

1. What tools did you use for each step?(Python,SQL, Excel,etc)

Step 1. I used SQL queries to extract my data for the database.

Select the city in Thailand.

The screenshot shows a SQL query interface. On the left, under the 'Input' tab, there is a 'SCHEMA' section with a refresh icon and a list of tables: 'city_data', 'city_list', and 'global_data'. The 'city_list' table is selected. In the center, a SQL query is entered:

```
1 SELECT*
2 FROM city_list
3 WHERE country = 'Thailand';
```

 Below the query, a green bar indicates 'Success!'. To the right of the query is a blue 'EVALUATE' button. Below the input section, the 'Output' section shows '1 results' and a 'Download CSV' link. The output table has two columns: 'city' and 'country'. The data row shows 'Bangkok' for the city and 'Thailand' for the country.

city	country
Bangkok	Thailand

Select city level data, Export to CSV.

The screenshot shows a SQL query interface. On the left, under the 'Input' tab, there is a 'SCHEMA' section with a refresh icon and a list of tables: 'city_data', 'city_list', and 'global_data'. The 'city_data' table is selected. In the center, a SQL query is entered:

```
1 SELECT year, avg_temp
2 FROM city_data
3 WHERE country = 'Thailand' and city = 'Bangkok';
```

 Below the query, a green bar indicates 'Success!'. To the right of the query is a blue 'EVALUATE' button. Below the input section, the 'Output' section shows '198 results' and a 'Download CSV' link. The output table has two columns: 'year' and 'avg_temp'. The data rows show years from 1816 to 1823 and their corresponding average temperatures.

year	avg_temp
1816	25.96
1817	25.83
1818	26.48
1819	25.90
1820	26.42
1821	26.81
1822	26.93
1823	26.78

Select the global data. Export to CSV.

Input

SCHEMA

city_data

city_list

global_data

1 SELECT *

2 FROM global_data

3

Success!

EVALUATE

Output 266 results

Download CSV

1752	5.78
1753	8.39
1754	8.47
1755	8.36
1756	8.85
1757	9.02
1758	6.74
1759	7.99

Step 2. I export the data using

Download CSV

2. How did you calculate the moving aver?

I used Google Sheets to calculate moving averages of the first 10 years to smooth out data and create line chart.

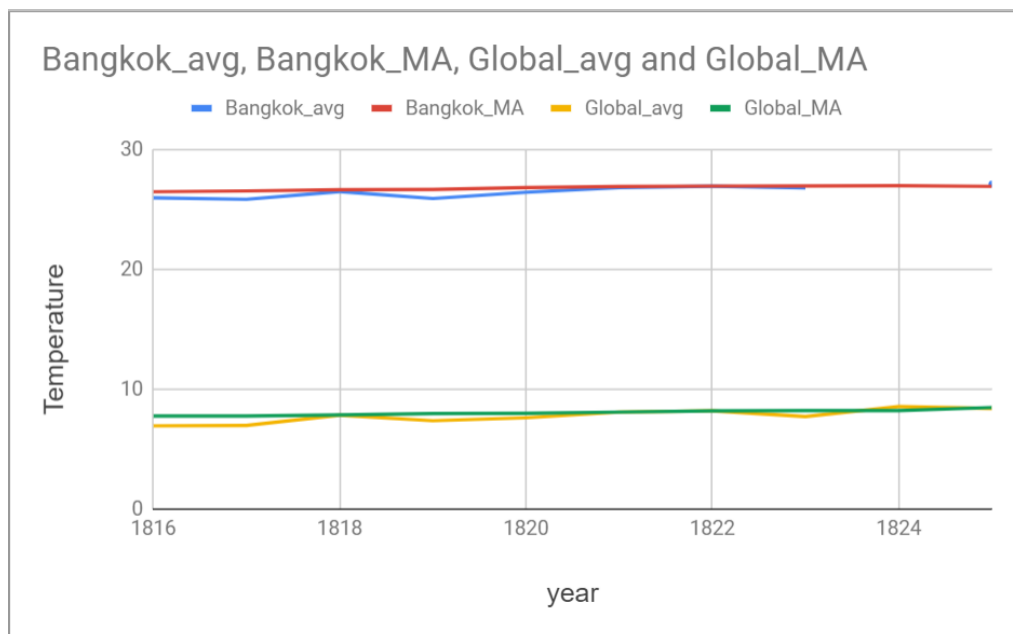
fx `=AVERAGE(B2:B11)`

	A	B	C	D
1	year	avg_temp	26.46888889 ×	
2	1816	25.96	<code>=AVERAGE(B2:B11)</code>	
3	1817	25.83		
4	1818	26.48		
5	1819	25.9		
6	1820	26.42		
7	1821	26.81		
8	1822	26.93		
9	1823	26.78		
10	1824			
11	1825	27.11		
12	1826			

fx `=Average(B2:B11)`

	A	B	C	
1	year	avg_temp	Bangkok_MA	
2	1816	25.96	26.46888889	
3	1817	25.83	26.5325	
4	1818	26.48	26.63285714	
5	1819	25.9	26.65833333	
6	1820	26.42	26.81	
7	1821	26.81	26.9075	
8	1822	26.93	26.94	
9	1823	26.78	26.945	
10	1824		26.97	
11	1825	27.11	26.92	
12	1826			

3. Line chart



Observation:

1. Bangkok's average temperature is observed to be much hotter than the global average temperature.
2. The different between Bangkok average temperature and the global average temperature has been consistent.
3. The global moving average temperature is increasing at a faster rate in comparison to Bangkok moving average temperature.
4. It's shown that the world is getting hotter because the temperature is increasing each year.