**Sales for Retail and Food Services in U.S.A.**

**1)Top-performing industries in terms of sales for a year 2021, and how do their sales compare month-over-month?**

WITH monthly\_sales AS (

SELECT

year,

month,

industry,

SUM(sales) AS total\_sales

FROM

retail\_sales

WHERE

year = 2021

GROUP BY

year,

month,

industry

),

top\_industries AS (

SELECT

year,

month,

industry,

total\_sales,

RANK() OVER (PARTITION BY year, month ORDER BY total\_sales DESC) AS industry\_rank

FROM

monthly\_sales

)

SELECT

year,

month,

industry,

total\_sales

FROM

top\_industries

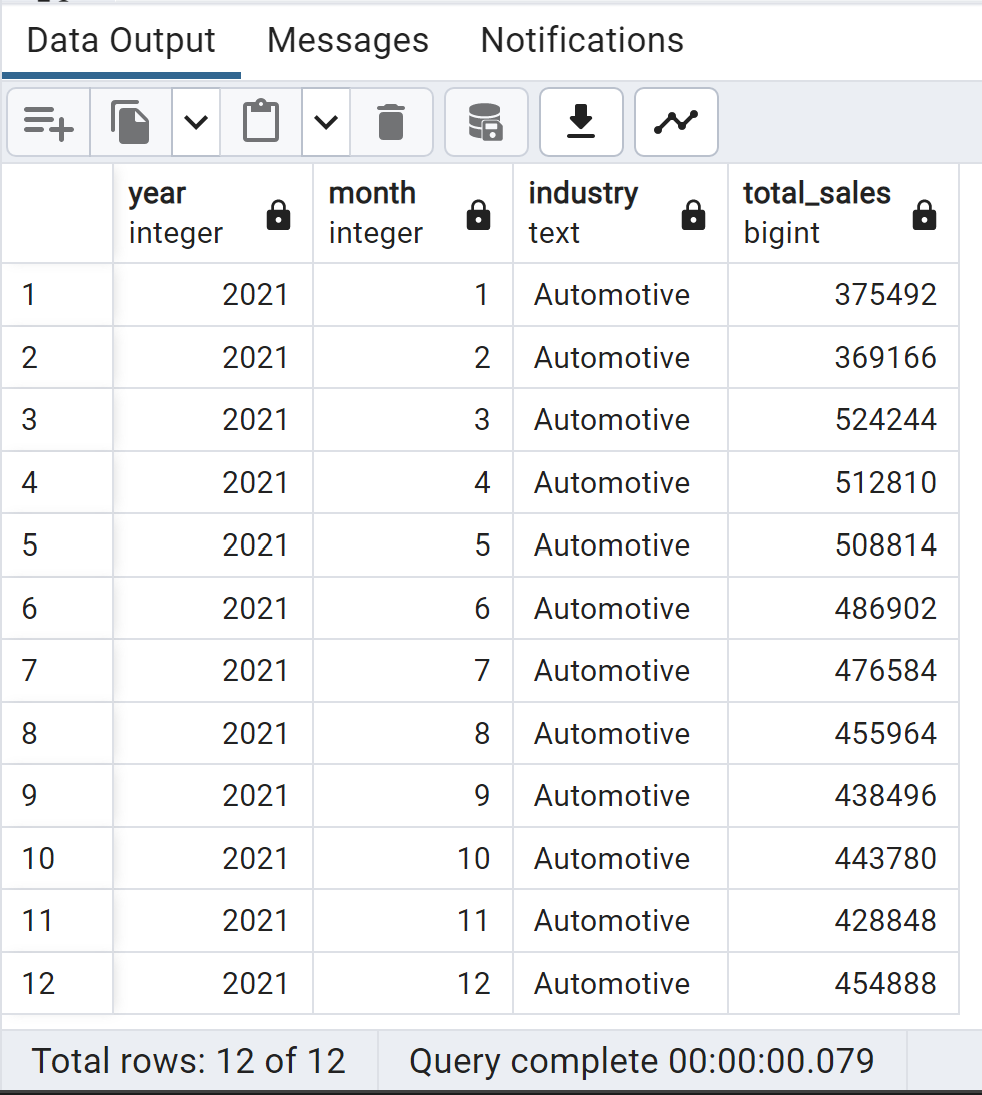
WHERE

industry\_rank = 1

ORDER BY

year,

month;



2)Top-performing industries in terms of sales for a year 2022, and how do their sales compare month-over-month?

WITH monthly\_sales AS (

SELECT

year,

month,

industry,

SUM(sales) AS total\_sales

FROM

retail\_sales

WHERE

year = 2022

GROUP BY

year,

month,

industry

),

top\_industries AS (

SELECT

year,

month,

industry,

total\_sales,

RANK() OVER (PARTITION BY year, month ORDER BY total\_sales DESC) AS industry\_rank

FROM

monthly\_sales

)

