Exploring Weather Trends

Steps involved in the project

1. Data Extraction
2. Data Cleaning
3. Data Visualization

1. Data Extraction

I have used the below SQL statements to get the data from the prescribed database schema.

City temperature Data:

select * from city_data;

Global temperature Data:

select * from global_data

I have then downloaded the corresponding results into a csv

2. Data Cleaning

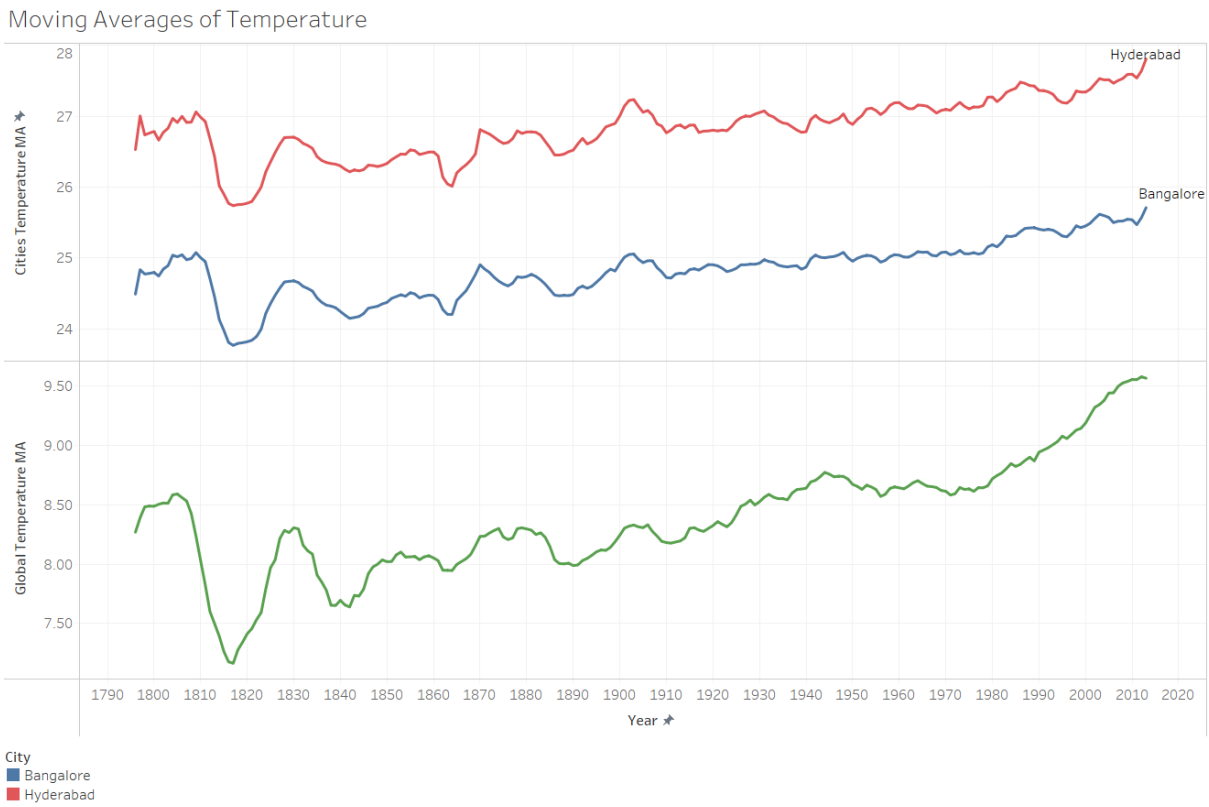
While walking through the data, I have realised the cities I'm interested in doesn't have the same set of values for the years were there were values for global temperature.

Hence in my visualization part, I have nullified (not considered) the years where there are no values.

3. Data Visualization

I have used Tableau to plot the data as a line chart, with Moving average of temperature for 7 years along the Y axis and the corresponding year along the X axis.

While connecting the data sources, I have joined the city data and the global data based on the temperature, there by having the required data for plotting the graph



4. Observations:

- There is a clear uptrend in the global temperature averages while a slight uptrend in Hyderabad and Bangalore, which is stepping up towards the recent years.

- While the Global temperature average ranged between 6 to 10 degrees across the decades, the temperature average of Hyderabad and Bangalore are considerably higher between 23 to 28 degrees.

- The rise in global average temperature from 1990 is considerably higher than Hyderabad and Bangalore, while, both Hyderabad and Bangalore are rising at a higher rate from 2010.

- The average temperature of Hyderabad is greater than that of Bangalore, and it seems to be accurate has Bangalore is situated a higher altitude compared to Hyderabad and historically it has been a cooler place.