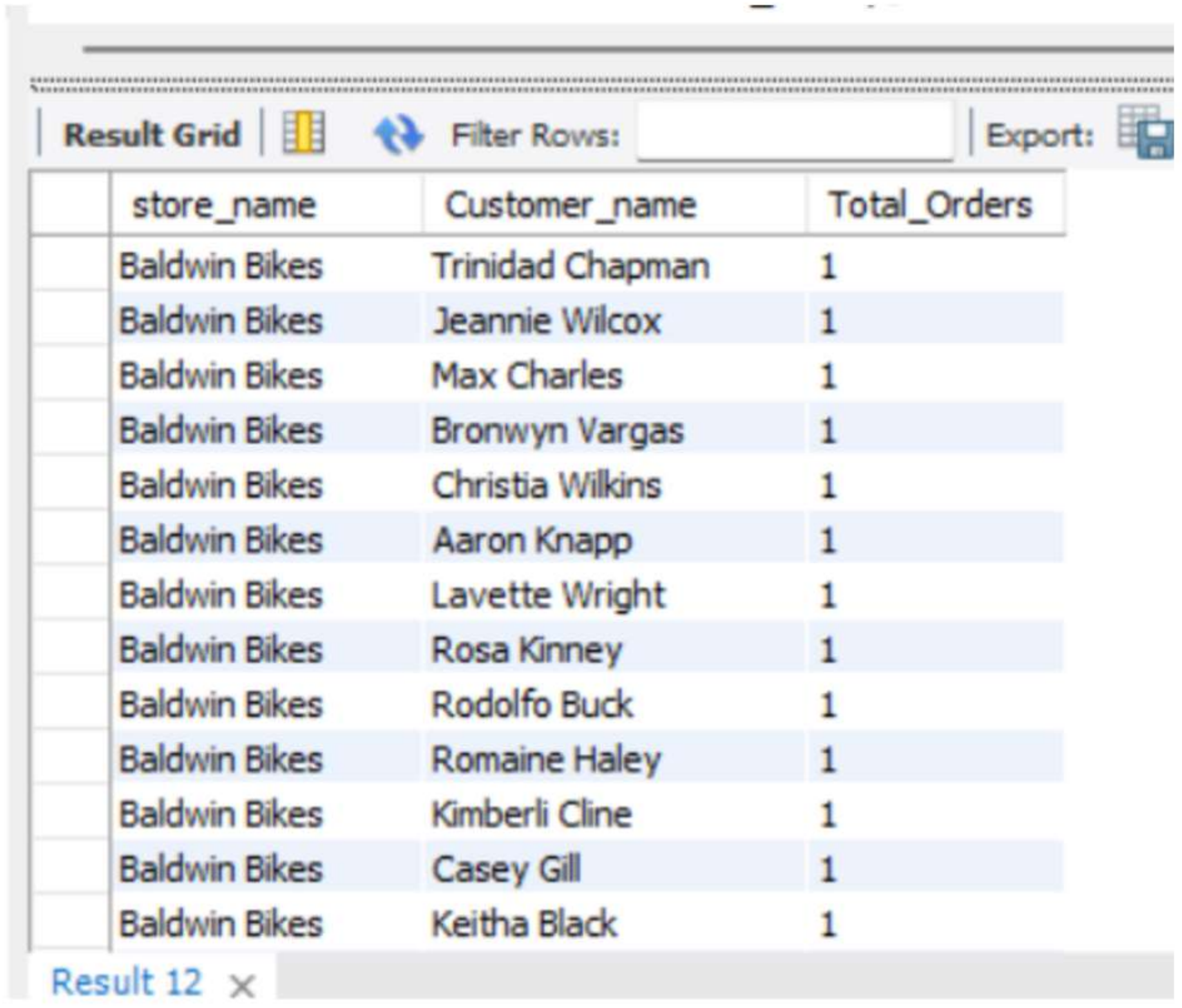
```sql
With a as(SELECT
    categories.category_name, products.product_name, products.list_price
FROM
    products
        JOIN
    categories ON products.category_id = categories.category_id)

  Select * from
  ( select *, rank() over(partition by category_name order by list_price desc) AS Rnk from a) b
  where Rnk=1;
```