SELECT

year,

month,

industry,

total\_sales

FROM

top\_industries

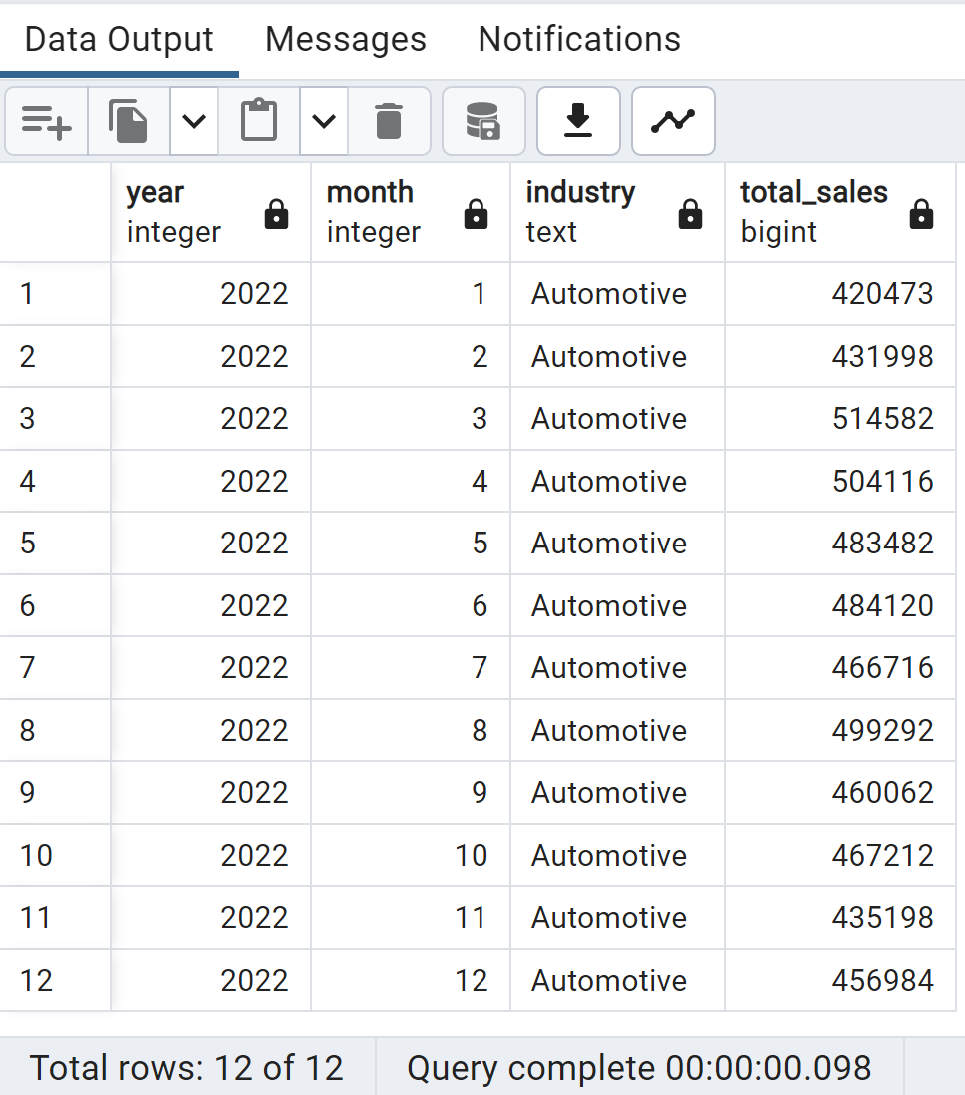
WHERE

industry\_rank = 1

ORDER BY

year,

month;



3)Top-performing industries in terms of sales for a year 2020, and how do their sales compare month-over-month?

WITH monthly\_sales AS (

SELECT

year,

month,

industry,

SUM(sales) AS total\_sales

FROM

retail\_sales

WHERE

year = 2020

GROUP BY

year,

month,

industry

),

top\_industries AS (

SELECT

year,

month,

industry,

total\_sales,

RANK() OVER (PARTITION BY year, month ORDER BY total\_sales DESC) AS industry\_rank

FROM

monthly\_sales

)

