

PROJECT: ANALYZING MOTORCYCLE PART SALES





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.

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

Your query output should be presented in the following format:

product_line	month	warehouse	net_revenue
product_one	---	---	---
product_one	---	---	---
product_one	---	---	---
product_one	---	---	---
product_one	---	---	---
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, month, warehouse
ORDER by product_line, month, net_revenue DESC

```

index	...	↑↓	product_line	...	↑↓	month	...	↑↓	ware
		0	Braking system			August			Ci
		1	Braking system			August			W
		2	Braking system			August			N
		3	Braking system			July			Ci
		4	Braking system			July			W
		5	Braking system			July			N
		6	Braking system			June			Ci
		7	Braking system			June			N
		8	Braking system			June			W
		9	Electrical system			August			N
		10	Electrical system			August			Ci
		11	Electrical system			August			W
		12	Electrical system			July			Ci
		13	Electrical system			July			N
		14	Electrical system			July			W
		15	Electrical system			June			Ci

Rows: 48

[↗ Expand](#)