category_name	product_name	list_price	Rnk
Children Bicycles	Electra Straight 8 3i (20-inch) - Boy's - 2017	48999.00	1
Children Bicycles	Electra Townie 3i EQ (20-inch) - Boys' - 2017	48999.00	1
Children Bicycles	Trek Superfly 24 - 2017/2018	48999.00	1
Comfort Bicycles	Electra Townie Go! 8i - 2017/2018	259999.00	1
Cruisers Bicycles	Electra Townie Commute Go! - 2018	299999.00	1
Cruisers Bicycles	Electra Townie Commute Go! Ladies' - 2018	299999.00	1
Cyclocross Bicycles	Trek Boone 7 Disc - 2018	399999.00	1
Electric Bikes	Trek Powerfly 7 FS - 2018	499999.00	1
Electric Bikes	Trek Super Commuter + 8S - 2018	499999.00	1
Electric Bikes	Trek Powerfly 8 FS Plus - 2017	499999.00	1
Mountain Bikes	Trek Fuel EX 98 275 Plus - 2017	529999.00	1
Mountain Bikes	Trek Remedy 98 - 2017	529999.00	1
Road Bikes	Trek Domane SLR 9 Disc - 2018	1199999.00	1

Find the total number of orders placed by each customer per store.


Limit to 5000 rows

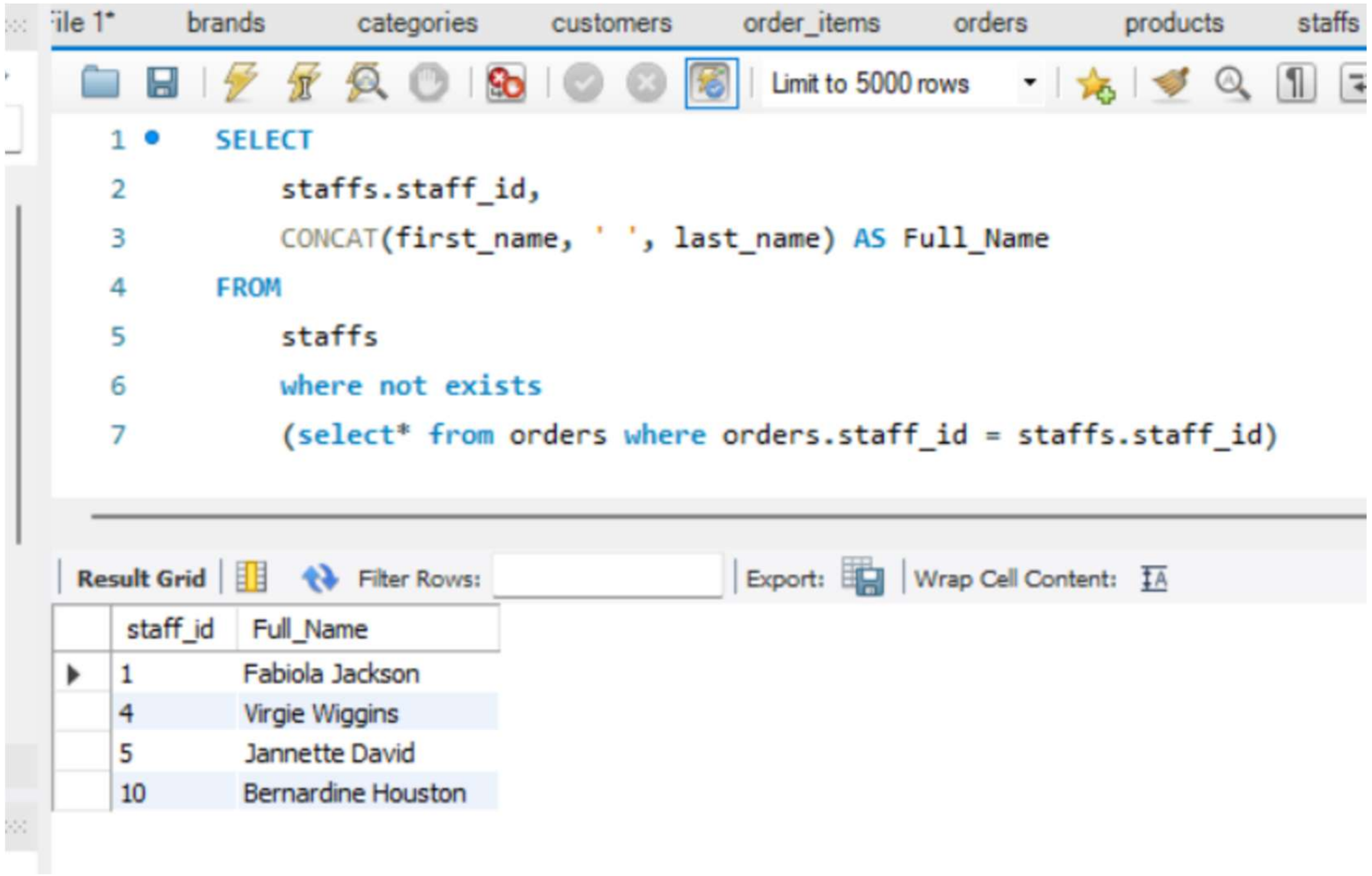
```sql
SELECT
    stores.store_name,
    CONCAT(customers.first_name,
            ' ',
            customers.last_name) AS Customer_name,
    COUNT(orders.order_id) Total_Orders
FROM
    orders
        JOIN
    stores ON orders.store_id = stores.store_id
        JOIN
    customers ON orders.customer_id = customers.customer_id
GROUP BY stores.store_name , CONCAT(customers.first_name,
        ' ',
        customers.last_name);
```


