

Exploring Weather Trends

In this project , I chose Riyadh city and certainly global data ,Then ,I extracted the data of Riyadh city and global from the workspace located in the Udacity website:

I USED SQL QUERY

First query for extract Riyadh data :

```
select year,avg_temp from city_data where city='Riyadh' ORDER BY year
```

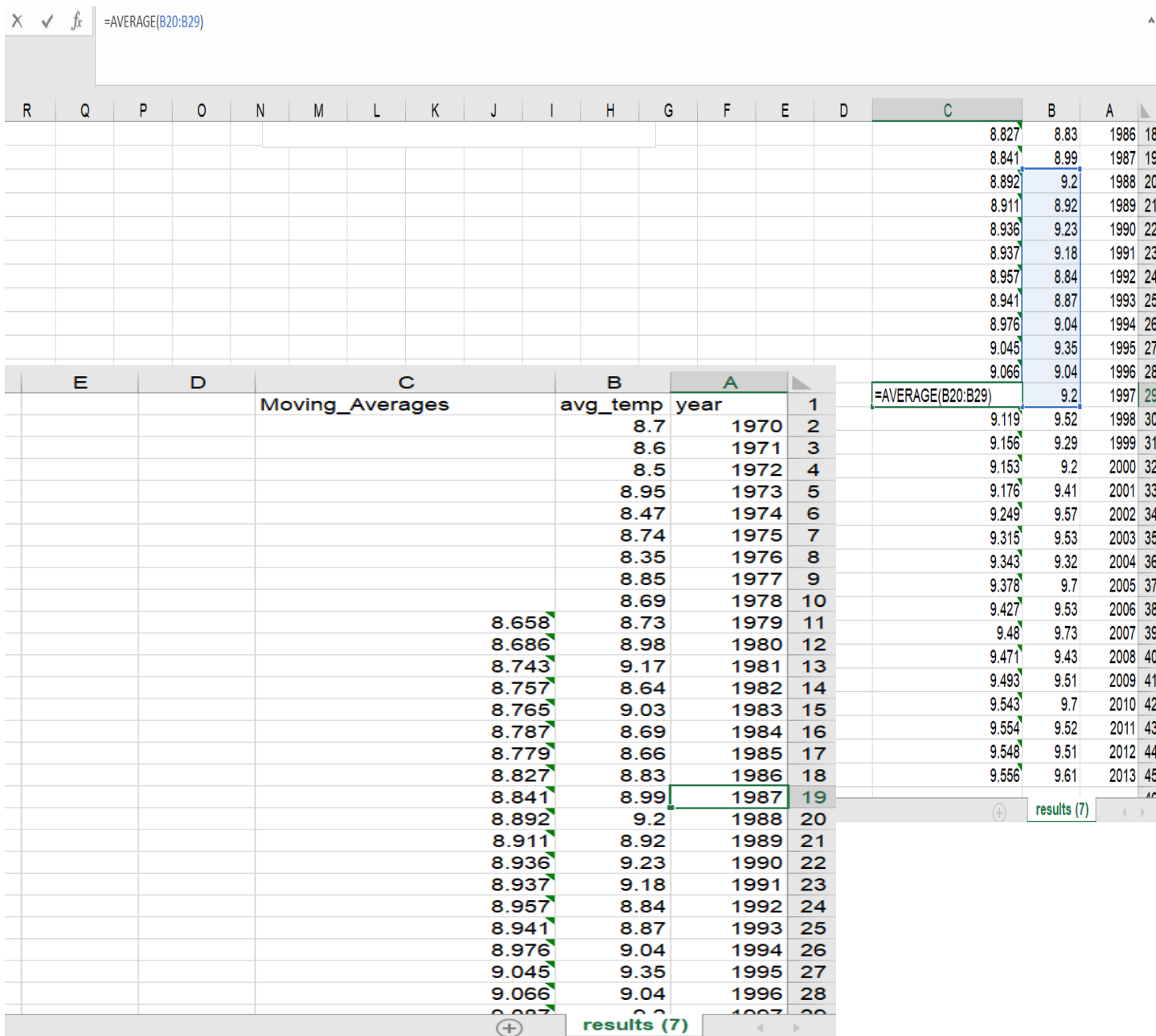
Second query for extract global data :

```
select * from global_data ORDER BY year
```