SELECT

year,

month,

industry,

total\_sales

FROM

top\_industries

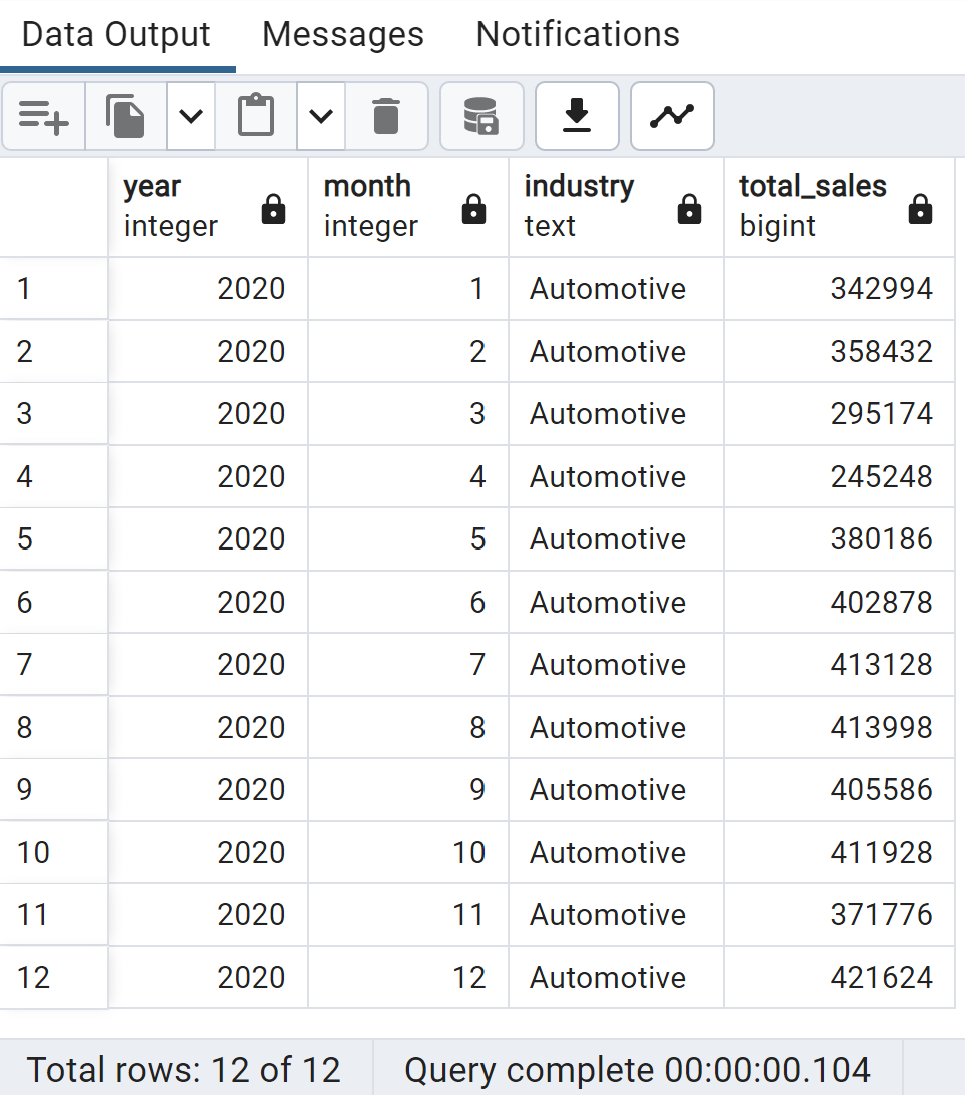
WHERE

industry\_rank = 1

ORDER BY

year,

month;



4)Top-performing industries in terms of sales for a year 2019, and how do their sales compare month-over-month?

WITH monthly\_sales AS (

SELECT

year,

month,

industry,

SUM(sales) AS total\_sales

FROM

retail\_sales

WHERE

year = 2019

GROUP BY

year,

month,

industry

),

top\_industries AS (

SELECT

year,

month,

industry,

total\_sales,

RANK() OVER (PARTITION BY year, month ORDER BY total\_sales DESC) AS industry\_rank

FROM

monthly\_sales

)

SELECT

year,

month,

industry,

total\_sales

FROM

top\_industries

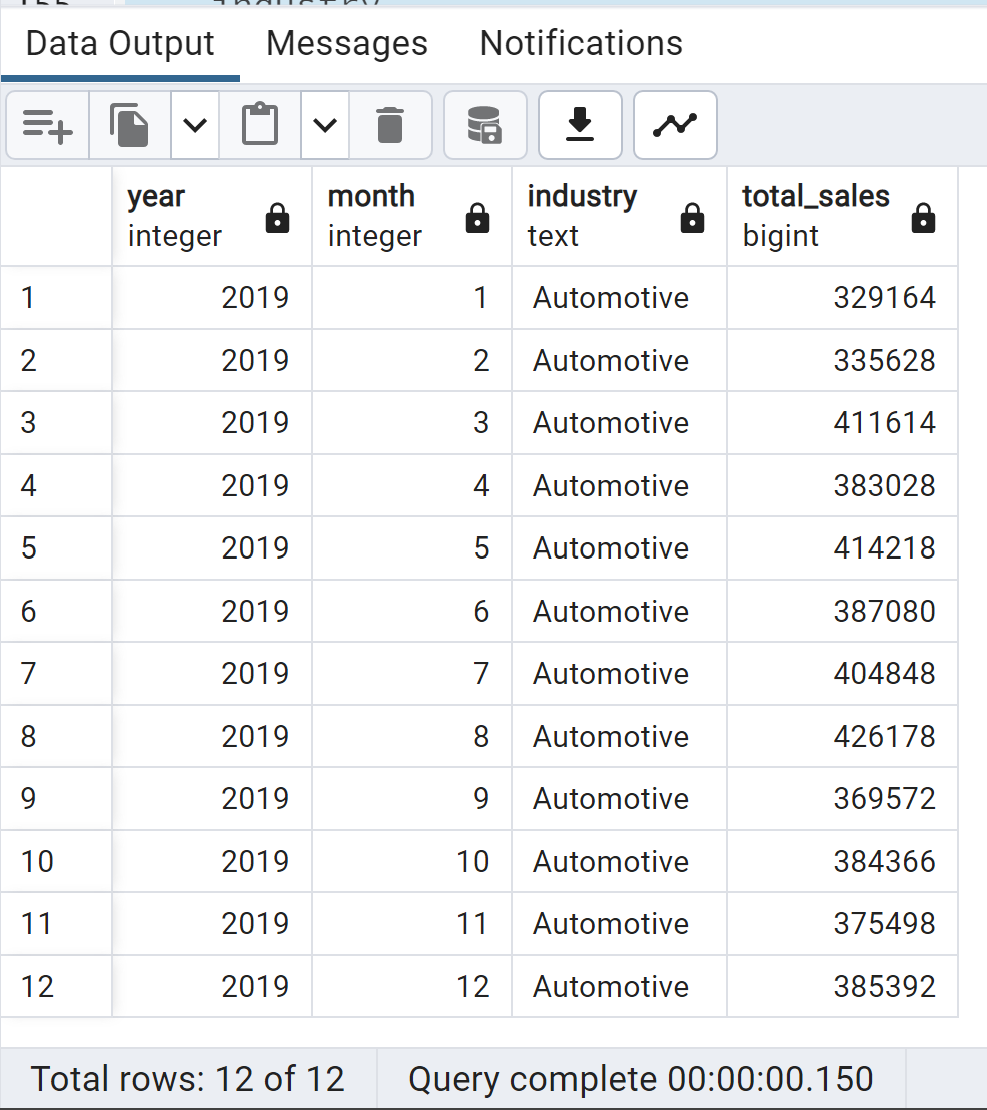
WHERE

industry\_rank = 1

ORDER BY

year,

month;



Business Question

2: Which specific kind of businesses contribute the most to total sales, and how does their performance vary across industries?

