

MOTORCYCLE PARTS SALES

The background image shows a motorcyclist in a white and blue suit leaning into a turn on a paved road. The scene is slightly blurred to convey motion. A large, semi-transparent olive-green circle is positioned on the right side of the image. A thin, dark teal horizontal line spans the width of the image near the bottom.

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.

01.

Group by Month and Warehouse:

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

02.

Sort Results:

Organize the results by net revenue in descending order.

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



01 Top-Performing Product Lines

Identify the product lines that generate the highest net revenue.

02 Seasonal Trends

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

03 Warehouse Performance

Compare the revenue performance of different warehouses.

04 Payment Fee Impact

Assess the impact of payment fees on overall net revenue.