

Weather Trends project

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What tools did you use for each step?

First I used SQL to show global data then download CSV

The screenshot shows a SQL query interface. On the left, there is a 'SCHEMA' panel with a tree view containing 'city_data', 'city_list', 'global_data', 'year', and 'avg_temp'. The 'global_data' table is selected. The main area shows a SQL query: `SELECT * FROM global_data`. Below the query, there is a 'Success!' message and an 'EVALUATE' button. The 'Output' section shows '266 results' and a 'Download CSV' link. The output table has two columns: 'year' and 'avg_temp'. The first three rows are: 1750 (8.72), 1751 (7.98), and 1752 (5.78).

year	avg_temp
1750	8.72
1751	7.98
1752	5.78

Second I found city of database I chose the city of Riyadh

The screenshot shows a SQL query interface. On the left, there is a 'SCHEMA' panel with a tree view containing 'city_data', 'city_list', 'global_data', 'year', and 'avg_temp'. The 'city_list' table is selected. The main area shows a SQL query: `SELECT * FROM city_list`. Below the query, there is a 'Success!' message and an 'EVALUATE' button. The 'Output' section shows '342 results' and a 'Download CSV' link. The output table has two columns: 'city' and 'country'. The first five rows are: Abidjan (Côte D'Ivoire), Abu Dhabi (United Arab Emirates), Abuja (Nigeria), Accra (Ghana), and Adana (Turkey).

city	country
Abidjan	Côte D'Ivoire
Abu Dhabi	United Arab Emirates
Abuja	Nigeria
Accra	Ghana
Adana	Turkey

Then show the data of the city of Riyadh download CSV

The screenshot shows a SQL query interface. On the left, there is a 'SCHEMA' panel with a tree view containing 'city_data', 'city_list', 'global_data', 'year', and 'avg_temp'. The 'city_data' table is selected. The main area shows a SQL query: `SELECT * FROM city_data WHERE city = 'Riyadh'`. Below the query, there is a 'Success!' message and an 'EVALUATE' button. The 'Output' section shows '171 results' and a 'Download CSV' link. The output table has four columns: 'year', 'city', 'country', and 'avg_temp'. The first six rows are: 1843 (Riyadh, Saudi Arabia, 24.74), 1844 (Riyadh, Saudi Arabia, 15.45), 1845 (Riyadh, Saudi Arabia, 20.82), 1846 (Riyadh, Saudi Arabia), 1847 (Riyadh, Saudi Arabia), and 1848 (Riyadh, Saudi Arabia, 24.56).

year	city	country	avg_temp
1843	Riyadh	Saudi Arabia	24.74
1844	Riyadh	Saudi Arabia	15.45
1845	Riyadh	Saudi Arabia	20.82
1846	Riyadh	Saudi Arabia	
1847	Riyadh	Saudi Arabia	
1848	Riyadh	Saudi Arabia	24.56
1849	Riyadh	Saudi Arabia	24.80

How did you calculate the moving average?

First I calculated the average of the city of Riyadh 9 YEAR

=AVERAGE(C2:C10)

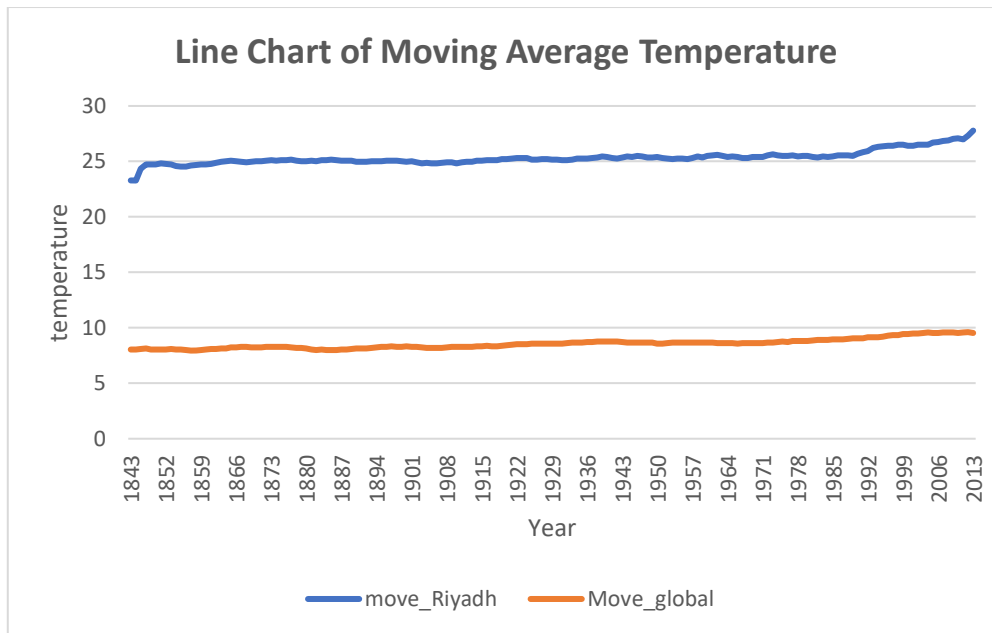
F	E	D	C	B	A	
Move_global			Riyadh avg_temp	city	year	1
8.038888889	=AVERAGE(C2:C10)	8.17	24.74	Riyadh	1843	2
8.031111111	AVERAGE(value1, [value2], ...)	7.65	15.45	Riyadh	1844	3
8.074444444	24.33	7.85	20.82	Riyadh	1845	4
8.114444444	24.74666667	8.55	24.56	Riyadh	1848	5
8.065555556	24.71333333	8.09	24.8	Riyadh	1849	6
8.055555556	24.73666667	7.98	24.34	Riyadh	1850	7
8.031111111	24.80444444	7.98	25.03	Riyadh	1851	8
8.044444444	24.79444444	7.9	24.85	Riyadh	1852	9
8.083333333	24.71444444	8.18	24.93	Riyadh	1853	10
8.058888889	24.58555556	8.1	24.72	Riyadh	1854	11
8.031111111	24.53666667	8.04	24.92	Riyadh	1855	12
7.977777778	24.54888889	8.21	24.57	Riyadh	1856	13
7.966666667	24.62222222	8.11	24.26	Riyadh	1857	14
7.952222222	24.69555556	8	25.01	Riyadh	1858	15
7.972222222	24.71888889	7.76	24.95	Riyadh	1859	16
8.031111111	24.72444444	8.1	24.94	Riyadh	1860	17
8.068888889	24.76444444	8.25	24.13	Riyadh	1861	18
8.068888889	24.86333333	7.96	23.77	Riyadh	1862	19
8.121111111	24.97	7.85	24.28	Riyadh	1863	20
8.16	25.03555556	7.56	25.03	Riyadh	1864	21
8.222222222	25.05888889	8.11	25.23	Riyadh	1865	22
8.231111111	25.03111111	7.98	24.92	Riyadh	1866	23
8.272222222	24.97666667	8.18	25.22	Riyadh	1867	24
8.3	24.94	8.29	25	Riyadh	1868	25
8.252222222	24.99222222	8.44	25.3	Riyadh	1869	26
8.212222222	25.01555556	8.25	25.02	Riyadh	1870	27
8.244444444	25.04	8.43	24.73	Riyadh	1871	28
8.288888889	25.04777778	8.2	24.87	Riyadh	1872	29
8.285555556	25.13222222	8.12	25.24	Riyadh	1873	30
8.285555556	25.06777778	8.19	24.98	Riyadh	1874	31
8.294444444	25.09111111	8.35	24.43	Riyadh	1875	32
8.27	25.13222222	8.43	24.89	Riyadh	1876	33
8.22	25.14222222	7.86	25.47	Riyadh	1877	34
8.21	25.08777778	8.08	25.51	Riyadh	1878	35

