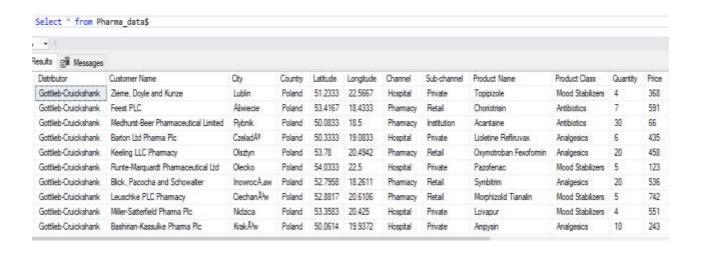


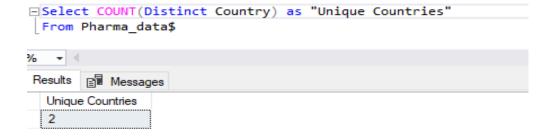
Dataset Overview:

The dataset appears to contain information about sales transactions, including details such as customer names, sales amounts, product classes, dates, and sales representatives.

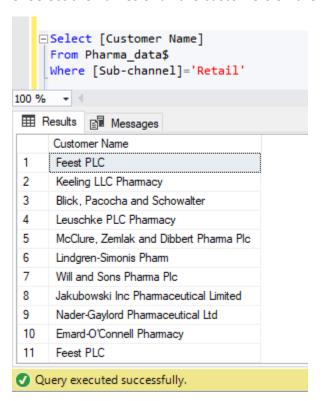
1. Retrieve all columns for all records in the dataset.



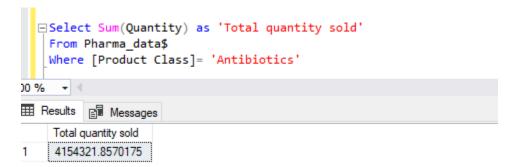
2. How many unique countries are represented in the dataset?



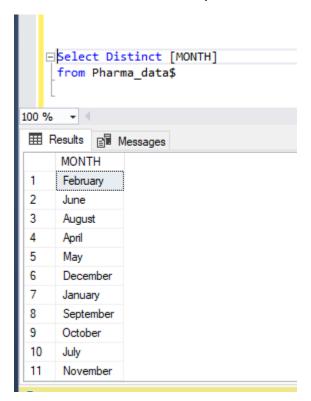
3. Select the names of all the customers on the 'Retail' channel.



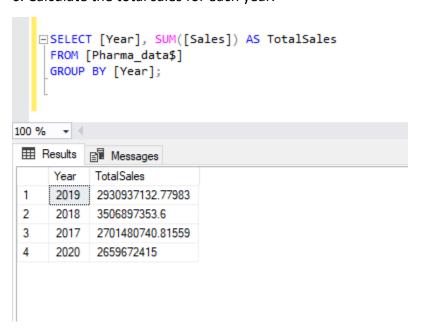
4. Find the total quantity sold for the 'Antibiotics' product class.



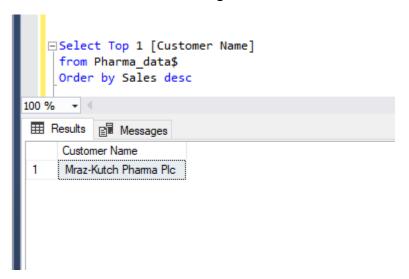
5. List all the distinct months present in the dataset.



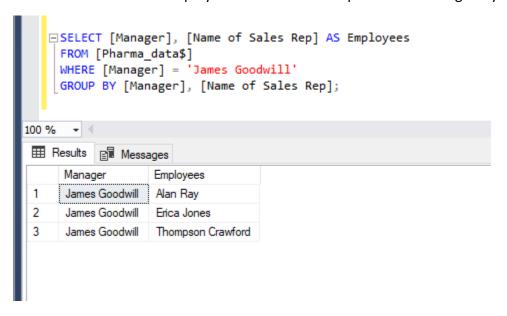
6. Calculate the total sales for each year.



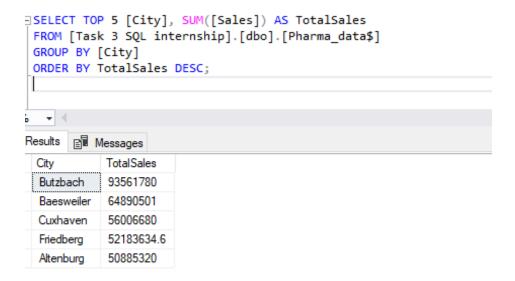
7. Find the customer with the highest sales value.



