Explore Weather Trends project

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This Report provides an analysis of average temperature changes globally VS. Riyadh city, Saudi Arabia.

Outline

ANALYSIS

1. SQL query was used to extract needed data then download CSV files that contains yearly average temperature of the city Riyadh and Global temperature.
2. SQL commands used:
    - To select the nearest city in my country:

    ```
    select * from city_list where country ='Saudi Arabia';
    ```

    - To select the city data (Riyadh):

    ```
    select * from city_data
    where country = 'Saudi Arabia' AND city = 'Riyadh';
    ```

    - To select the Global data:

    ```
    select * from global_data;
    ```

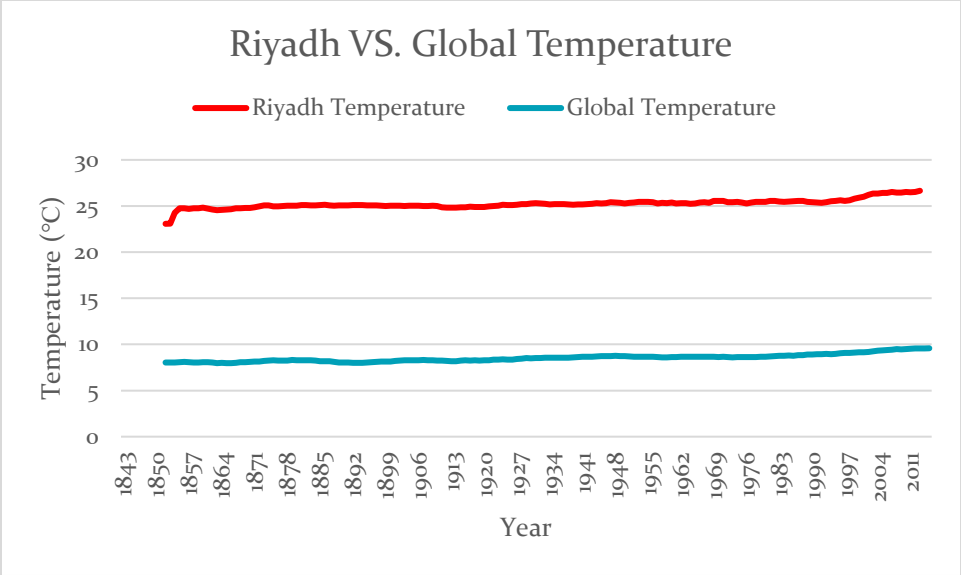
3. I used Excel to analyze the data
4. I copied the global and city data CSV files to get required data.

MOVING AVERAGE

- I calculated the moving average (MA) to observe long-term trends in temperature.
- I used ten (10) years moving average to have a smooth line chart.
- Excel command for ten (10) moving average:

  ```
  = average (B2:B11)
  ```

Line chart for Riyadh city and Global average temperature



Observations

1. By comparing the global average temperature and Riyadh city average temperature. We can find that **Riyadh city average temperature is hotter** than the Global average temperature.
2. The chart shows that from **1852 to 1997** the Global average temperature and Riyadh city average temperature was almost steady with a slight increasing and from **1997 until 2011** the weather average temperature noticeably increased.
3. The chart shows that both Riyadh city and Global weather have the same trend where the weather **consistent and getting hotter** over the years.
4. As per the chart the **world temperature is getting hotter**.