Result Grid | Filter Rows: | Export:

store_name	Customer_name	Total_Orders
Baldwin Bikes	Trinidad Chapman	1
Baldwin Bikes	Jeannie Wilcox	1
Baldwin Bikes	Max Charles	1
Baldwin Bikes	Bronwyn Vargas	1
Baldwin Bikes	Christia Wilkins	1
Baldwin Bikes	Aaron Knapp	1
Baldwin Bikes	Lavette Wright	1
Baldwin Bikes	Rosa Kinney	1
Baldwin Bikes	Rodolfo Buck	1
Baldwin Bikes	Romaine Haley	1
Baldwin Bikes	Kimberli Cline	1
Baldwin Bikes	Casey Gill	1
Baldwin Bikes	Keitha Black	1

Result 12

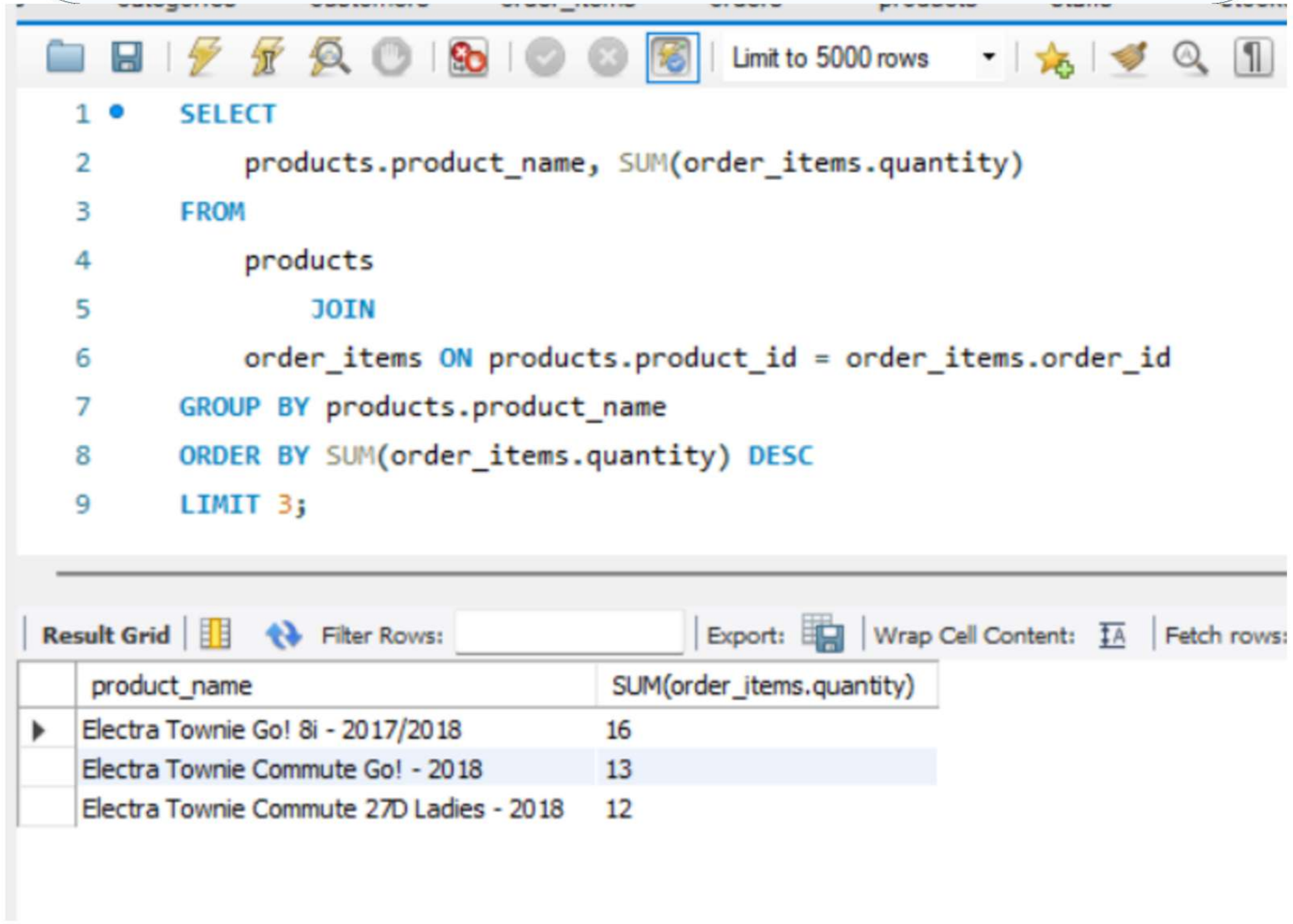
Find the names of staff members who have not made any sales.



```sql
SELECT
    staffs.staff_id,
    CONCAT(first_name, ' ', last_name) AS Full_Name
FROM
    staffs
    where not exists
    (select* from orders where orders.staff_id = staffs.staff_id)
```

