

Weather Trends Project

The nearest big city to me is Cairo

Tools:

- 1- SQL
- 2- Google Sheets

Steps:

1- Check Whether Cairo exists:

Input

HISTORY ▾

MENU ▾

SCHEMA

city_data ▾

city_list ▾

global_data ▾

1 SELECT * FROM city_list

2 WHERE city = 'Cairo' AND country = 'Egypt';

Success!

EVALUATE

Output 1 results

Download CSV

city	country
Cairo	Egypt

I needed to make sure that Cairo exists in the data set

2- Extracting Data:

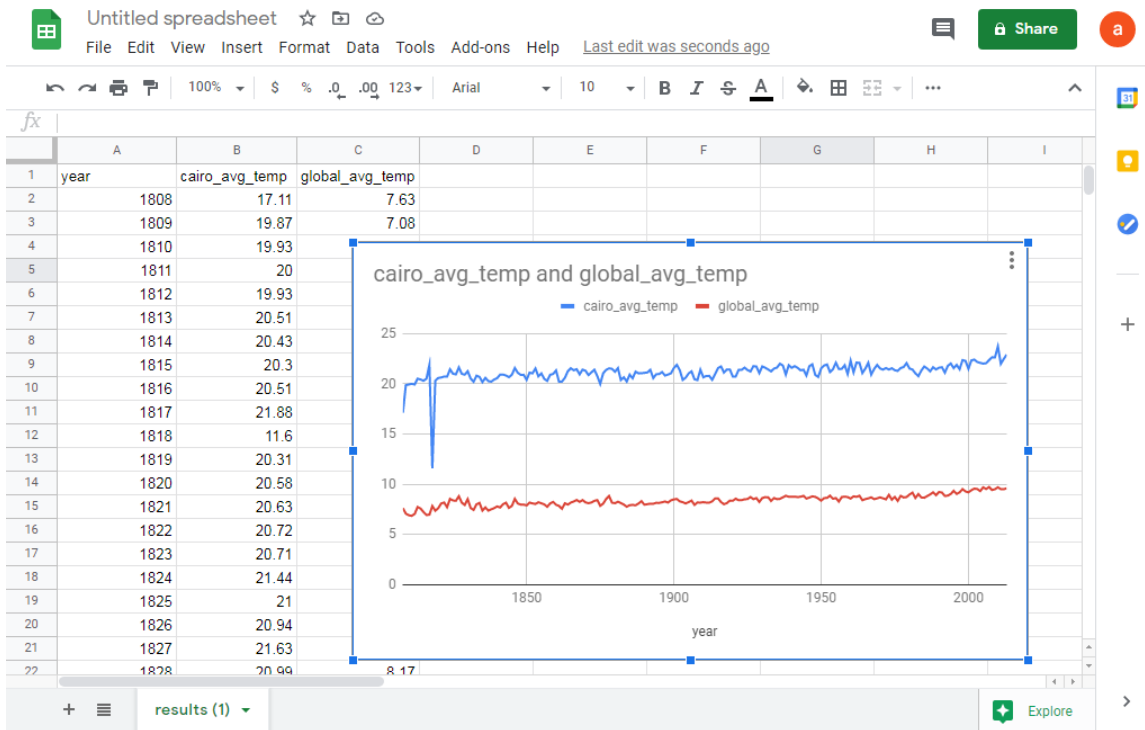
Input		HISTORY ▾		MENU ▾	
SCHEMA	↻	1	SELECT	gd.year, cd.city, cd.avg_temp	My_city,
city_data	▾	2	gd.avg_temp	World	
city_list	▾	3	FROM	city_data	cd
global_data	▾	4	JOIN	global_data	gd ON gd.year = cd.year
		5	WHERE	cd.city = 'Cairo'	
		6	ORDER BY	gd.year	
		7			
		8			
		Success!		EVALUATE	
Output		206 results		Download CSV	
year	city	my_city	world		
1808	Cairo	17.11	7.63		
1809	Cairo	19.87	7.08		
1810	Cairo	19.93	6.92		
1811	Cairo	20.00	6.86		
1812	Cairo	19.93	7.05		
1813	Cairo	20.51	7.74		

I have edited my query and used Joins to get both local data and global one in one table

So I think this query solved the problem

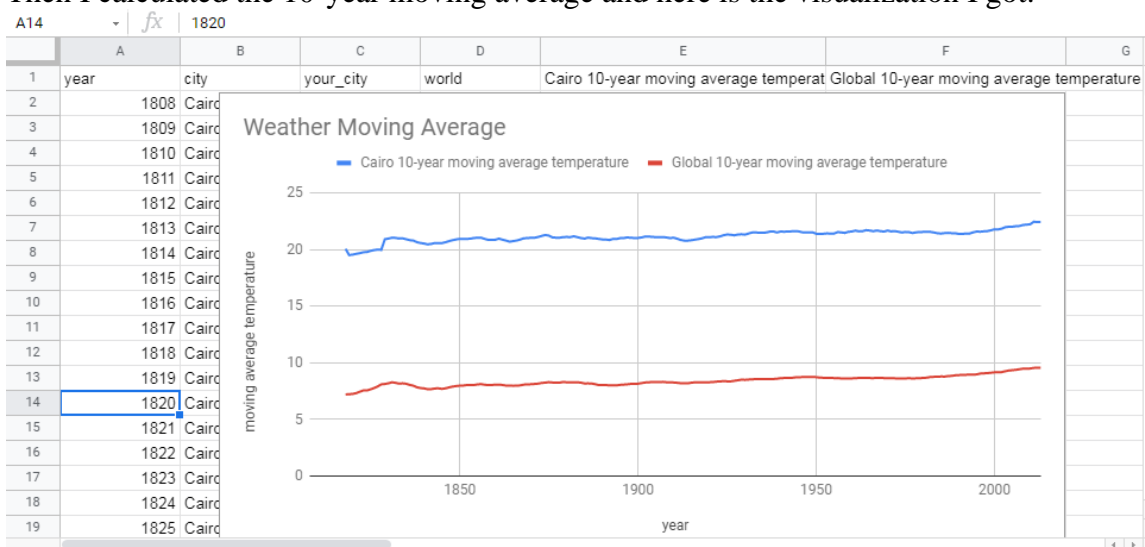
3- Visualization

Using Google Sheets, I uploaded both data and created line chart



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Then I calculated the 10-year moving average and here is the visualization I got:



Observations:

- 1- The local and global temperature is increasing over time and this is because of the global warming which affects nearly the whole world.
- 2- There is a drop in the temperature of Cairo in 1820s and this seems weird.

- 3- Egypt's temperature is higher than the global one and this is because of the location of Egypt in the north east corner of Africa.
- 4- The difference between Cairo temperature and the global one is about 15 degrees and it is quite consistent (except the during the drop I mentioned earlier).