SELECT

kind\_of\_business,

industry,

SUM(sales) AS total\_sales

FROM

retail\_sales

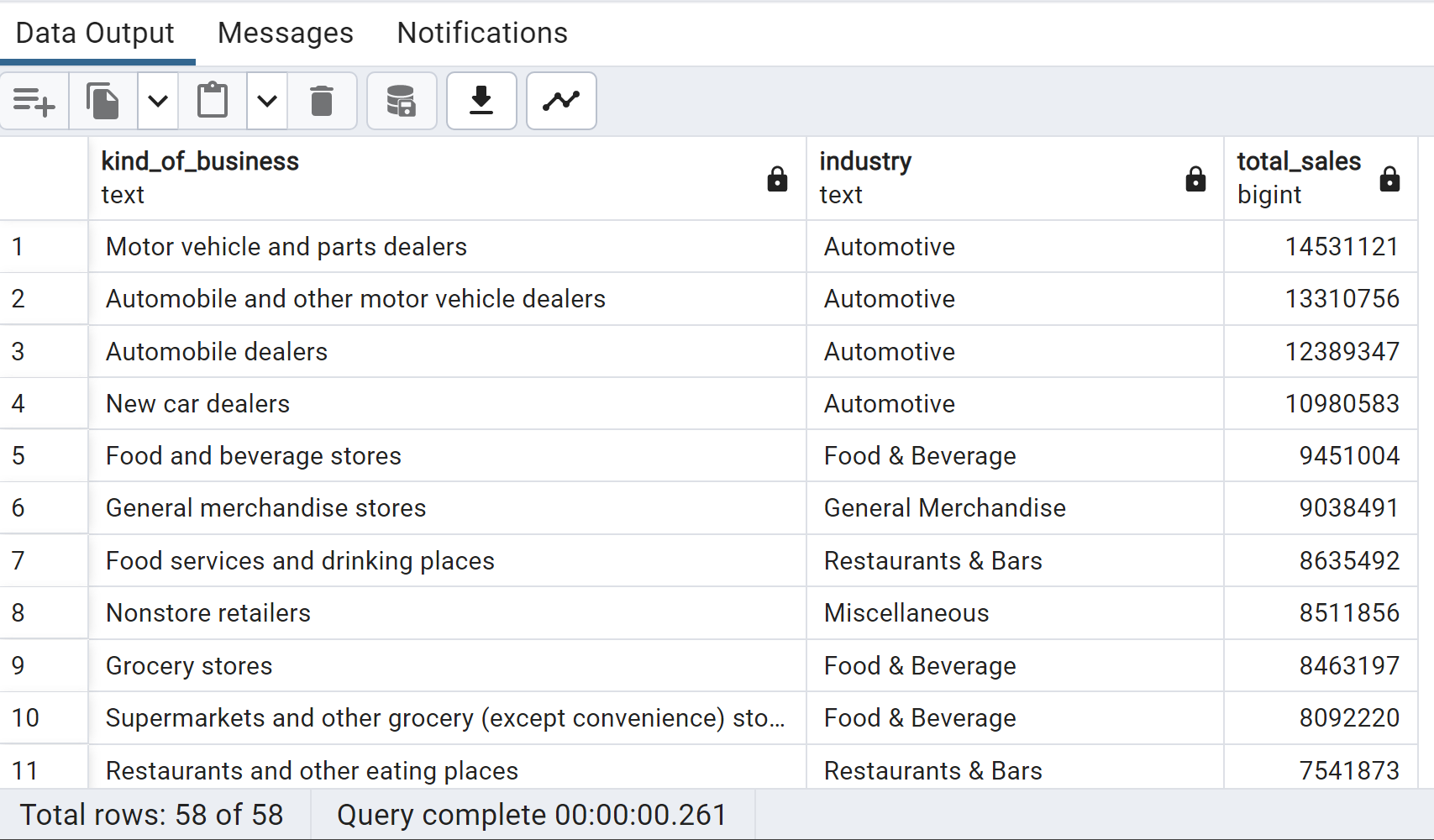
GROUP BY

kind\_of\_business,

industry

ORDER BY

total\_sales DESC;



3: Is there any seasonality in sales for specific industries, and how do they perform month-over-month?

