

Explore weather trends!

Steps:

1.Extract data using SQL then export to CVS:

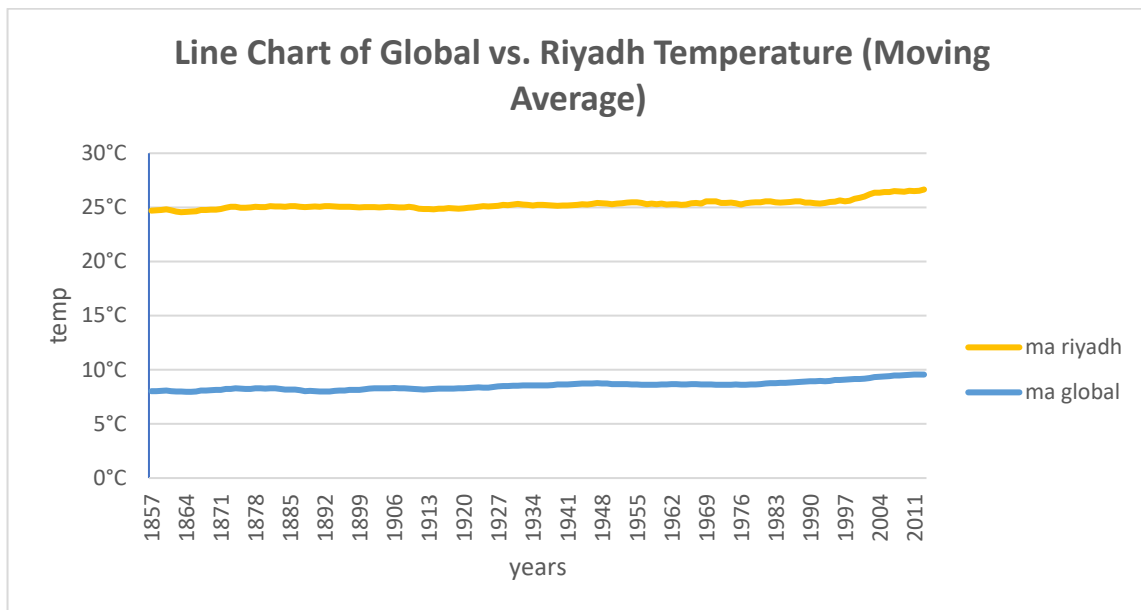
```
1 select
2 city_data.year, city_data.avg_temp, city_data.city,
  global_data.avg_temp as "avg global temp"
3 from city_data
4 join global_data
5 on global_data.year = city_data.year
6 where city = 'Riyadh' and country = 'Saudi Arabia'
```

2.Calculate Moving Average:

Calculate 10 years of MA by using '=average' function.

	year	avg_temp	city	avg global	ma riyadh	ma global
1	1848	24.56	Riyadh	7.98		
2	1849	24.8	Riyadh	7.98		
3	1850	24.34	Riyadh	7.9		
4	1851	25.03	Riyadh	8.18		
5	1852	24.85	Riyadh	8.1		
6	1853	24.93	Riyadh	8.04		
7	1854	24.72	Riyadh	8.21		
8	1855	24.92	Riyadh	8.11		
9	1856	24.57	Riyadh	8		
10	1857	24.26	Riyadh	7.76	24.698	8.026
11	1858	25.01	Riyadh	8.1	24.743	8.038
12	1859	24.95	Riyadh	8.25	24.758	8.065
13	1860	24.94	Riyadh	7.96	24.818	8.071
14	1861	24.13	Riyadh	7.85	24.728	8.038
15	1862	23.77	Riyadh	7.56	24.62	7.984
16	1863	24.28	Riyadh	8.11	24.555	7.991
17	1864	25.03	Riyadh	7.98	24.586	7.968
18	1865	25.23	Riyadh	8.18	24.617	7.975
19	1866	24.92	Riyadh	8.29	24.652	8.004
20	1867	25.22	Riyadh	8.44	24.748	8.072
21	1868	25	Riyadh	8.25	24.747	8.087
22	1869	25.3	Riyadh	8.43	24.782	8.105
23	1870	25.02	Riyadh	8.2	24.79	8.129
24	1871	24.73	Riyadh	8.12	24.85	8.156
25	1872	24.87	Riyadh	8.19	24.96	8.219
26	1873	25.24	Riyadh	8.35	25.056	8.243
27	1874	24.98	Riyadh	8.43	25.051	8.288
28	1875	24.43	Riyadh	7.86	24.971	8.256
29	1876	24.89	Riyadh	8.08	24.968	8.235
30	1877	25.47	Riyadh	8.54	24.993	8.245
31	1878	25.51	Riyadh	8.83	25.044	8.303
32	1879	25.24	Riyadh	8.17	25.038	8.277
33	1880	24.8	Riyadh	8.12	25.016	8.269
34	1881	25.63	Riyadh	8.27	25.106	8.284
35	1882	24.66	Riyadh	8.13	25.085	8.278
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3.Create a Line Chart:



4.observations:

- 1.Riyadh is hotter that the global with large difference.
- 2.Riyadh's average and Global average getting higher over years.
3. Year by year Global avg temp is getting hotter.
- 4.Riyadh overall average is 25.30 and Global overall average is 8.55 where Riyadh is larger.
- 5.Riyadh min temp (23.77) in year 1862 and max temp (27.78) in year 2013. Global min temp (7.56) in year 1862 and max temp (9.73) in year 2013. There comparison shows that year 1862 was coldest year in both Riyadh and the Global.