

Data Analyst Nanodegree

Project One :Explore weather Trends

By RAHAF ALHARBI

Extraction of Data from provided Database

For Global Data:

```
SELECT *  
FROM global_city
```

To find the city nearest to me :

```
SELECT *  
From city_list
```

To select the City Data

```
SELECT *  
From city_data  
Where city = 'Riydah'
```

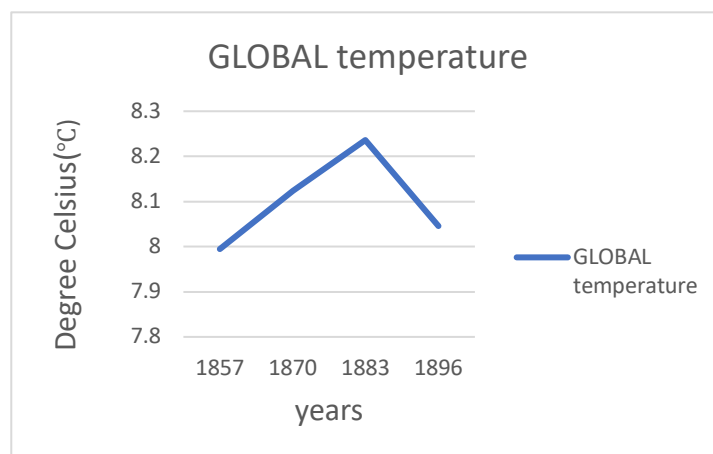
Approach To get the desired data:

- I downloaded the **global** data and CSV file of **city** to get the data.
- I Used Microsoft Excel for the analysis.

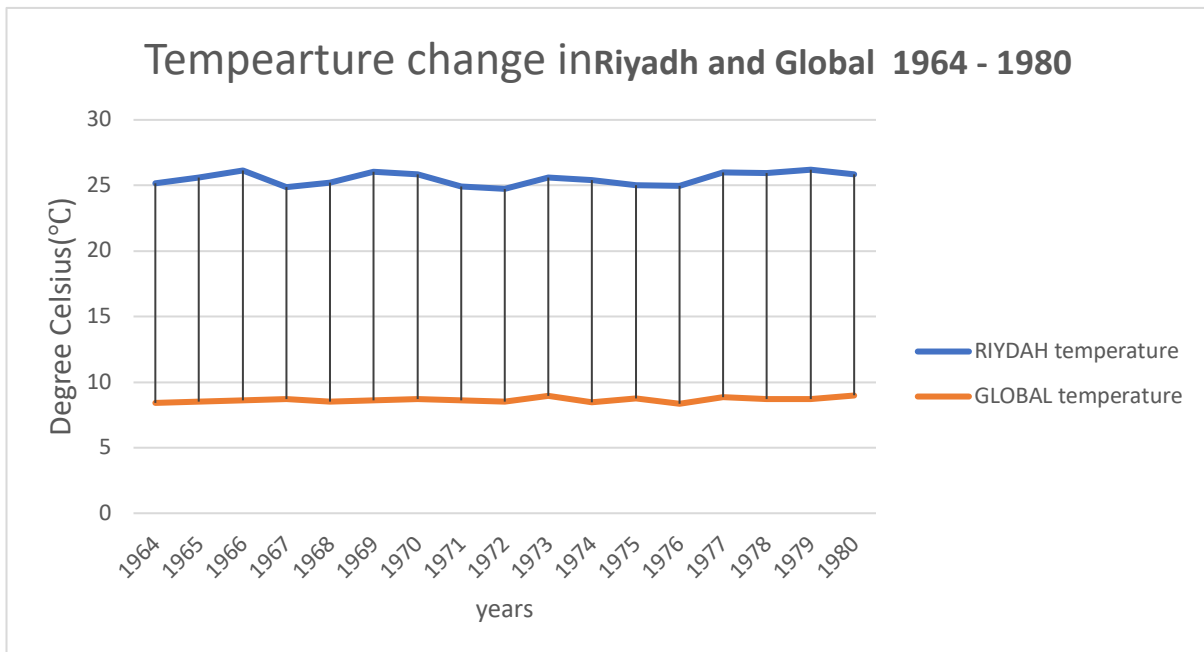
Excel commands for Moving Averages:

- To observe the trends in temperature .
- I used 13 years Moving Average **FOR GLOBAL** temperature.