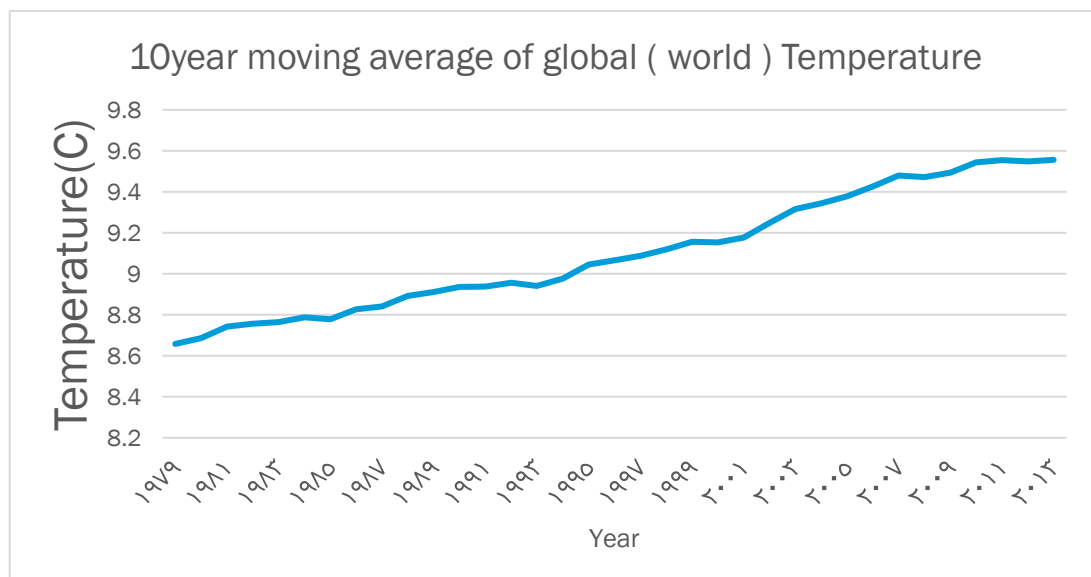
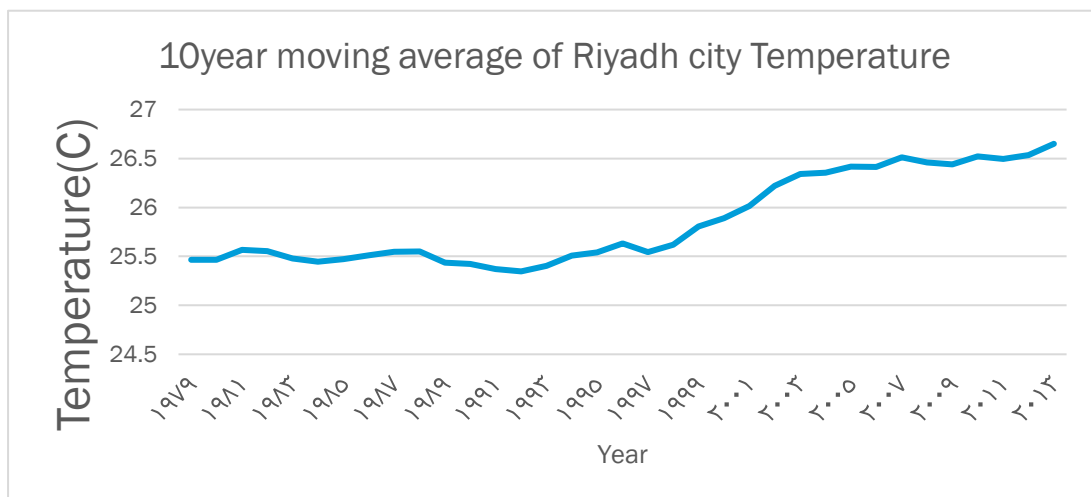
Accessing Data With SQL				Accessing Data With SQL			
Input				Input			
SCHEMA	↻	1	select * from global_data ORDER BY year	SCHEMA	↻	1	select year,avg_temp from city_data where city='Riyadh' ORDER BY year
city_data	▼			city_data	▼		
city_list	▼			city_list	▼		
global_data	▼			global_data	▼		
			Success!				Success!
			EVALUATE				EVALUATE
Output				Output			
266 results			Download	171 results			Download CSV
year	avg_temp			year	avg_temp		
1750	8.72			1843	24.74		
1751	7.98			1844	15.45		
1752	5.78			1845	20.82		
1753	8.39			1846			
1754	8.47			1847			
1755	8.36			1848	24.56		
1756	8.85			1849	24.80		

After that ,I used the Excel to calculate **Moving Averages (with 10 day Moving Averages)** ,
 create line charts for both (Riyadh and global):
 i used this formula to calculated (**AVERAGE(num1:num2)**)

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The line charts :





The observations :

- Average Temperature of Riyadh city is hotter than Global Temperature.
- Both (Riyadh and Global) there Average Temperature are increasing as the years go by.
- We can note that until 1997 in the city of Riyadh, the increase in temperature was approximately (a slight increase in temperature as the years go by).
- And approximately since 1998 in the city of Riyadh, the temperature has increased significantly with the progression of the years.
- We can note that between 2009 to 2013 in global (world) the increase rate of temperature slight increase as the years go by.
- We can also note that the rate of global temperature increase is approximately constant.