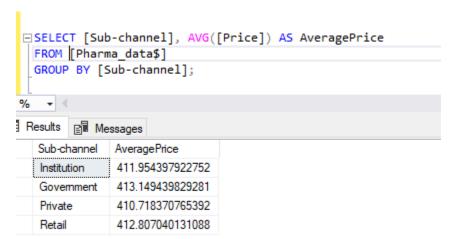
8. Get the names of all employees who are Sales Reps and are managed by 'James Goodwill'.



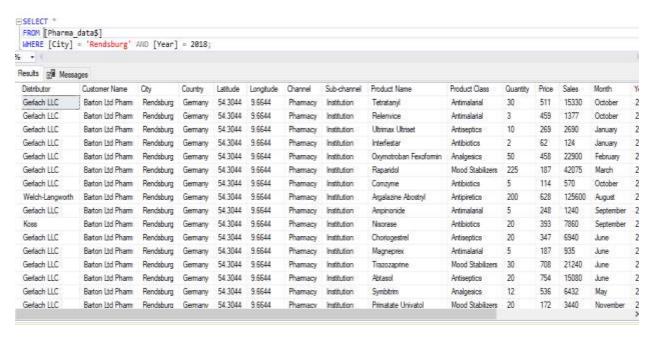
9. Retrieve the top 5 cities with the highest sales.



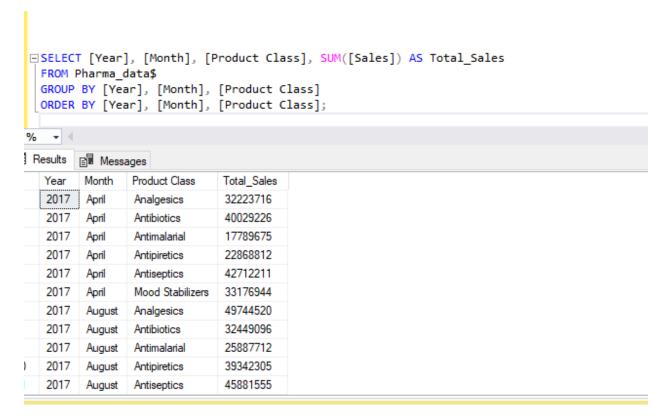
10. Calculate the average price of products in each sub-channel.



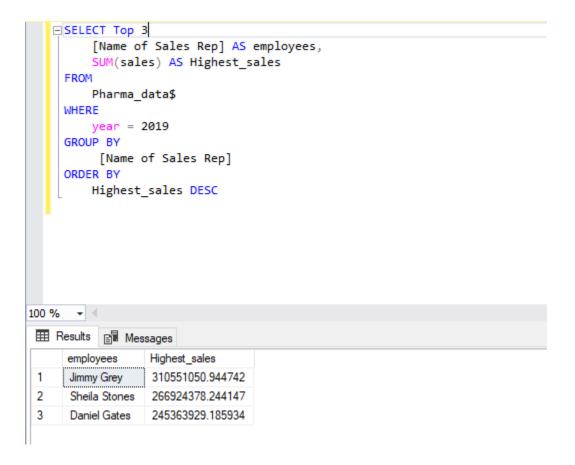
12. Retrieve all sales made by employees from 'Rendsburg' in the year 2018.



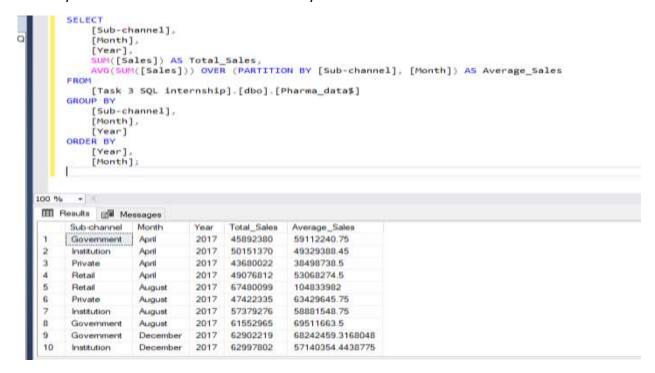
13. Calculate the total sales for each product class, for each month, and order the results by year, month, and product class.



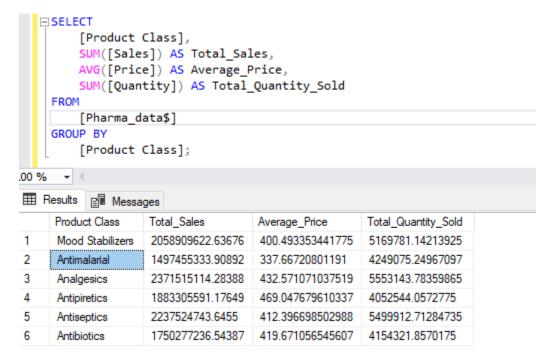
14. Find the top 3 sales reps with the highest sales in 2019.



