UDACITY

Explore weather trends

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Data collection:

- This query is to obtain all the data from my current city Riyadh:

    SELECT *
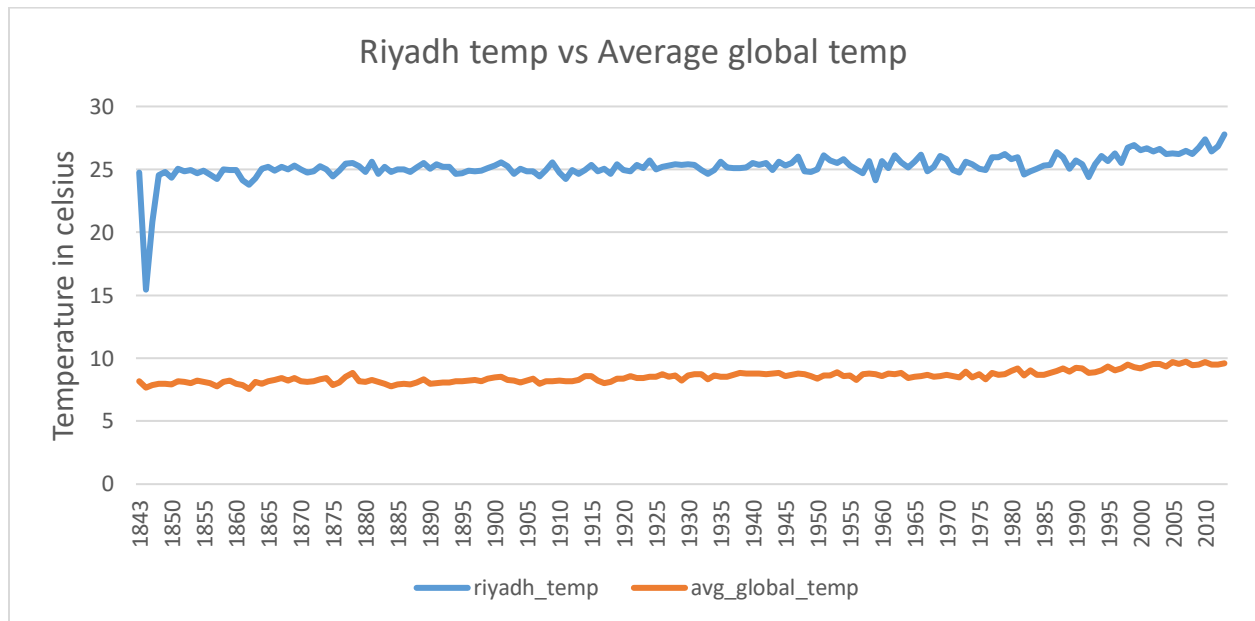
    FROM city_data

    WHERE city ='Riyadh'

- This query is to obtain all the data regarding global temp:

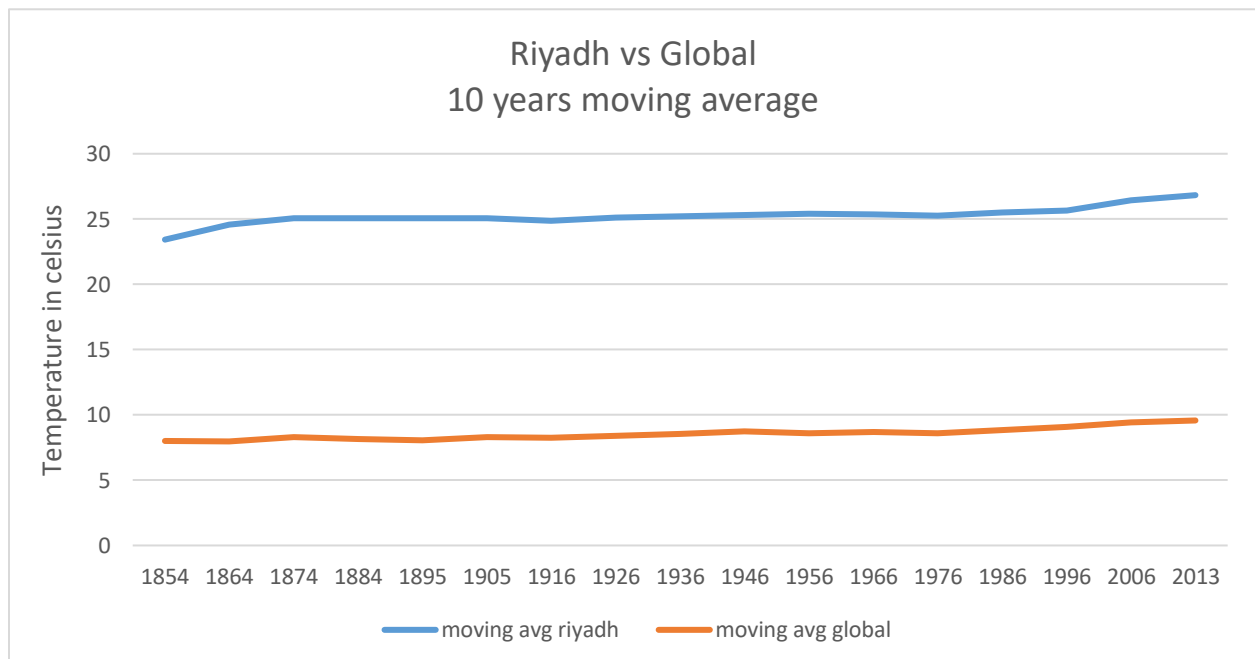   SELECT *

    FROM global_data

Approach:

- After collecting data using an SQL query, I downloaded the data in a CSV format.
- I used the AVERAGE() method in excel to calculate the moving average.
- I choose 10 years period to calculate the moving average to observe the trends in a smooth line.
- I used MAX(), MIN() to see maximum and minimum global and Riyadh temperature.

Riyadh temperature vs Average global temperature:

Riyadh temp vs Average global temp

Riyadh vs Global 10 years moving average:

Riyadh vs Global
10 years moving average

Observation:

	Riyadh	Global Average
Year	2013	2007
Max	27.78	9.73

	Riyadh	Global Average
Year	1844	1862
Min	15.45	7.56

- We can see the all the maximum Riyadh temperature was 27.78 which happened in 2013, and the maximum global average is 9.73 which happened in 2007.

- We can see the all the minimum Riyadh temperature was 15.45 which happened in 1844, and the minimum global average is 7.56 which happened in 1862.

- We can observe from Riyadh temperature vs Average global temperature graph that the temperature was fluctuates from 1850 to 1991. However, in 1992 the temperature is starting to rise.

- Looking at the moving average graph we can see in 1986 Riyadh and global temperature in increasing. However, 1854 until 1986 was fluctuating but not dramatically increased till 1986 to 2013.

Conclusion:

After observing the charts, we can see the temperature is increasing over the time due to global warming. The world must stand together to bring awareness and find solutions for climate change, because the global temperature is increasing over the years