

Explore Weather Trends

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Data Analyst Nanodegree

Overview

In this project, I learned to analyze local and global temperature data and compare the temperature trends where I live to overall global temperature trends.

Goals

1. Analyze city Avg. Temperature with Global Avg. Temperature.
2. Line Chart - Based on City Temperature vs Global Temperature using moving average values.

Specifications

1. Extract data using SQL Queries

- City Level data

```
Select * from city_data where city = 'New Delhi';
```

```
Select avg_temp,city,year, from city_data where city = 'New Delhi';
```

- Global Level data

```
Select * from global_data;
```

```
Select a.avg_temp,a.year,b.country from global_data a join city_data b using (country) ;
```

2. Manipulate data on Spreadsheet

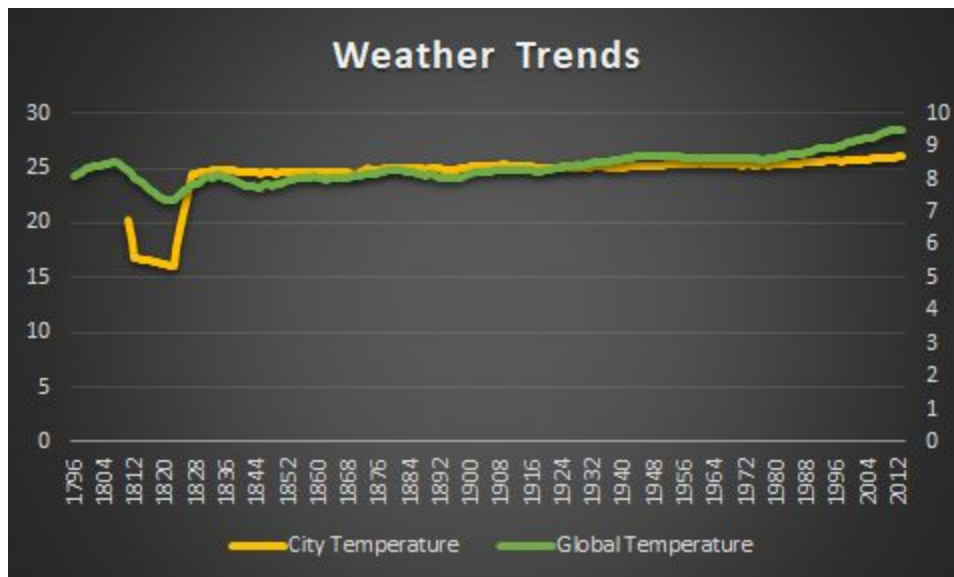
I segregated the data in Excel and plot the values in the Line Chart. I used the Average formula average(column1 : Column 6) and later on compared the City Avg Temperature and Global Average Temperature.

Excel - In way to get my data I merged sheets using vlookup function, it's helps me a lot to prepare plotting data.

3. Line Chart


Line Chart is one of the graphical representations of Data in a better way which helps to analyze any data in its best order.

PFB Chart



Observations

- Temperature of Delhi is much higher than the overall Globe reason behind it as globe's data includes hotter and colder places.
- In the middle of 18th Century City Temperature drops but it couldn't affect Global Avg. Temperature.
- In the 19th Century we can observe both temperatures were closed, which is a neutral point.

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- For last decade Globe Temperature is increasing day by day and earth has become hotter than Delhi.
 - In the overall report, we can see that from the past 2-century temperature is dropping or increasing within 1.5 C.