

1. The SQL Query to extract data:

Write a SQL query to extract the city level data. Export to CSV

SELECT *

FROM city_data

WHERE city = 'New York'

Write a SQL query to extract the global data. Export to CSV.

SELECT *

FROM global_data

2. What tools did you use for each step?

I used EXCEL to calculate the moving average.

I used EXCEL to visualized the data in the line chart

3. How did you calculate the moving average?

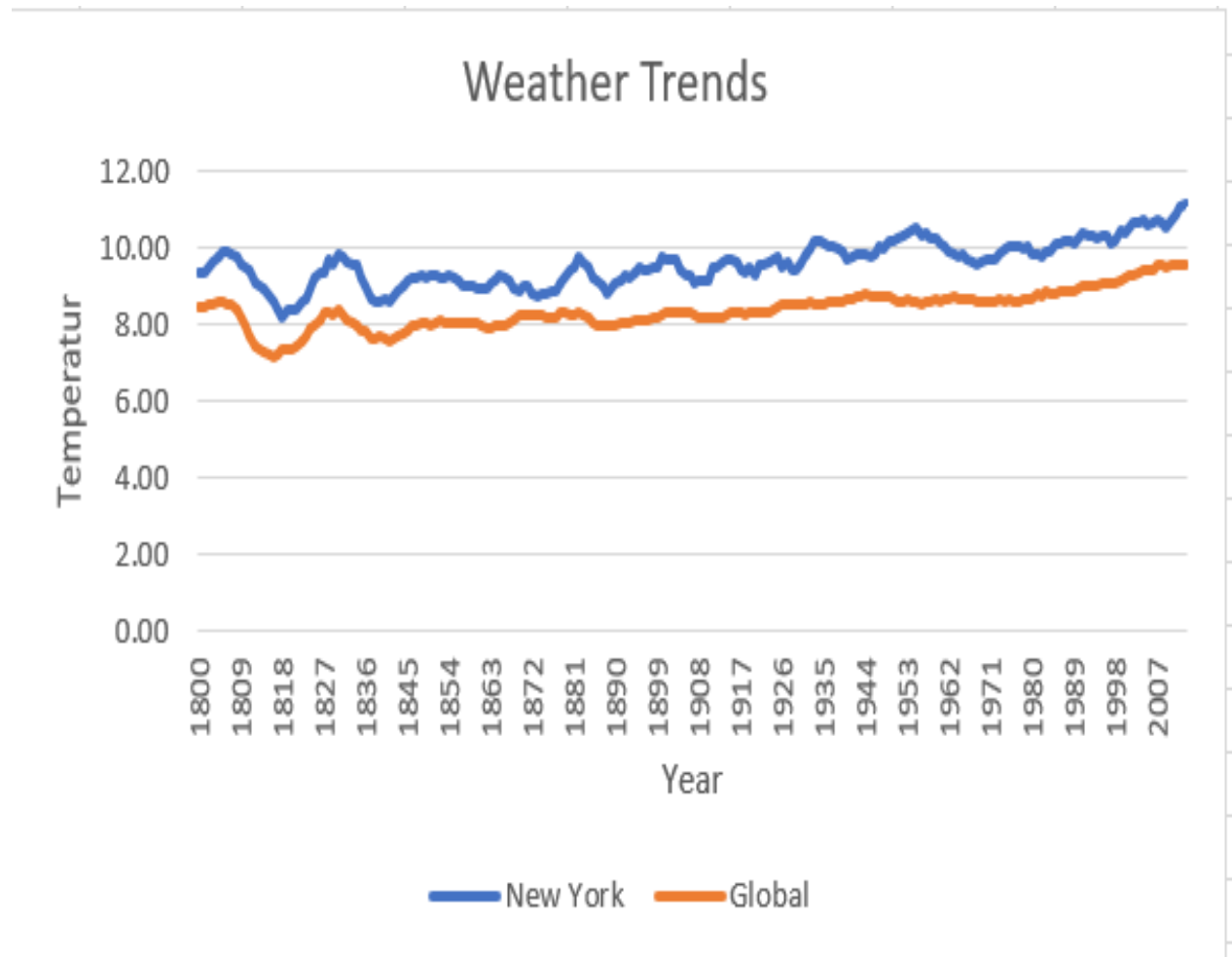
I calculated the moving average by using 7-years moving average

B15							
=AVERAGE(D9:D15)							
	A	B	C	D	E	F	G
1	year	7 years MA New York	7 years MA Global	New York avg_temp	Global avg_temp		
14	1793	9.36	8.19	9.88	8.23		
15	1794	9.48	8.26	9.83	8.53		
16	1795	9.40	8.25	9.21	8.35		
17	1796	9.34	8.24	8.97	8.27		
18	1797	9.26	8.32	8.85	8.51		
19	1798	9.31	8.38	9.71	8.67		
20	1799	9.38	8.44	9.19	8.51		
21	1800	9.33	8.47	9.58	8.48		
22	1801	9.36	8.48	10	8.59		
23	1802	9.51	8.52	10.29	8.58		
24	1803	9.67	8.55	10.07	8.50		
25	1804	9.79	8.60	9.69	8.84		
26	1805	9.89	8.58	10.43	8.56		
27	1806	9.92	8.57	9.38	8.43		
28	1807	9.86	8.54	9.17	8.28		
29	1808	9.80	8.40	9.57	7.63		
30	1809	9.60	8.19	8.87	7.08		
31	1810	9.49	7.96	9.35	6.92		
32	1811	9.46	7.68	9.43	6.86		
33	1812	9.08	7.46	7.8	7.05		
34	1813	9.02	7.37	8.93	7.74		
35	1814	8.95	7.27	8.7	7.59		
36	1815	8.76	7.21	8.27	7.24		
37	1816	8.63	7.19	7.92	6.94		

4. What were your key considerations when deciding how to visualize the trends?

I should be able to see the trend. The trend will be visualized by 7-years moving average.
I should be able to see similarities and differences between the world averages and my city's averages.

5. Line chart with local and global temperature trends



6. Observation

1. New York is hotter on average compared to the global average
2. The average temperature difference between New York temperature and global temperature has been consistent over time
3. The world is getting hotter. The New York is also getting hotter
4. The trend has been consistent over the last 100 year