

## Project#1

# Exploring Weather Trends

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## Summary

In this project, I will analyze local and global temperature data and compare the temperature trends in SA, Riyadh to overall global temperature trends.

Tools:

- SQL statements: to extract the data from the database.
- MS Excel: to calculate moving average over decades of years.

## Data Extraction

Here data has been extracted from the database using **SQL** queries. and moving average has been calculated by using **MS Excel** over four years in order to get line chart comparing data of Riyadh and Global. I started from 1996 A.D.

### SQL queries:

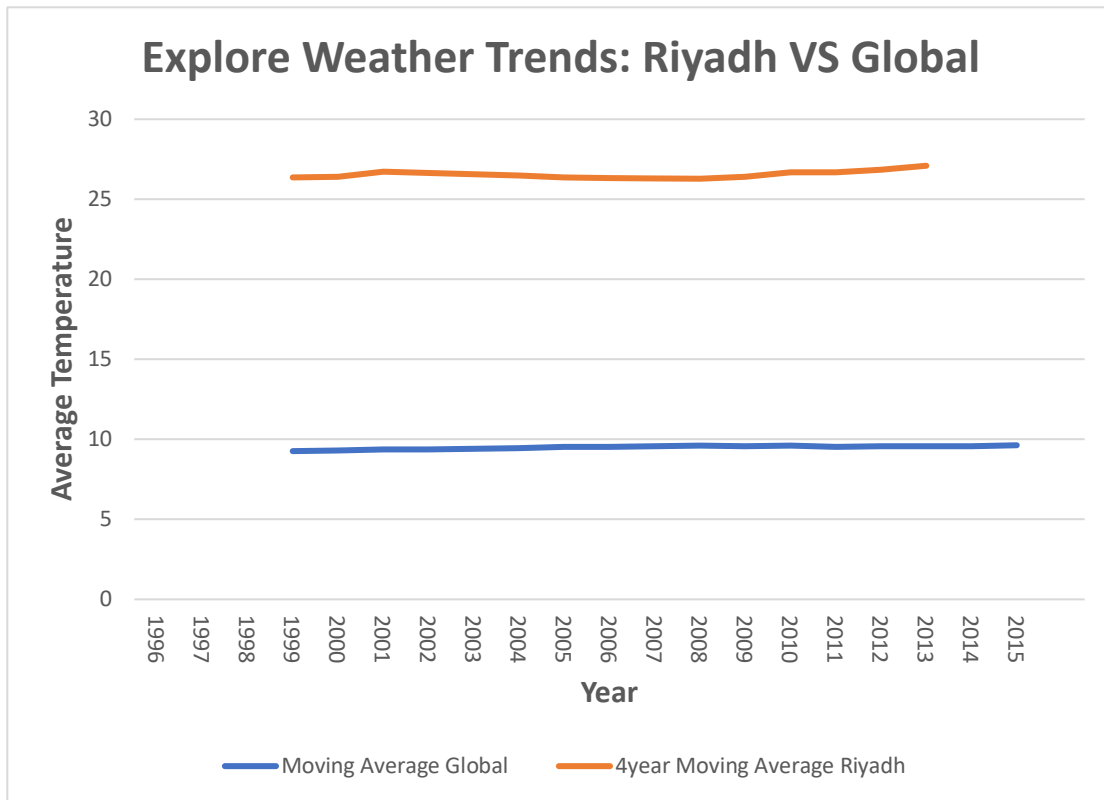
To extract Global data:

```
select avg_temp, year
from global_data
where year >= 1996
```

Then, to extract Riyadh data:

```
select avg_temp, year
from city_data
where year >= 1996 and city = 'Riyadh'
```

## Visualization



## Observations

- As we see the overall trend of Riyadh average is much hotter than Global averages.
- Overall trends look like global is consistently getting hotter over the last few hundred years.
- Riyadh has logged an extreme outlier average temperature of 27.78 on 2013.
- So, changes in Riyadh temperatures over time is matching with changes in the global averages.