15. Calculate the monthly total sales for each sub-channel, and then calculate the average monthly sales for each sub-channel over the years.



16. Create a summary report that includes the total sales, average price, and total quantity sold for each product class.



17. Find the top 5 customers with the highest sales for each year.

```
    □WITH RankedCustomers AS (
         SELECT
              [Customer Name],
             [Year],
             SUM([Sales]) AS Total_Sales,
             ROW_NUMBER() OVER (PARTITION BY [Year] ORDER BY SUM([Sales]) DESC) AS Rank
         FROM
              [Pharma_data$]
         GROUP BY
              [Customer Name],
             [Year]
    SELECT
         [Year],
         [Customer Name],
         Total_Sales
    FROM
         RankedCustomers
    WHERE
         Rank <= 5;
00 % 🕶 🔻
Results 📳 Messages
     Year
           Customer Name
                                                    Total_Sales
1
     2017
           Wiegand, Jast and Yost Pharmaceutical Ltd
                                                    20947974
2
     2017 Raynor-Graham
                                                    20691892
3
     2017
           Fadel-West Pharmaceutical Ltd
                                                    19381932
4
     2017
            Kuphal, Herzog and Purdy
                                                    16707639
5
     2017 Leannon-West Pharmaceutical Limited
                                                    16639689
6
     2018 Barrows, Zboncak and Reichert Pharm
                                                    22713841
7
     2018 Zemlak Group Pharm
                                                    20691357
```

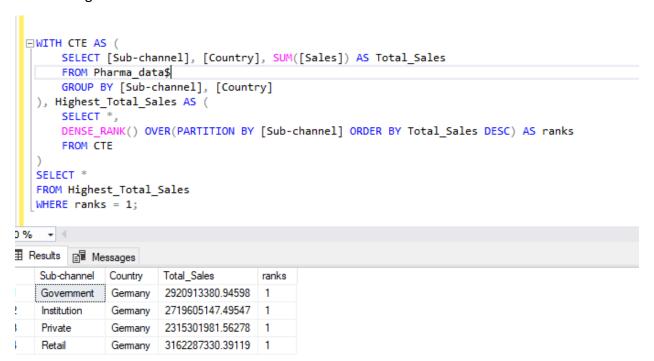
18. Calculate the year-over-year growth in sales for each country.

```
□SELECT [Year], [Month], [Product Class], SUM([Sales]) AS TotalSales
     FROM [Pharma_data$]
     GROUP BY [Year], [Month], [Product Class]
    ORDER BY [Year], [Month], [Product Class];
00 % + <
Results 📳 Messages
     Year
            Month
                    Product Class
                                   Total Sales
     2017
                                   32223716
1
            April
                    Analgesics
            April
2
      2017
                    Antibiotics
                                   40029226
3
      2017
            April
                    Antimalarial
                                   17789675
4
      2017
            April
                    Antipiretics
                                   22868812
5
     2017 April
                    Antiseptics
                                   42712211
6
      2017 April
                    Mood Stabilizers 33176944
```

19. List the months with the lowest sales for each year

```
∃WITH lowest_sales AS (
        SELECT [Month], [Year], SUM([Sales]) AS Total_Sales,
        DENSE_RANK() OVER (PARTITION BY [Year] ORDER BY SUM([Sales])) AS ranks
         FROM Pharma data$
        GROUP BY [Month], [Year]
    SELECT *
    FROM lowest sales
    WHERE ranks = 1;
100 %
Results Resages
     Month
                     Total_Sales
               Year
                               ranks
1
     January
               2017
                     151872184
                                1
2
     December
               2018
                     214882167 1
3
               2019
                     97664076
     January
               2020 135409908 1
     April
```

20. Calculate the total sales for each sub-channel in each country, and then find the country with the highest total sales for each sub-channel



Key Insights:

- Identified top-selling product classes and channels, allowing for targeted marketing efforts.
- Analyzed sales trends over time, providing insights into business performance and areas for improvement.
- Identified key cities and countries driving sales, informing strategic expansion plans.
- Evaluated sales rep performance, enabling targeted training and incentives.
- Calculated year-over-year growth to assess market dynamics and identify growth opportunities.
- Discovered seasonal sales patterns, allowing for optimized inventory management and

Conclusion:

In conclusion, the analysis of the dataset through SQL queries provides valuable insights into various aspects of the company's sales operations. By evaluating performance metrics such as total sales, customer distribution, employee performance, and geographic trends, the company can make informed decisions to optimize sales strategies, improve customer relationships, and drive overall business growth. Leveraging these insights enables the company to identify opportunities for enhancement, streamline operations, and remain competitive in the market.