staff_id	Full_Name
1	Fabiola Jackson
4	Virgie Wiggins
5	Jannette David
10	Bernardine Houston

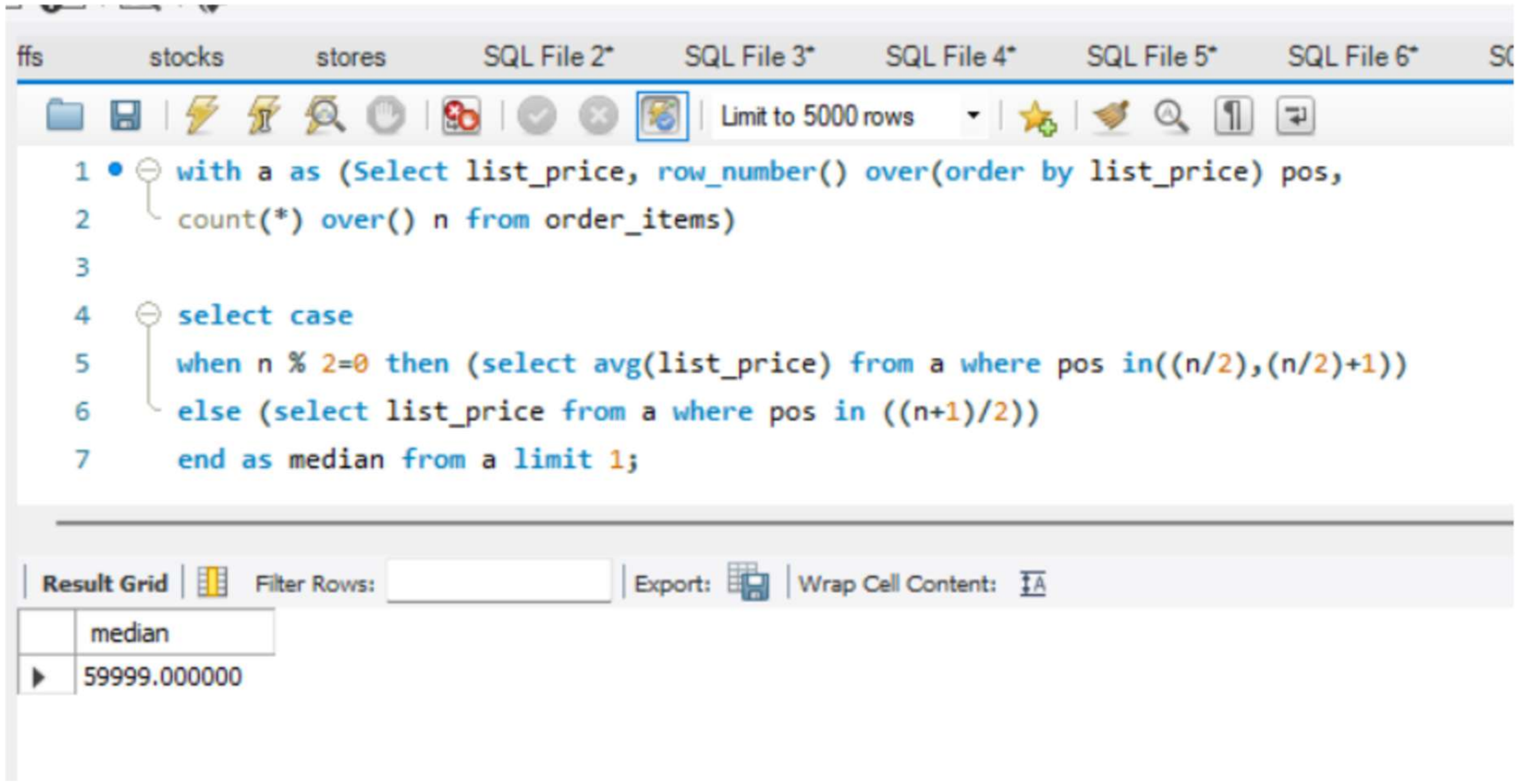
Find the top 3 most sold products in terms of quantity.



```sql
SELECT
    products.product_name, SUM(order_items.quantity)
FROM
    products
        JOIN
    order_items ON products.product_id = order_items.order_id
GROUP BY products.product_name
ORDER BY SUM(order_items.quantity) DESC
LIMIT 3;
```

product_name	SUM(order_items.quantity)
Electra Townie Go! 8i - 2017/2018	16
Electra Townie Commute Go! - 2018	13
Electra Townie Commute 27D Ladies - 2018	12