Second I calculated the average of the global 9 YEAR

=AVERAGE(D2:D10)

H	G	F	E	D	C	B	A	
				global_avg	Riyadh avg_temp	city	year	1
		=AVERAGE(D2:D10)			8.17	24.74	Riyadh	1843
		AVERAGE(value1, [value2], ...)			7.65	15.45	Riyadh	1844
		8.074444444	24.33		7.85	20.82	Riyadh	1845
		8.114444444	24.74666667		8.55	24.56	Riyadh	1848
		8.065555556	24.71333333		8.09	24.8	Riyadh	1849
		8.055555556	24.73666667		7.98	24.34	Riyadh	1850
		8.031111111	24.80444444		7.98	25.03	Riyadh	1851
		8.044444444	24.79444444		7.9	24.85	Riyadh	1852
		8.083333333	24.71444444		8.18	24.93	Riyadh	1853
		8.058888889	24.58555556		8.1	24.72	Riyadh	1854
		8.031111111	24.53666667		8.04	24.92	Riyadh	1855
		7.977777778	24.54888889		8.21	24.57	Riyadh	1856
		7.966666667	24.62222222		8.11	24.26	Riyadh	1857
		7.952222222	24.69555556		8	25.01	Riyadh	1858
		7.972222222	24.71888889		7.76	24.95	Riyadh	1859
		8.031111111	24.72444444		8.1	24.94	Riyadh	1860
		8.068888889	24.76444444		8.25	24.13	Riyadh	1861
		8.068888889	24.86333333		7.96	23.77	Riyadh	1862
		8.121111111	24.97		7.85	24.28	Riyadh	1863
		8.16	25.03555556		7.56	25.03	Riyadh	1864
		8.222222222	25.05888889		8.11	25.23	Riyadh	1865
		8.231111111	25.03111111		7.98	24.92	Riyadh	1866
		8.272222222	24.97666667		8.18	25.22	Riyadh	1867
		8.3	24.94		8.29	25	Riyadh	1868
		8.252222222	24.99222222		8.44	25.3	Riyadh	1869
		8.212222222	25.01555556		8.25	25.02	Riyadh	1870
		8.244444444	25.04		8.43	24.73	Riyadh	1871
		8.288888889	25.04777778		8.2	24.87	Riyadh	1872
		8.285555556	25.13222222		8.12	25.24	Riyadh	1873
		8.285555556	25.06777778		8.19	24.98	Riyadh	1874
		8.294444444	25.09111111		8.35	24.43	Riyadh	1875
		8.27	25.13222222		8.43	24.89	Riyadh	1876
		8.22	25.14222222		7.86	25.47	Riyadh	1877
		8.21	25.08777778		8.08	25.51	Riyadh	1878

Line Chart of Moving Average Temperature



When look at the liner char the blew liner is city Riyadh and the orange liner is global liner

1-The average temperature in the city of Riyadh is 25C and the average temperature global between 6 to 9 C

2-There is a big difference between the temperature in Riyadh and the global

The temperature index in the city of Riyadh is considered hot and high, while the global temperature is low and cold

3-In the past years of the city of Riyadh, the temperature was at 25C

4-in the past years of the global , the temperature was at 10C

5- When looking at a linear char of the city of Riyadh, we see that the temperature in recent years has increased up 25C

6-When we look at the global linear form we see that the temperature in recent years has increased up 10 C