SELECT

industry,

year,

month,

SUM(sales) AS total\_sales

FROM

retail\_sales

GROUP BY

year,

industry,

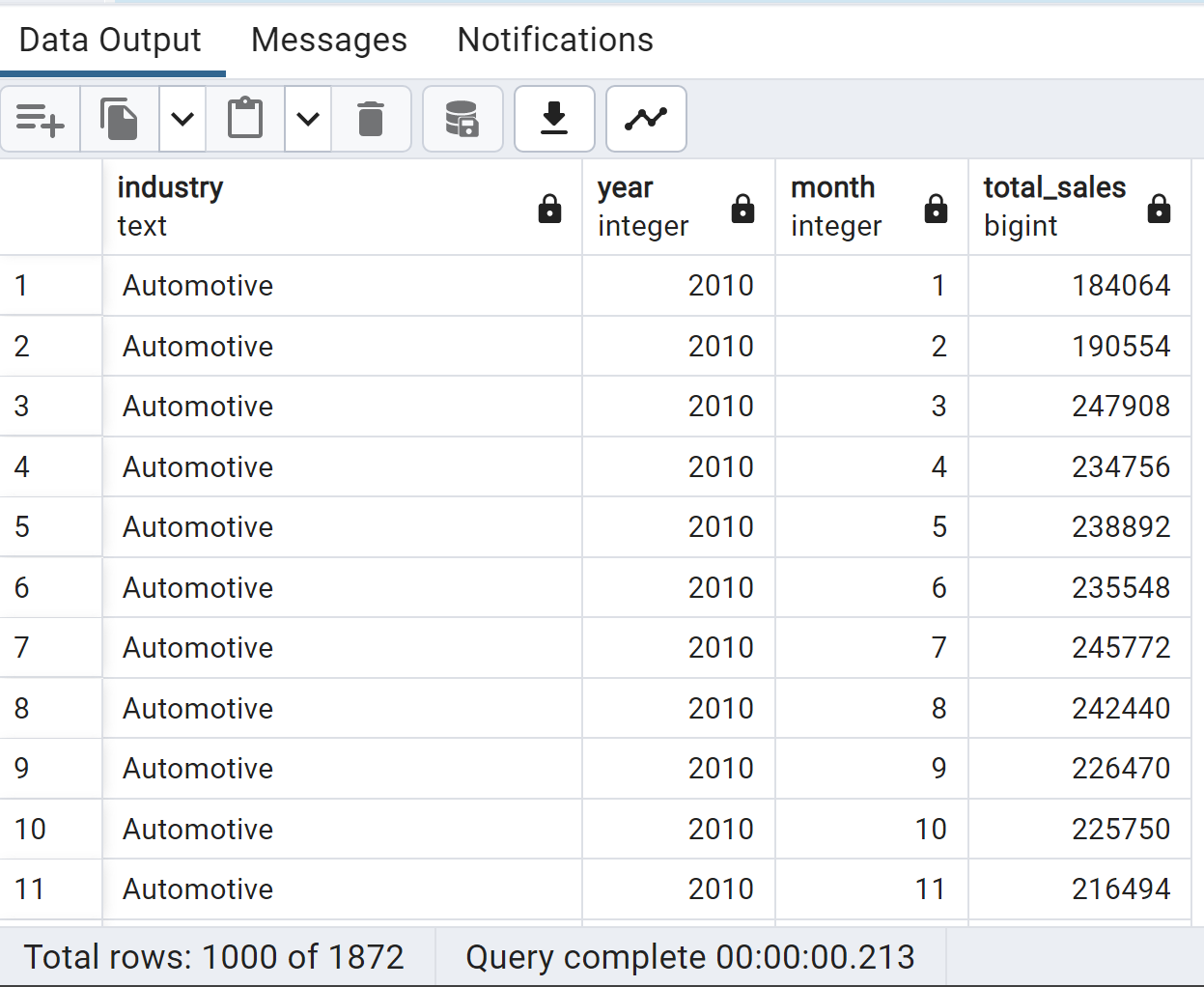
month

ORDER BY

year,

industry,

month;



4: How does the sales distribution vary among industries based on their North American Industry Classification System (NAICS) codes?

