

Introduction

Seattle is often thought of as one of the rainiest cities in the United States. But how does it really compare to other major cities? This project compares the rainfall between Seattle, Washington, and New York City from 2018 to 2022. The goal is to determine which city experiences more frequent rainfall and to examine seasonal patterns.

Data Description

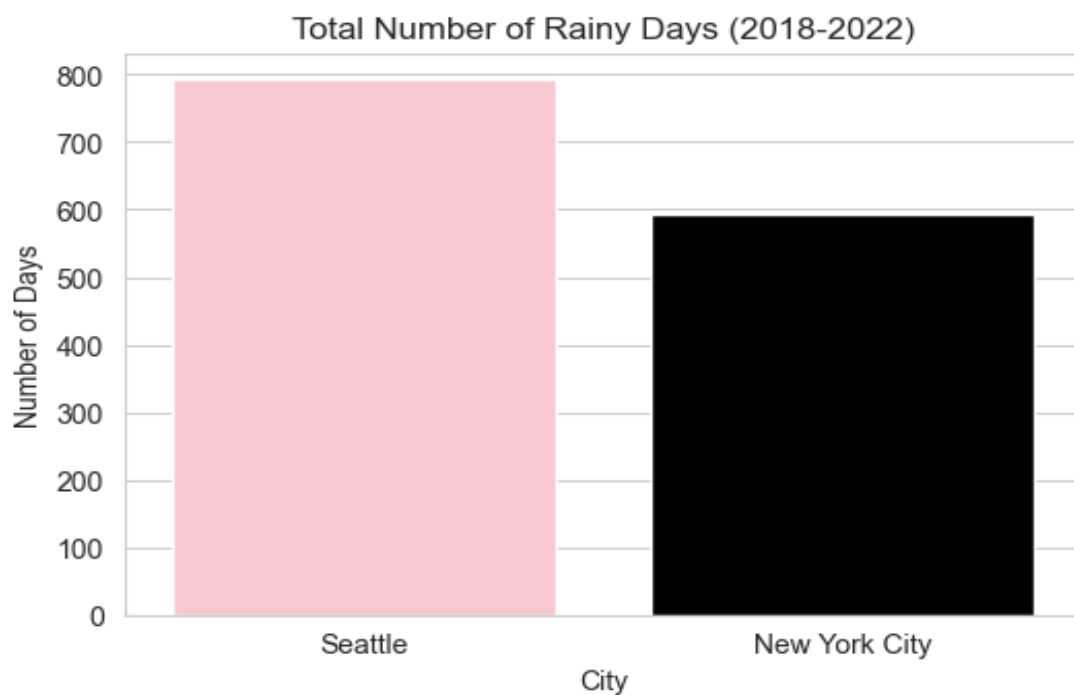
To conduct this analysis, daily rainfall data was collected from public sources, including NOAA and GitHub. By comparing these datasets, we can look at how often it rains and identify seasonal patterns in both cities.

Analysis Method

First, the datasets were cleaned to remove duplicate entries and fix missing values. Then, the date formats were standardized to ensure consistency. Next, we calculated the number of rainy days in each city and visualized the results with a bar chart. After that, monthly average rainfall was calculated to examine seasonal trends, which were displayed using line charts. Finally, these visualizations were interpreted in simple terms to communicate results to a general audience.

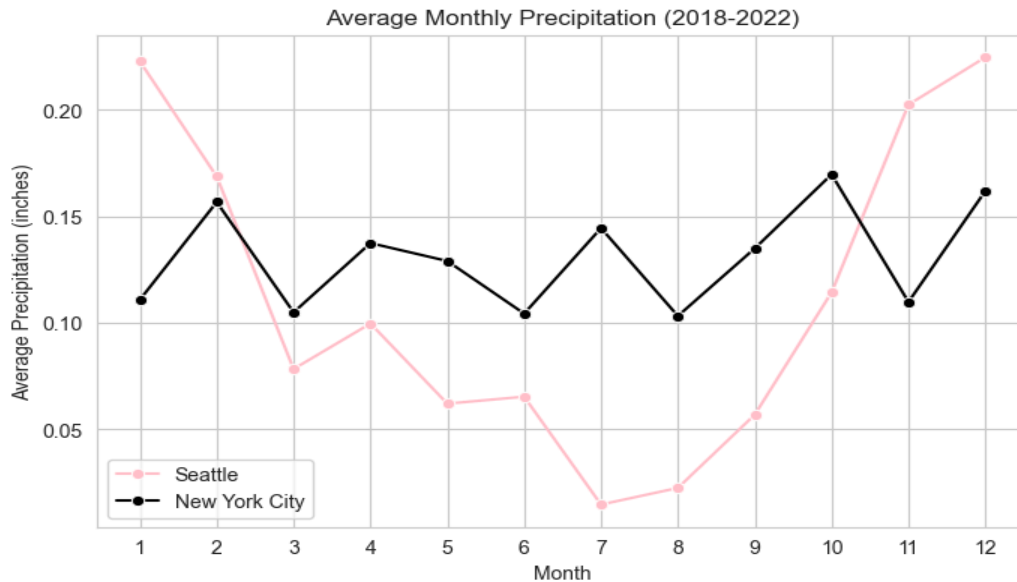
Results

- Graph 1



- The bar chart above shows that Seattle has more rainy days overall than New York City from 2018 to 2022. This indicates that Seattle experiences rain more frequently.

- **Graph 2**



- The line chart shows average monthly rainfall trends. Seattle has a clear seasonal pattern, with heavier rain during the winter months (November to January) and lighter rain in the summer. In contrast, New York City's rainfall is more evenly spread throughout the year, with only slight increases in certain months.
- Overall, these visualizations show that Seattle rains more often, while New York sometimes experiences heavier rain in individual months.

Conclusion

The analysis shows that Seattle has more rainy days than New York City from 2018 to 2022.

While Seattle's rainfall is frequent but generally lighter, New York tends to get fewer but heavier rainfalls.

This finding reminds us that "rainier" can have different meanings depending on whether we focus on frequency or total rainfall. Seattle truly deserves its rainy reputation not because of how much rain it gets, but because of how often it rains.