

## Outline: -Tools used

### SQL

*Make wanted queries*

```
SELECT city_data.year, city_data.avg_temp AS city_data,  
       global_data.avg_temp AS global_data  
FROM city_data  
JOIN global_data  
ON city_data.year = global_data.year  
WHERE city_data.city = 'Cairo'  
ORDER BY 1;
```

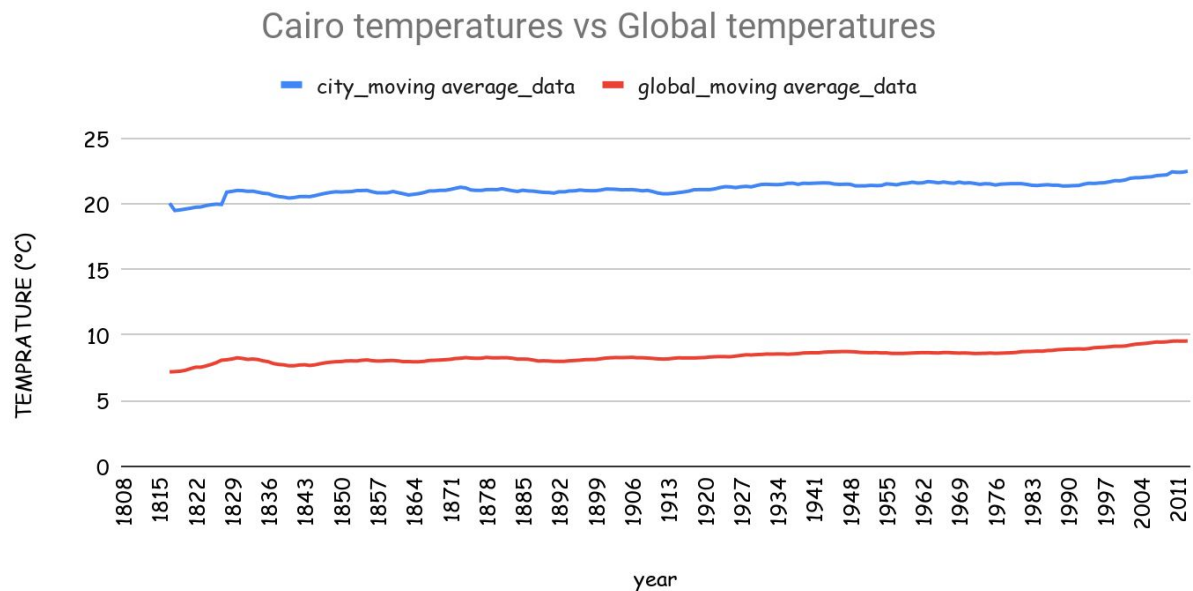
### Google sheets

*Combine data, calculate moving average (10 years MA)*

*And visualize data.*

AVERAGE(B2:B11)

A	B	C	D	E	F	G
year	city_data	global_data		city_moving average_data	lobal_moving average_data	
1808	17.11	7.63				
1809	19.87	7.08				
1810	19.93	6.92				
1811	20	6.86				
1812	19.93	7.05				
1813	20.51	7.74				
1814	20.43	7.59				
1815	20.3	7.24				
1816	20.51	6.94				
1817	21.88	6.98		=AVERAGE(B2:B11)	7.203	
1818	11.6	7.83		19.496	7.223	
1819	20.31	7.37		19.54	7.252	
1820	20.58	7.62		19.605	7.322	
1821	20.63	8.09		19.668	7.445	
1822	20.72	8.19		19.747	7.559	
1823	20.71	7.72		19.767	7.557	
1824	21.11	8.55		19.868	7.653	



### Observations:

- Cairo is hotter on average compared to the global average; but also we could say that the difference in average temperature between Cairo and global cities tends to be constant.
- In Cairo curve it seems that temperatures over years are so near (between 19 : 22), which is the same to global one(7 : 9)
- We can observe that temperatures are risen over years.
- We can predict that temperatures will exceed 25 degree on average in Cairo by 2022.
- Cairo is very good to visit in winter.