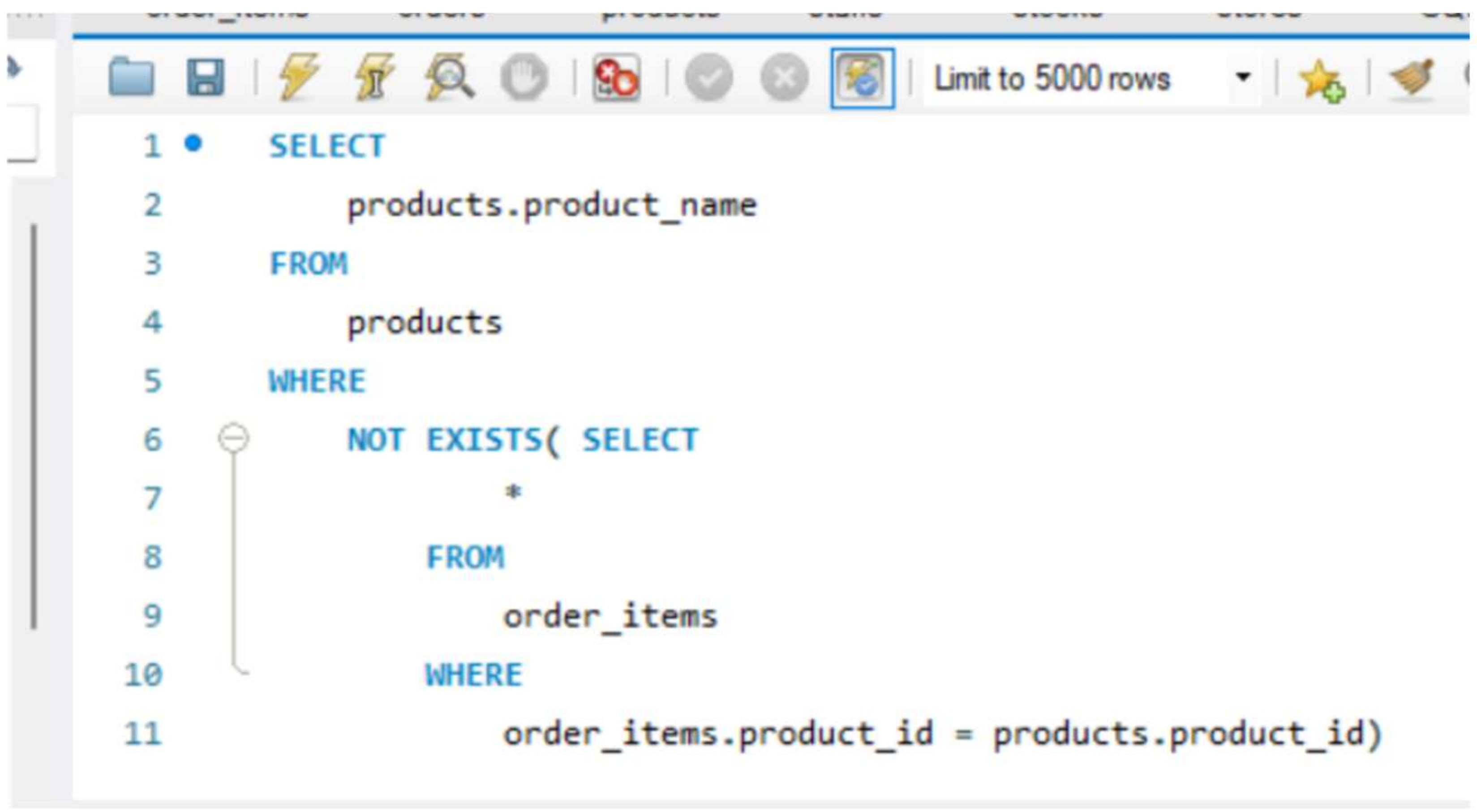
Find the median value of the price list.