SELECT

naics\_code,

industry,

SUM(sales) AS total\_sales

FROM

retail\_sales

GROUP BY

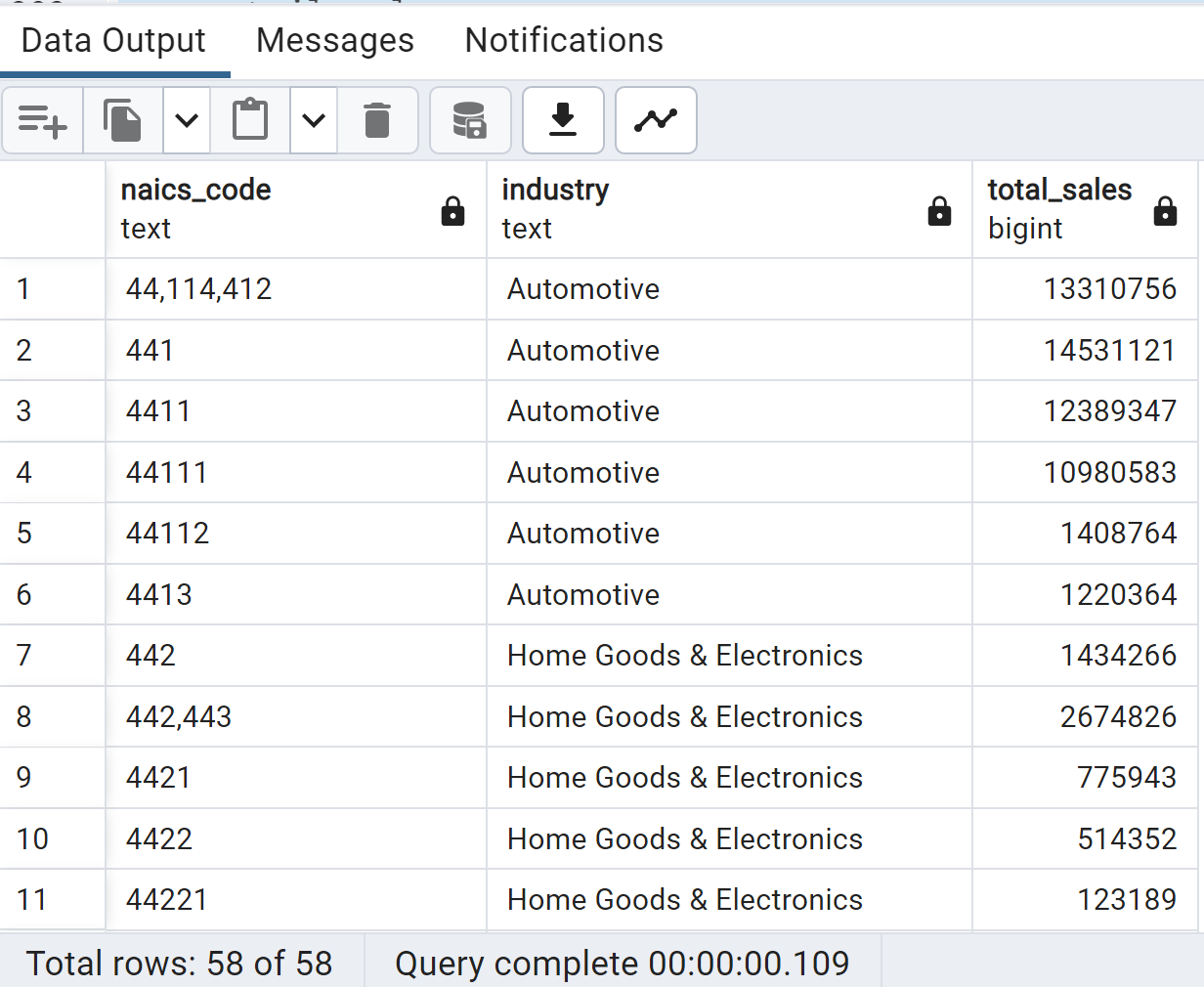
naics\_code,

industry

ORDER BY

naics\_code,

total\_sales DESC;



5: Are there any outliers or significant changes in sales for specific industries during particular months or years?

SELECT

industry,

year,

month,

sales

FROM

retail\_sales

WHERE

(industry, year, month) IN (

SELECT

industry,

year,

month

FROM (

SELECT

industry,

year,

month,

sales,

LAG(sales) OVER (PARTITION BY industry ORDER BY year, month) AS prev\_sales,

LEAD(sales) OVER (PARTITION BY industry ORDER BY year, month) AS next\_sales

FROM

retail\_sales

) AS sales\_analysis

WHERE

sales > 1.5 \* COALESCE(prev\_sales, 0) OR sales > 1.5 \* COALESCE(next\_sales, 0)

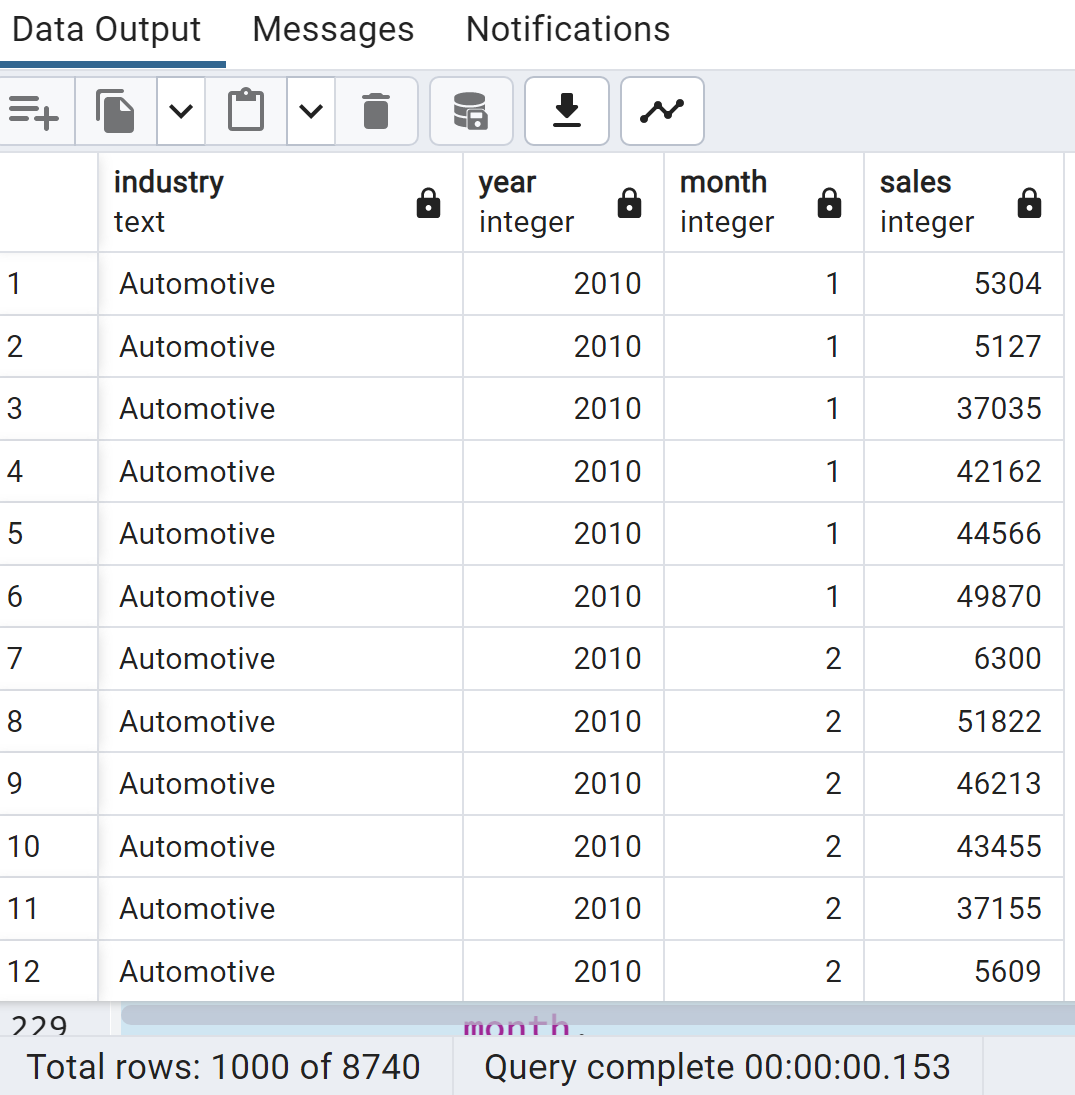
)

ORDER BY

industry,

year,

month;



Which businesses all-time average sale was above 10 billion dollars?

