

Explore Weather Trends **PROJECT**

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Tools Used:

1. SQL: To extract the data from the database.
2. Excel: For calculating moving average and plotting line chart.

Step1: Extract the data from the database (Sql):

Initially, I extracted the data through the on-site database.

```
select city_data.year,city_data.avg_temp  
from city_list,city_data  
where city_list.city='Riyadh' and  
city_data.city='Riyadh' ;
```

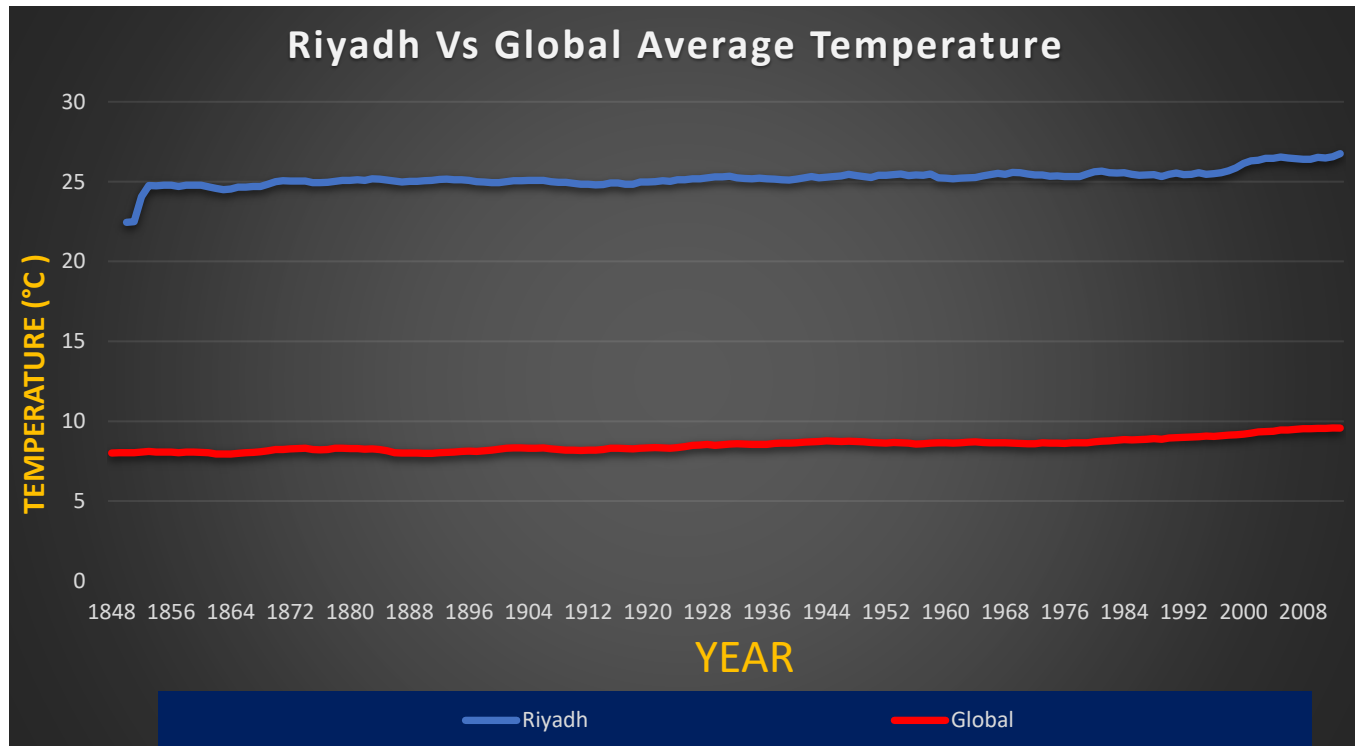
```
select *  
from global_data;
```

Moving Average:

The Excel tool was used in the moving average stage and the illustration used between my city and the world. All of that was using the Excel tool. The moving average was calculated through Excel, and to do that go to the data field after that click on the data analysis button after that choose the moving average and then select the data that will be calculated in the

moving average and specify the interval, then choose where the moving average results are placed.

I have done 8 year Moving Average to get the smooth line chart.



considerations:

Existing fonts in the charts have Different colors of lines. The red line for global temperatures and The blue line Riyadh city temperatures. The bottom row shows the years and the column shown the temperatures.

OBSERVATIONS :

- 1- We note in the city of Riyadh in the average years the temperature was moderate, but in the last years there is an increase in temperature.
- 2- Riyadh city Average Temperature for interval 8yrear varies between 21°C to 27°C
- 3- Global Average Temperature for interval 8yrear varies between 7.5°C to 9.5°C
- 4- Riyadh city Vs Global has very big difference in the temperatures Average Temperatures Riyadh is hotter than Global average temperature.