



You're working for a company that sells motorcycle parts, and they've asked for some help in analyzing their sales data!

They operate three warehouses in the area, selling both retail and wholesale. They offer a variety of parts and accept credit cards, cash, and bank transfer as payment methods. However, each payment type incurs a different fee.

The board of directors wants to gain a better understanding of wholesale revenue by product line, and how this varies month-to-month and across warehouses. You have been tasked with calculating net revenue for each product line and grouping results by month and warehouse. The results should be filtered so that only "WhoLesale" orders are included.

They have provided you with access to their database, which contains the following table called `sales`:

Sales

Column	Data type	Description
<code>order_number</code>	<code>VARCHAR</code>	Unique order number.
<code>date</code>	<code>DATE</code>	Date of the order, from June to August 2021.
<code>warehouse</code>	<code>VARCHAR</code>	The warehouse that the order was made from— <code>North</code> , <code>Central</code> , or <code>West</code> .
<code>client_type</code>	<code>VARCHAR</code>	Whether the order was <code>Retail</code> or <code>WhoLesale</code> .
<code>product_line</code>	<code>VARCHAR</code>	Type of product ordered.
<code>quantity</code>	<code>INT</code>	Number of products ordered.
<code>unit_price</code>	<code>FLOAT</code>	Price per product (dollars).
<code>total</code>	<code>FLOAT</code>	Total price of the order (dollars).
<code>payment</code>	<code>VARCHAR</code>	Payment method— <code>Credit card</code> , <code>Transfer</code> , or <code>Cash</code> .
<code>payment_fee</code>	<code>FLOAT</code>	Percentage of <code>total</code> charged as a result of the <code>payment</code> method.

Your query output should be presented in the following format:

<code>product_line</code>	<code>month</code>	<code>warehouse</code>	<code>net_revenue</code>
product_one	---	---	---
product_one	---	---	---
product_one	---	---	---
product_one	---	---	---
product_one	---	---	---
product_one	---	---	---
product_two	---	---	---

product_line

month

warehouse

net_revenue

...

...

...

...

 Projects Data

DataFrame as revenue_by_product_line

```
--Find out how much Wholesale net revenue each product_line generated per month per warehouse in the dataset. The query should be
saved as revenue_by_product_line using the SQL cell provided, and contain the following: product_line, month: displayed as 'June',
'July', and 'August', warehouse, and net_revenue: the sum of total minus the sum of payment_fee. The results should be sorted by
product_line and month, followed by net_revenue in descending order.
SELECT product_line,
CASE WHEN EXTRACT(month from date) = '06' Then 'June' --want only the month names from June to August. Repeated for July and
August below
WHEN EXTRACT(month from date) = '07' Then 'July'
WHEN EXTRACT(month from date) = '08' Then 'August'
ELSE 'null' END AS month,
warehouse,
SUM(total)-SUM(payment_fee) AS net_revenue --this gives us net revenue for each product line and warehouse in each month
from June to july. The grouping comes from the group by clause below
FROM sales
WHERE client_type = 'Wholesale' --only want wholesale net revenue
GROUP BY product_line, warehouse, month --grouped by each product line, then warehouse, then month
ORDER BY product_line, month, net_revenue DESC --sorted as question asked us to
```

index	...	↑↓	product_line	...	↑↓	month	...	↑↓	warehouse	...
		0	Braking system			August			Central	
		1	Braking system			August			West	
		2	Braking system			August			North	
		3	Braking system			July			Central	
		4	Braking system			July			West	
		5	Braking system			July			North	
		6	Braking system			June			Central	
		7	Braking system			June			North	
		8	Braking system			June			West	
		9	Electrical system			August			North	
		10	Electrical system			August			Central	
		11	Electrical system			August			West	
		12	Electrical system			July			Central	
		13	Electrical system			July			North	
		14	Electrical system			July			West	
		15	Electrical system			June			Central	

Rows: 48

 Expand Table