SELECT

kind\_of\_business,

AVG(sales) AS average\_sale

FROM

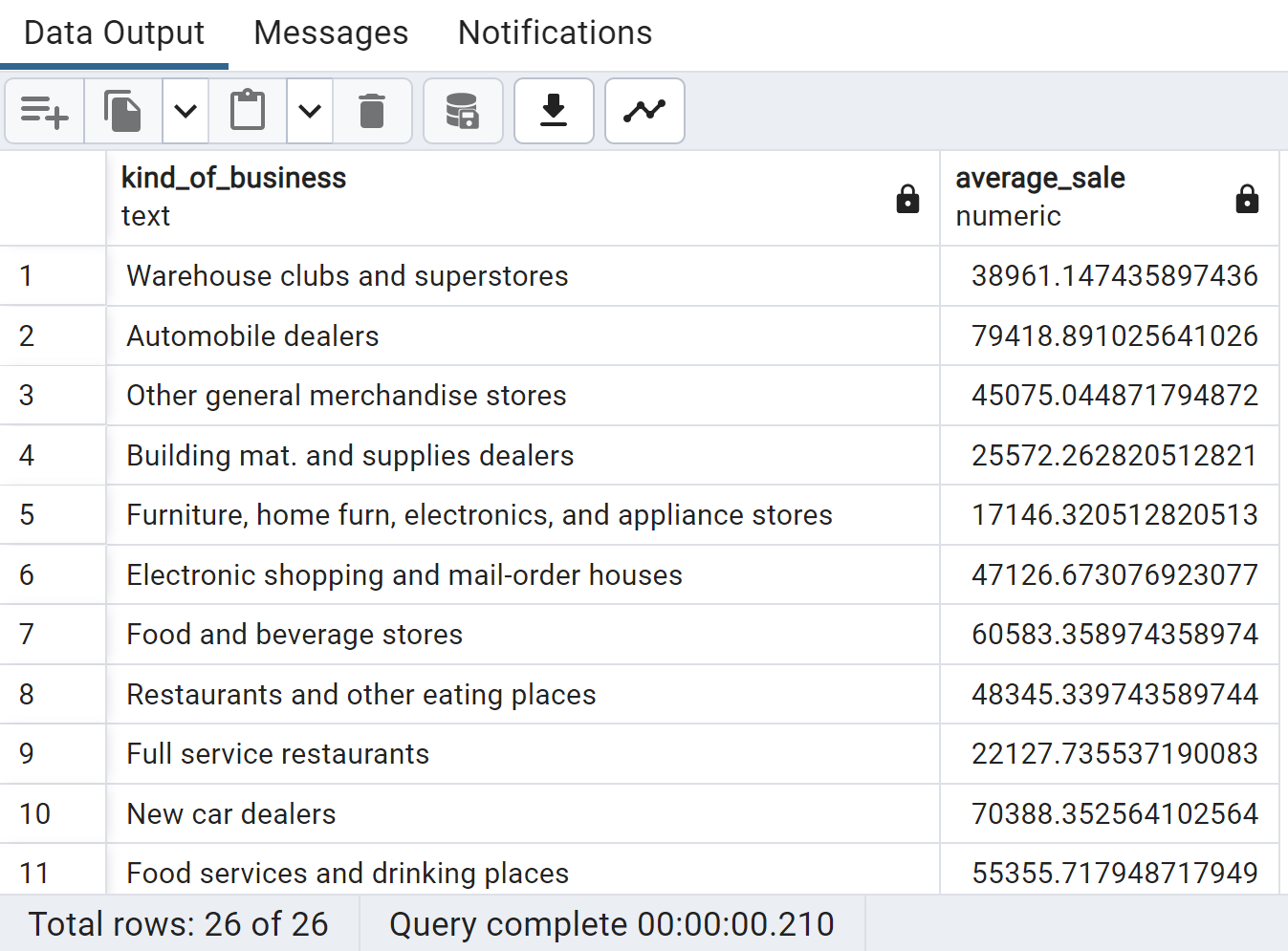
retail\_sales

GROUP BY

kind\_of\_business

HAVING

AVG(sales) > 10000; -- 10 billion dollars in cents (1 dollar = 100 cents)



Which kind of businesses within the automotive industry had the highest sales revenue for 2022?

