

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

product_line	month	warehouse	net_revenue
product_one	---	---	---
product_two	---	---	---
...



Projects Data DataFrame as revenue_by_product_line

```
-- Start coding here
SELECT product_line,
       CASE WHEN EXTRACT('month' from date) = 6 THEN 'June'
            WHEN EXTRACT('month' from date) = 7 THEN 'July'
            WHEN EXTRACT('month' from date) = 8 THEN 'August'
       END as month,
       warehouse,
       SUM(total) - SUM(payment_fee) AS net_revenue
FROM sales
WHERE client_type = 'Wholesale'
GROUP BY product_line, warehouse, month
ORDER BY product_line, month, net_revenue DESC
```

	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

48 rows ↓