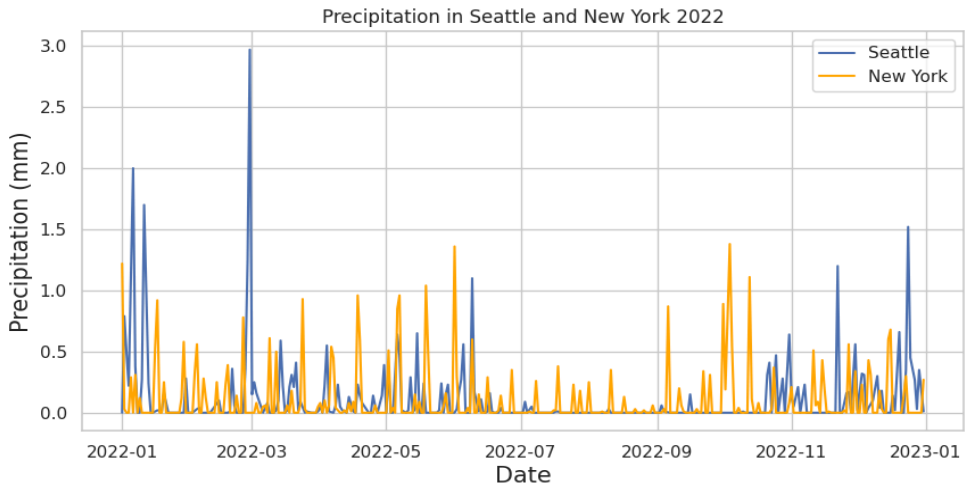
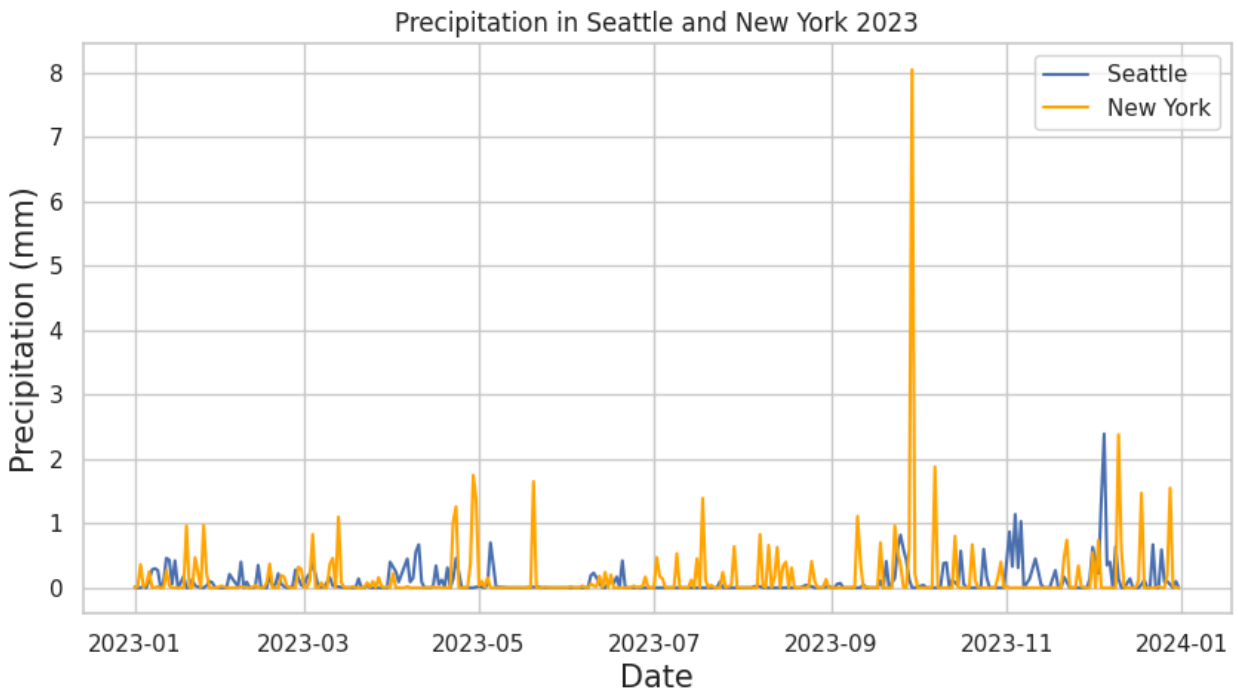
Introduction:

In the project, we got the amount of precipitation from two different cities, Seattle and New York. This project was inspired by Dr. Egan because his family believes it rains more in Seattle than in New York which is why they have not visited him at all. In this report, we will analyze two graphs that will help us determine if Dr. Egan's family is right in believing that it rains more in Seattle. The data was obtained by the National Centers for Environmental Information (NOAA). They provide environmental data, but we used only the data of daily precipitation provided by the NOAA. The precipitation data used in the report from both cities were from their international airports, Seattle-Tacoma International Airport and the John F. Kennedy International Airport.

Analysis:

While looking at the data, we found that there were missing data. The way I dealt with the missing values was by removing them entirely from the dataset given. Another method used was to get just two years ranging from 2022 to 2023 as they are the most recent years that we have. While we were given the data from 2020 to the beginning of 2024, I believed that it would just be more accurate to have to entirety of the last two years as they would be more relevant to us. There were a few graphs made, but in this report, I will just be using two line graphs for both 2022 and 2023 to help me conclude whether it rains more in Seattle or New York. Both these line graphs compare both Seattle and New York.





Conclusion:

In the plot for 2022, we see that in the first 3 months and last 3 months of 2022, it rained harder in Seattle. Then across the months, on average in New York, it rained more than in Seattle. Especially around the summer of 2022, New York experienced heavier rainfall than in Seattle. Now we can move on to the graphs in 2023. Judging from just the line graph, we see that New York easily beats Seattle in terms of precipitation per month. While there are 3-4 months in total for the whole year in which we can say Seattle beats New York in terms of average rainfall per month, we can see that most of the time, New York rains more often and heavier than Seattle. From both graphs, we conclude that usually when it rains, New York will rain heavier than in Seattle. However, it also depends on the time because around the end of the year, there are times that Seattle rains more than in New York so time is also a factor in this. Overall, the conclusion from this project is that it rains harder in New York than in Seattle which means it is time for Dr. Egan's family to come visit him as there are graphs to prove this conclusion.