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UDACITY Data Analysis Nanodegree

Project1: Exploring Weather Trends

Summary

In this project, I will analyze local and global temperature data and compare the temperature trends where you live to overall global temperature trends. I selected temperature of Riyadh city to compare it with global temperature.

- **Extract the data** from the SQL database and export to CSV: city_list, city_data and global_data. I downloaded all the data Then I used the Filter in Excel.

```
1  select *
2  From city_data
```

```
1  select *
2  From global_data;
```

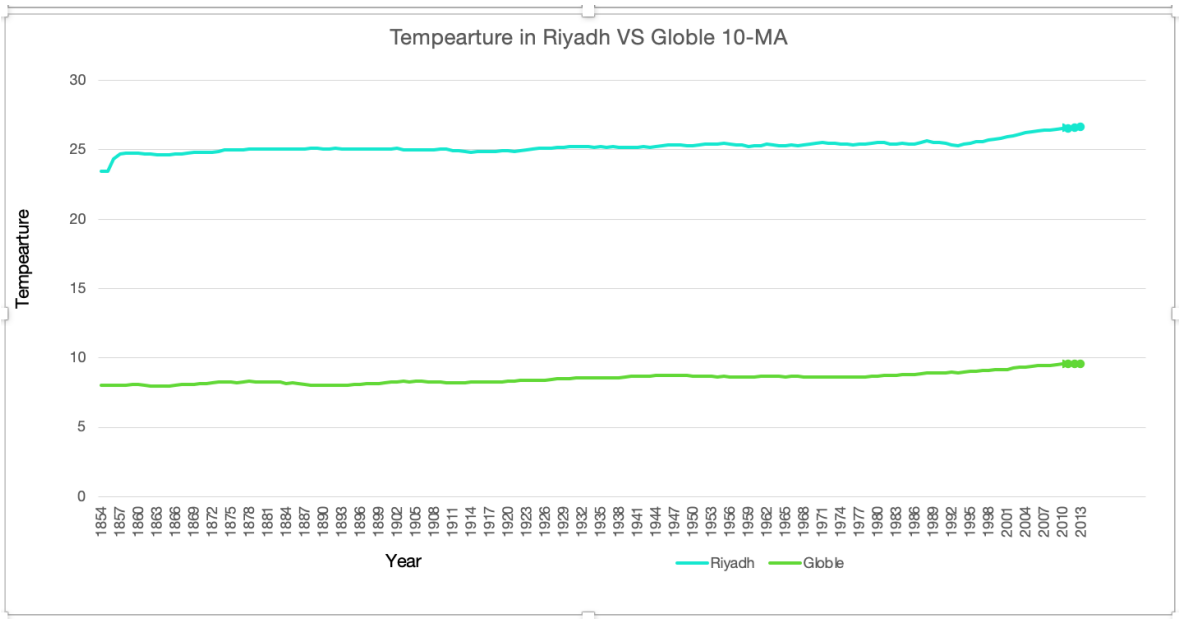
```
1  select *
2  From city_list;
```

- I selected temperature of Riyadh city to compare it with global temperature. And used Microsoft Excel for Analysis.

- **Moving Averages:**

  Rolling Average has been calculated to smooth out data and observe the trends.
  I used 10 years Moving Average to get the smoth line chart.
  By this formla: =Average(B2:b11)

- **Line chart for Riyadh and Global Temperature:**



- **Observation:**

Global Average Temperature is between (8.0006, 9.556) ℃
Riyadh Average Temperature is between (23.424, 26.63) ℃
Riyadh Average Temperature is increasing over time.
1872-1992 Riyadh and Global average Temperature have similar kind of trends.
1995-2013 the Moving average Temperature is raising without any stops.

According to the graph Riyadh and world getting hotter over time because the Temperature increasing over time, and the change of the climate between the **Global** and **Riyadh** are slightly small.

- **Conclusion:**

The world Temperature is raising over the years.