Moving Average	Excel commands
For 13 Years Moving Average	=Average(F2:F14)



Line Chart fir Riyadh and Global Temperature between 1964-1980:



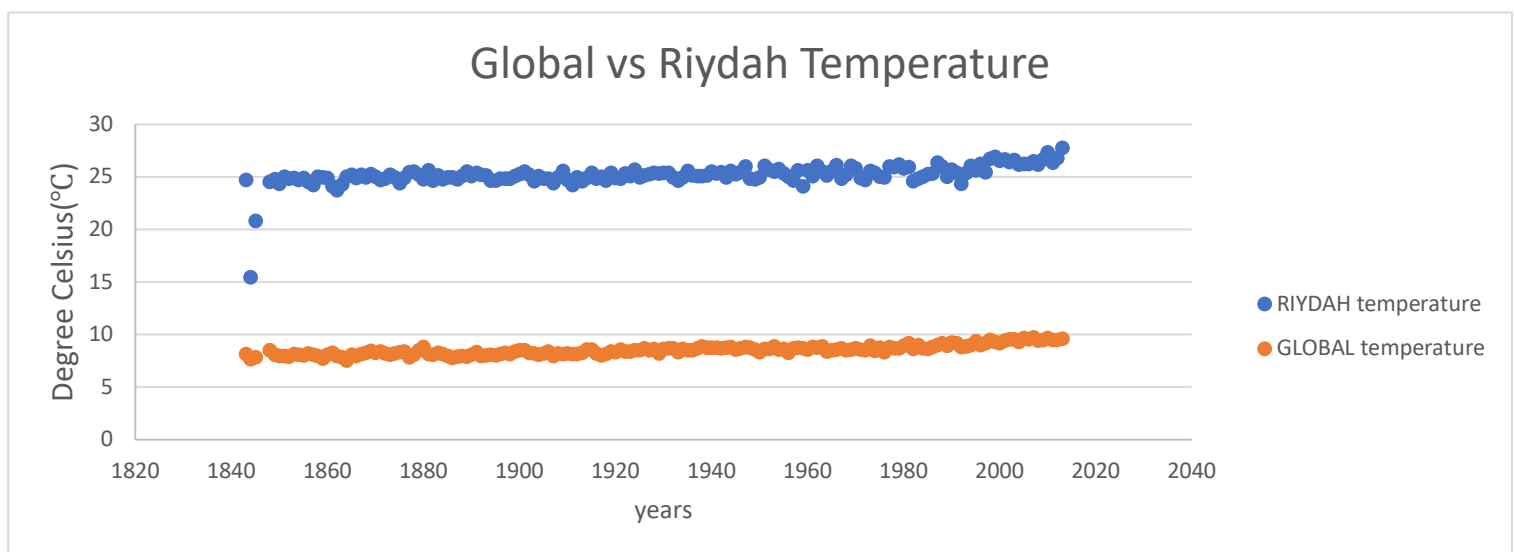
Observation:

- Global average temperature is varies between 8.35– 8.98 Degree Celsius but Riyadh city average temperature is varies between 24.93 to 26.6 Degree Celsius.
- If comparing the Global average temperature and Riyadh average temperature then the Riyadh city is hotter then Global average temperature.
- Change in temperature over time:

Year	Change in Riyadh average temperature	Change in Global average temperature	Increasing / Decreasing over time
1964-1966	25.14 - 26.16	8.41 - 8.6	Increasing
1970-1972	26.05 - 24.93	8.7 - 8.5	Decreasing
1976-1978	24.97 - 25.95	8.35 - 8.89	Increasing

- According to the graph and above table the difference between **Global** average temperature and **Riyadh** average temperature is been not consistent over time.
- **Riyadh** and **Global** average temperature have different kind of trends. During early years, in **Riyadh** trends have ups and downs then approx. but in **Global** have steady rate approx.
- According to the graph the **world is getting hotter** because from 1964 to 1978 temperature is increases.

Conclusion Line Chart:



From This line chart we can see that eventually the graph is moving upwards which means the global temperature is rising which is directly proportional to increase in temperatures of the city.

Final Conclusion:

The **world is getting hotter** over the years