Project 1 :

Exploring Weather Trends

UDACITY

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Step 1 : extract the data from the database

- To extract the global data, I use this query :

  ```sql
  select *
  from global_data
  ```

- To extract my city data , I use this query :
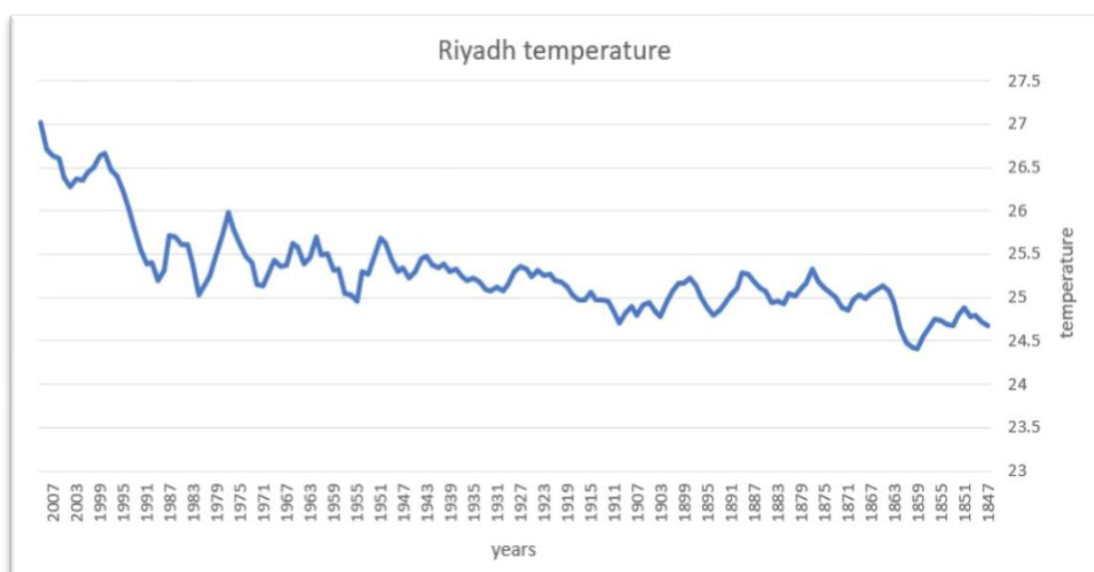
  ```sql
  select *
  from city_data
  where city='Riyadh'
  ```
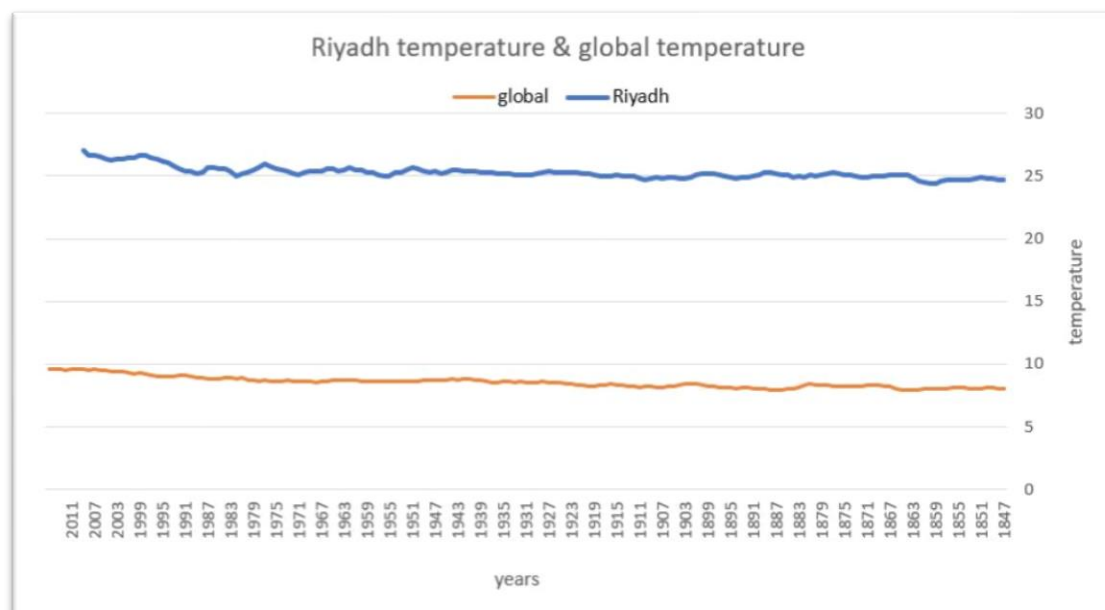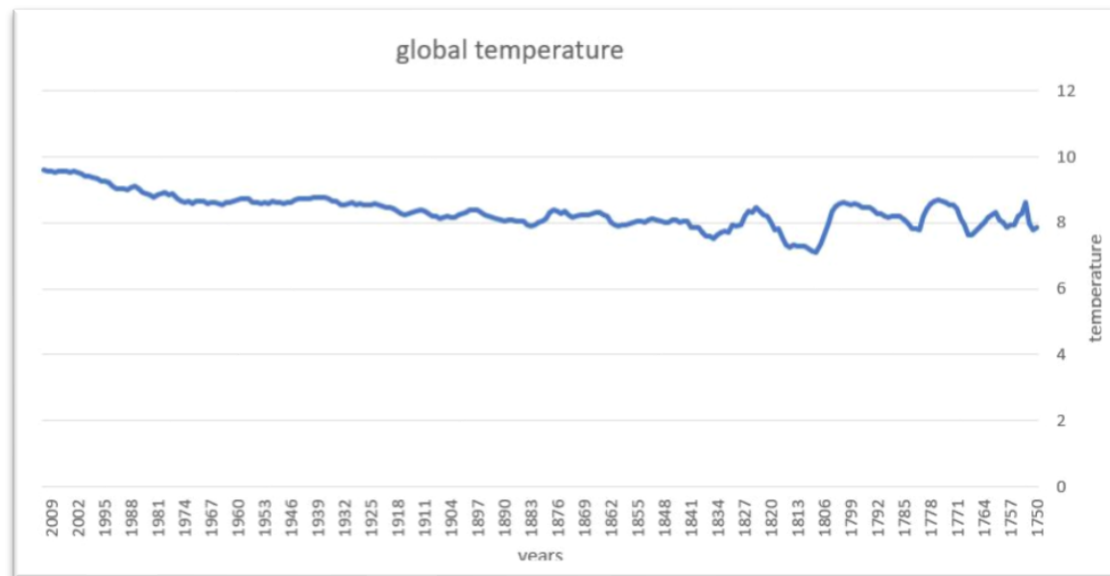
Step 2: calculate a moving average in a spreadsheet
I use the data from the previous step in Microsoft Excel , and I calculate a moving average as 5 years moving average as shown below :

C	B	A	
ear MA	g_temp	ar	1
	8.72	1750	2
	7.98	1751	3
	5.78	1752	4
	8.39	1753	5
=AVERAGE(B2:B6)	.47	1754	6
	8.36	1755	7

Step 3: create a line chart in a spreadsheet

Riyadh temperature

Step 4: observations

- Riyadh average temperature was between **20.28** and **27.018** whereas the global average temperature was between **7.108** and **9.608** .
- Riyadh minimum average temperature was in **1848** ,and in 2013 Riyadh reach the maximum average temperature **27.18** so the average temperature was Increased by **6.9** degrees .
- Global minimum average temperature was in 1812 and the maximum global temperature was in 2015 so it is Increased by **2.5** degrees
- The temperature increased over the years in both world and Riyadh city.
- Riyadh city has higher average temperature than the global average temperature, so Riyadh is hotter.