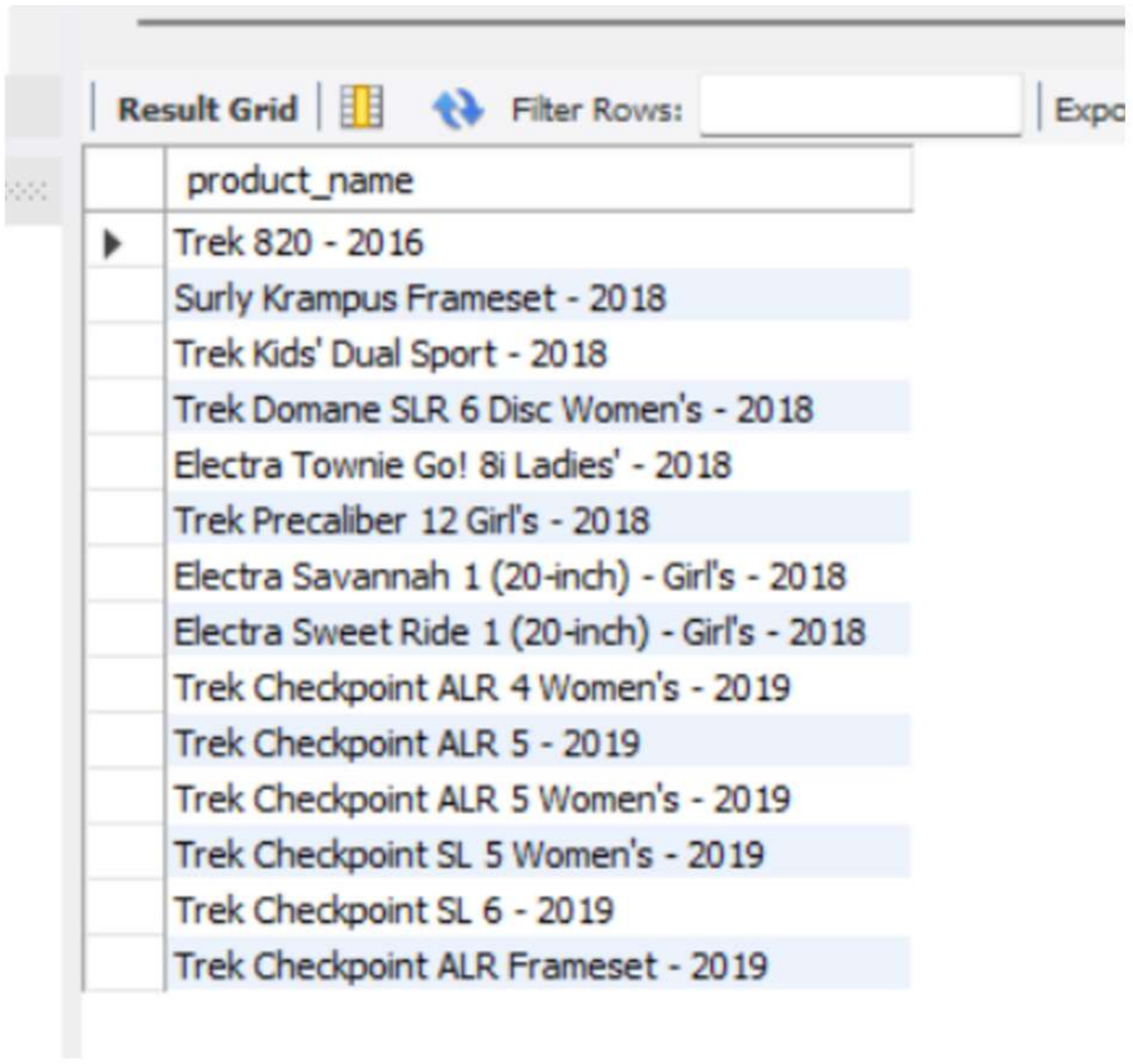
```sql
with a as (Select list_price, row_number() over(order by list_price) pos,
count(*) over() n from order_items)

select case
when n % 2=0 then (select avg(list_price) from a where pos in((n/2),(n/2)+1))
else (select list_price from a where pos in ((n+1)/2))
end as median from a limit 1;
```

```
median
59999.000000
```

