## 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:

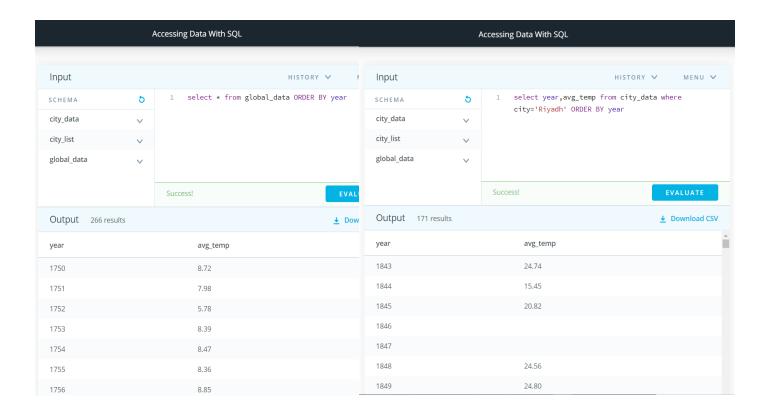
## I USED SQL QUERY

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



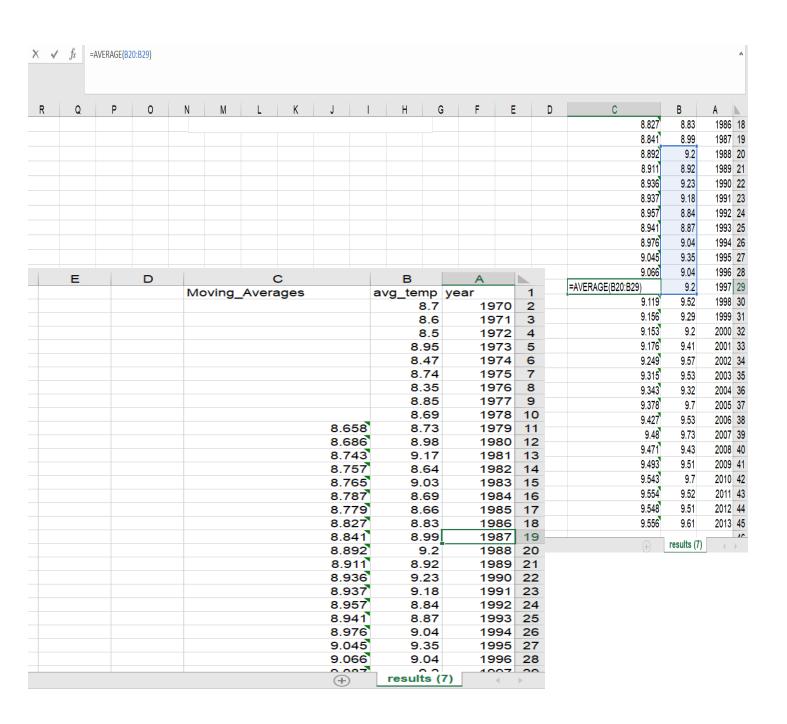


After that ,I used the Excel to calculate Moving Averages (with 10 day Moving Averages) , create line charts for both (Riyadh and global ): i used this formula to calculated (AVERAGE(num1:num2))

0	N		М	L	K	J	1	Н	G	F	Е	D	C	В	A
														25.95	1978
													25.466	26.2	1979
													25.465	25.83	1980
													25.567	25.95	1981
													25.555	24.62	1982
													25.48	24.85	1983
													25.445	25.05	1984
													25.471	25.3	1985
													25.51	25.36	1986
G	F	Е		D		С			В		Α		25.548	26.37	1987
					Moving_Av	erages		avg_t	•	year		1	25.552	25.99	1988
									25.8		1970		25.437	25.05	1989
									24.9 24.7		1971 1972		25.424	25.7	1990
									25.		1973		25.372	25.43	1991
									25.		1974		25.347	24.37	1992
									25.0	4	1975	7	25.404	25.42	1993
									24.9		1976		25.507	26.08	1994
									25.9		1977		25.541	25.64	199
							25.46	e C	25.9 26.		1978 1979		25.633	26.28	1996
							25.46		25.8		1980		25.545	25.49	1997
							25.56		25.9		1981		=AVERAGE(B21:B30)	26.73	1998
							25.55	55	24.6		1982	14	25.806	26.92	1999
							25.4		24.8		1983		25.891	26.55	2000
							25.44		25.0		1984		26.015	26.67	2001
							25.47 25.5		25. 25.3		1985 1986		26.222	26.44	2002
							25.54		26.3		1987		26.342	26.62	2003
							25.55		25.9		1988		<del>-</del>		
							25.43	37	25.0		1989	21			
							25.42		25.		1990				
							25.37		25.4		1991				
							25.34 25.40		24.3 25.4		1992 1993				
							25.40		26.0		1993	26			
							25.54		25.6		1995	27			
							25.63		26.2		1996	00			

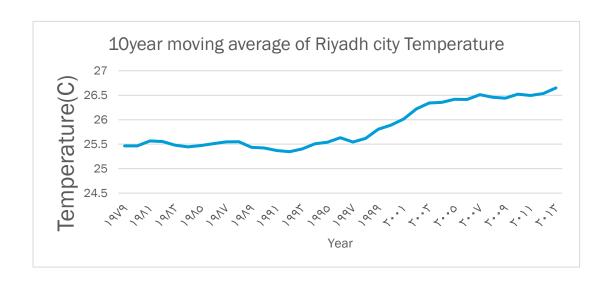
results (6)

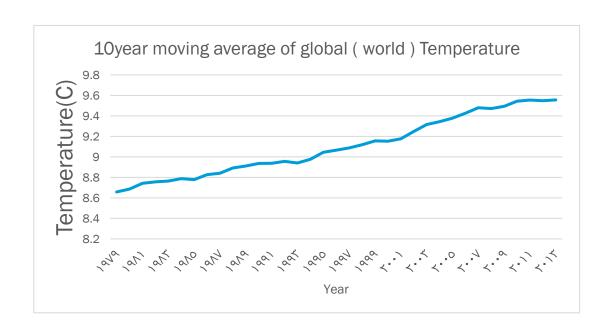






## The line charts:







## 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.