SELECT

kind\_of\_business,

SUM(sales) AS total\_sales

FROM

retail\_sales

WHERE

industry = 'Automotive' AND year = 2022

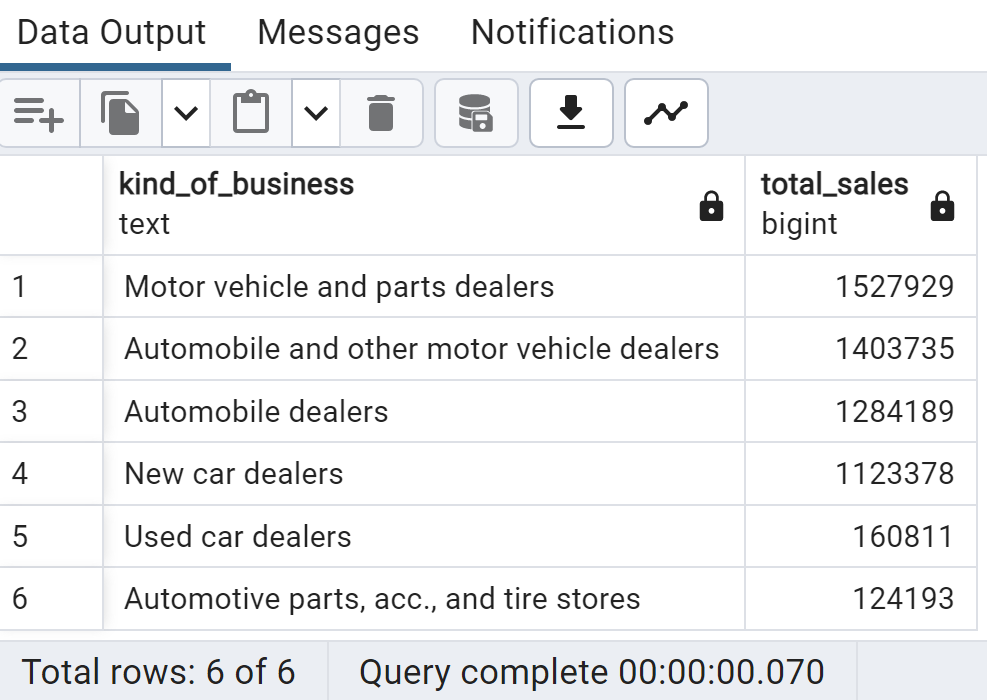
GROUP BY

kind\_of\_business

ORDER BY

total\_sales DESC

;



What is the contribution percentage of each business in the automotive industry this year?

WITH automotive\_sales AS (

SELECT

kind\_of\_business,

SUM(sales) AS total\_sales

FROM

retail\_sales

WHERE

industry = 'Automotive' AND

year = 2022

GROUP BY

kind\_of\_business

),

total\_sales\_automotive AS (

SELECT

SUM(sales) AS total\_sales\_automotive

FROM

retail\_sales

WHERE

industry = 'Automotive' AND

year = 2022

)

SELECT

kind\_of\_business,

ROUND((total\_sales / total\_sales\_automotive.total\_sales\_automotive) \* 100, 2) AS contribution\_percentage

FROM

automotive\_sales

CROSS JOIN

total\_sales\_automotive;

*What are the year-over-year growth rates for each industry per year?*

with total\_sales as(select year, industry, sum(sales) as sales\_sum

from retail\_sales

GROUP BY 1,2)

SELECT curr.industry, prev.year as previous\_year, curr.year as current\_year,

    (curr.sales\_sum - prev.sales\_sum) / prev.sales\_sum \* 100 as YoY

from total\_sales as curr

join total\_sales as prev

   on curr.year=prev.year+1 AND curr.industry=prev.industry

ORDER BY industry, curr.year DESC;

*What are the yearly total sales for womenâ€™s clothing stores and menâ€™s clothing stores?*

SELECT year,

sum(CASE WHEN kind\_of\_business = "Women's clothing stores" THEN sales ELSE 0 END) as women\_sales,

sum(CASE WHEN kind\_of\_business = "Men's clothing stores" THEN sales ELSE 0 END) as men\_sales

FROM retail\_sales

GROUP BY 1;

*What is the yearly ratio of total sales for women's clothing stores to total sales for men's clothing stores?*

SELECT year, women\_sales/men\_sales as Women\_to\_Men\_rario

from (SELECT year,

sum(CASE WHEN kind\_of\_business = "Women's clothing stores" THEN sales ELSE 0 END) as women\_sales,

sum(CASE WHEN kind\_of\_business = "Men's clothing stores" THEN sales ELSE 0 END) as men\_sales

FROM retail\_sales

GROUP BY 1;

*What is the year-to-date total sale of each month for 2019, 2020, 2021, and 2022 for the womenâ€™s clothing stores?*

select rs.month, rs.year, rs.sales,

((SELECT SUM(sales)

        FROM retail\_sales rs2

        WHERE rs2.year = rs.year AND rs2.month <= rs.month AND rs2.kind\_of\_business = 'Women\'s clothing stores') AS ytd\_sales

)

from retail\_sales as rs

WHERE rs.kind\_of\_business = 'Women\'s clothing stores' AND rs.year IN (2019, 2020, 2021, 2022);

*What is the month-over-month growth rate of womenâ€™s clothing businesses in 2022?*

select month, sales as current\_sales, *-- now we want the sales from 1 previous period*

lag(sales, 1) over (order by month) as prev\_sales

from retail\_sales

where kind\_of\_business ='Women\'s clothing stores' and year =2022;

*-- growth rate*

select month, sales as current\_sales,

lag(sales, 1) over (order by month) as prev\_sales,

(sales - lag(sales, 1) over (order by month))/lag(sales, 1) over (order by month) \*100 as growth\_rate

from retail\_sales

where kind\_of\_business ='Women\'s clothing stores' and year =2022;

**Most occupied Days & Month**

**Days**-Orders are highest on Friday & Saturday evenings

**Month**-Orders are highest on January & July

**Sales Performance**

**Category**-Classical contributes maximum to Sales & Total Orders

**Size**-Large pizza contributes maximum to Sales

**Best Sellers**

**Revenue**-Thai Chicken Pizza contribute maximum to Revenue

**Quantity**-Classical Deluxe Pizza contributes maximum to Total Quantities

**Total Orders**-Classic Deluxe Pizza contributes maximum to Total Orders

**Lowest Sellers**

**Revenue**-Brie Carre Pizza contribute minimum to Revenue

**Quantity**-Brie Carre Pizza contribute minimum to Total Quantities

**Total Orders**-Brie Carre Pizza contribute minimum to Total Orders

**Most occupied Time**

**Lunch**-12 P.M. - 1:30 P.M., **Dinner**-6 P.M. - 8 P.M.

**Data Source: Maven Analytics**

**GitHub Repo:** <https://github.com/tushar2704/Pizza-Sales-Analysis>

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