

### **OVERVIEW**

The company operates three warehouses in the region, selling both retail and wholesale. They provide a wide range of parts and accept payment via credit cards, cash, and bank transfers, each of which comes with varying fees.

The board of directors seeks a deeper understanding of wholesale revenue by product line and how it fluctuates month-to-month across the different warehouses. Your task is to calculate the net revenue for each product line, grouped by month and warehouse. The results should only include orders classified as Wholesale.



### PROBLEM STATEMENT

The company wants to analyze its wholesale revenue performance across different product lines, warehouses, and months. Specifically, they aim to calculate the net revenue for each product line, considering the total revenue and payment fees.

# GOALS

#### **Calculate Net Revenue:**

Determine the net revenue for each product line by subtracting payment fees from total revenue.

# **Group by Month and Warehouse:**

Analyze the revenue performance for each product line across different months and warehouses.

#### **Sort Results:**

Organize the results by net revenue in descending order.

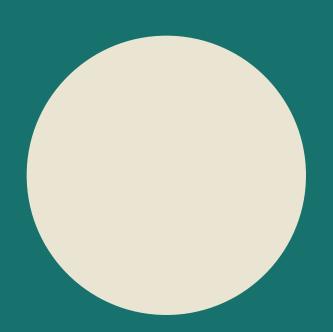
01.

02.

03.

### DATASET

The dataset is provided in a CSV file named 'sales.csv'. It contains information about sales transactions, including product line, date, warehouse, client type, total revenue, payment fees, and other relevant details.



# OUTPUTS

Store the query as **revenue\_by\_product\_line** in the provided SQL cell, and include the following columns:

- product\_line
- month, displayed as June, July, and August
- warehouse
- **net\_revenue**, calculated as the sum of total revenue minus the sum of **payment\_fee**.

The results should be sorted by **product\_line** and **month**, with **net\_revenue** in descending order. The query output should be presented in the following format:

# DATA FINDINGS

| product_line ∨        | month ~ | warehouse × | net_revenue =↓ |
|-----------------------|---------|-------------|----------------|
| Engine                | August  | Central     | 9528.71        |
| Frame & body          | August  | Central     | 8657.99        |
| Suspension & traction | June    | North       | 8065.74        |
| Frame & body          | August  | North       | 7898.89        |
| Engine                | June    | Central     | 6548.85        |
| Suspension & traction | July    | Central     | 6456.72        |
| Frame & body          | July    | North       | 6154.61        |
| Electrical system     | July    | Central     | 5577.62        |
| Suspension & traction | August  | Central     | 5416.7         |
|                       |         |             |                |
| •••                   | ••••    |             | •••            |
| Engine                | July    | North       | 1007.14        |
| Frame & body          | August  | West        | 829.69         |
| Miscellaneous         | August  | West        | 813.43         |
| Miscellaneous         | June    | North       | 513.99         |
| Electrical system     | July    | West        | 449.46         |

**This table** presents a breakdown of net revenue for each product line across different months and warehouses. The columns are:

- **product\_line:** The specific product category (e.g., Braking System, Electrical System, Engine, etc.).
- month: The month of the sale (June, July, August).
- warehouse: The warehouse location where the sale occurred (Central, North, West).
- **net\_revenue:** The total revenue generated from sales of that product line in that month and warehouse, minus the associated payment fees.
- 1.**Top-Performing Product Lines and Warehouses:** By analyzing the net revenue values, we can identify the top-performing product lines and warehouses. For example, the "Engine" product line in the "Central" warehouse consistently generates high net revenue.
- 2. **Seasonal Trends:** We can observe seasonal variations in revenue for different product lines. Some products may have higher demand during certain months, leading to increased sales and revenue.
- 3. **Warehouse Performance:** The table provides insights into the performance of different warehouses. We can compare the net revenue generated by each warehouse for different product lines and months.
- 4. **Payment Fee Impact:** The calculation of net revenue by subtracting payment fees from total revenue highlights the importance of considering these costs when analyzing overall profitability.

### INSIGHTS

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O1 Top-Performing Product Lines

Identify the product lines that generate the highest net revenue.

Warehouse PerformanceCompare the revenue performance of different warehouses.

**02** Seasonal Trends

Analyze how revenue varies across different months for each product line.

**04** Payment Fee Impact

Assess the impact of payment fees on overall net revenue.