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

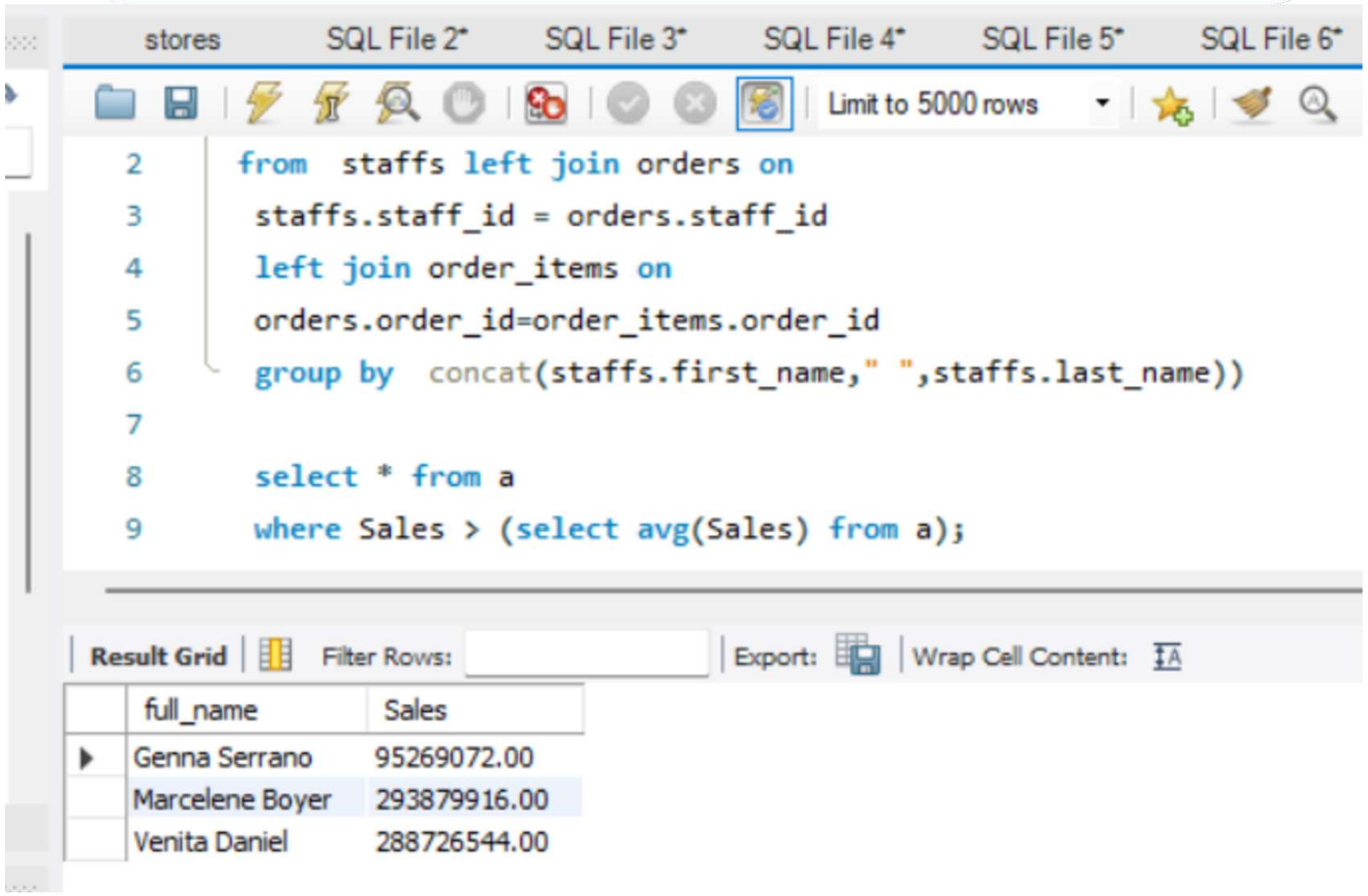


```
SELECT
    products.product_name
FROM
    products
WHERE
    NOT EXISTS( SELECT
            *
        FROM
            order_items
        WHERE
            order_items.product_id = products.product_id)
```



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
Trek Checkpoint ALR 5 Women's - 2019
Trek Checkpoint SL 5 Women's - 2019
Trek Checkpoint SL 6 - 2019
Trek Checkpoint ALR Frameset - 2019

