**Project 1: Explore Weather Trends**

1. **The exact SQL query used to extract the data:**

Select \* from city\_data

where country='United States' And city='Boston';

A screenshot of a cell phone

Description automatically generated

Query to extract global data:

Select \* from global\_data;

A screenshot of a cell phone

Description automatically generated

1. **A description of the tool used to complete the project:**

For this project, I used Google Sheets and Microsoft Excel.

I used Microsoft Excel to read and merge the data, as there were 2 different csv files. So, I had to combine the csv file and merge it according to the year column.

I calculated the moving average for 10 years and created new columns for it.

The image shows all the data columns with their respective calculations and vaues.

A close up of a piece of paper

Description automatically generated

1. **The line chart produced:**

A close up of text on a white background

Description automatically generated

A close up of a map

Description automatically generated

1. **observations:**

There are several observations which I’d like to mention here:

1. According to line graph we can see that global temperature as well as Boston city’s temperature are increasing by the time. (Global warming may be)
2. Based on the findings, Boston city is always having a low temperature then other cities and countries. It never gets more than an average global temperature. Based on that, we can say that, Boston is cold place respectively.
3. Between the year of around 1775 to 1780, Boston city’s temperature measured as lowest temperature in more than 2 centauries. It was below the 0. We can see that in graph 1.
4. Year of 1820 to 1830, Global temperature as well as Boston city temperature was respectively low. It was lowest for global average. That was the time when It measured as a lowest, after that global temperature was increasing constantly.
5. Based on the both of graphs we can predict that, for upcoming years the global average temperature would cross 10o C.
6. Link for the Line chart and data: <https://docs.google.com/spreadsheets/d/1s0sWO-mtNPbommK5cbrgi3oVXNrGhVlNrCXhUhP9ZJ8/edit?usp=sharing>