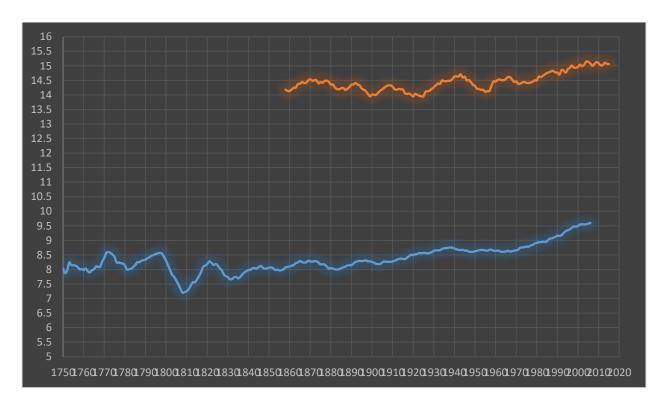
## **EXPLORE WEATHER TRENDS PROJECT**

## **PROJECT OUTLINE-**

This project contrasts the weather data of San Francisco against the world. I used MS Excel for this project. I combined the data into a single worksheet and then plotted the moving averages of temperature in San Francisco and the world. The moving average was calculated as shown in the lesson. I calculated the moving averages over a period of 10 years so as to make data more readable.

In order to visualize data properly, it was important that the lines were smooth and the bin width was set at appropriate measure so that observations could be made correctly. The x- axis represents the years from 1750 to 2020 and the y-axis represents the temperature.



## **OBSERVATIONS-**

The data for San Francisco before 1849 is missing, but we observe that the San Francisco temperatures have been consistently higher than the global averages.

From the late 1900s we observe that the global temperatures have been on a rise consistently. This could be attributed to the advent of Industrialization. Smoke and gases released from factories have been a major factor in the depletion of the ozone layer and the subsequent rise in temperatures.

The San Francisco data also shows that in the late 1900s the temperatures spiked, but in the 2000s there has neither been a considerable spike or a dip in the temperatures.

Even though San Francisco temperatures have been way higher than the global average, the increase around the 2000s is common in both. This could be because of a varied variety of reasons, carbon emissions being one of them. Increase in population has led to an increase in the number of automobiles which has added to the emissions.