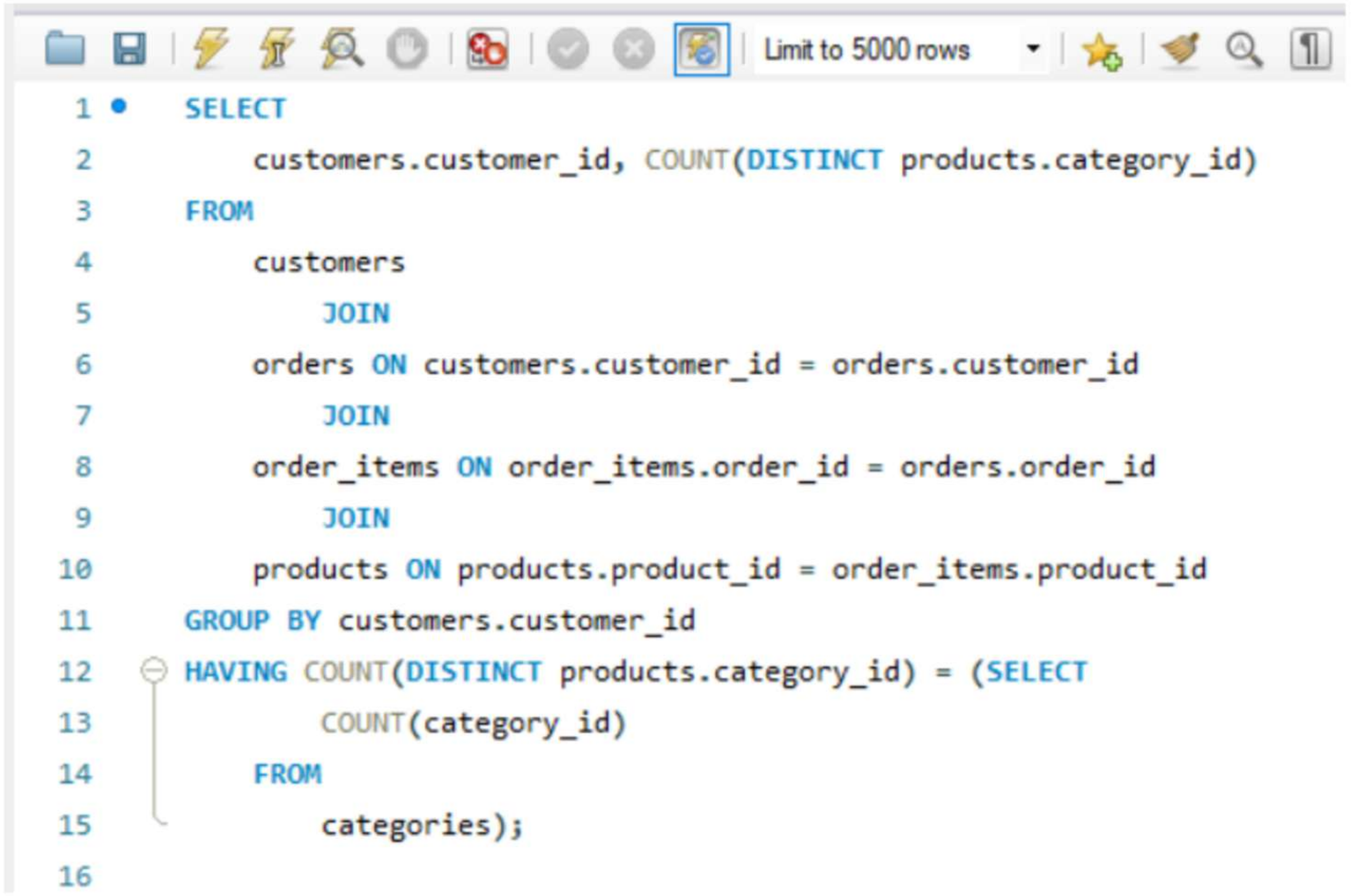
List the names of staff members who have made more sales than the average number of sales by all staff members.



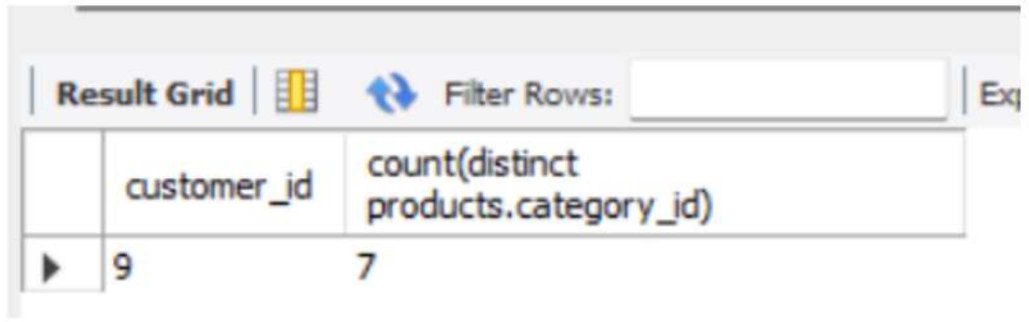
```
  from  staffs left join orders on
   staffs.staff_id = orders.staff_id
   left join order_items on
   orders.order_id=order_items.order_id
   group by  concat(staffs.first_name," ",staffs.last_name))

   select * from a
   where Sales > (select avg(Sales) from a);
```

full_name	Sales
Genna Serrano	95269072.00
Marcelene Boyer	293879916.00
Venita Daniel	288726544.00

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



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



customer_id	count(distinct products.category_id)
9	7

Thank You

Presented By-
Anshika Tejwani