# **Exploring Weather Trends**

### Extract the data:

- 1- SQL query to extract the city level data:
  - select \* from city\_data where country='Bahrain'
    order by year;

Success!

EVALUATE

**2-** SQL query to extract the global data:

HISTORY V MENU V

select \* from global\_data order by year;

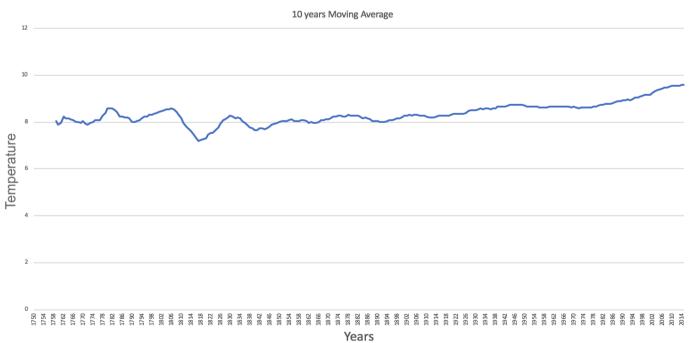
Success!

EVALUATE

### 3- Line charts:

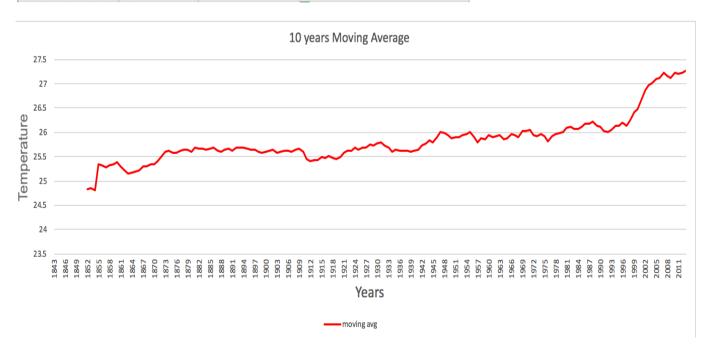
#### 1- Global data line chart:

Α	В	С	
year	avg_temp	10years_moving_avg	
1750	8.72		
1751	7.98		
1752	5.78		
1753	8.39		
1754	8.47		
1755	8.36		
1756	8.85		
1757	9.02		
1758	6.74		
1759	7.99	8.03	
1760	7.19	7.877	
1761	8.77	7.956	
1762	8.61	8.239	
1763	7.5	8.15	
1764	8.4	8.143	
1765	8.25	8.132	
1766	8.41	8.088	
1767	8.22	8.008	
1768	6.78	8.012	
1769	7.69	7.982	
1770	7.69	8.032	
1771	7.85	7.94	
1772	8.19	7.898	
1773	8.22	7.97	
1774	8.77	8.007	
1775	9.18	8.1	
1776	8.3	8.089	



## **2-** Nearest City line chart:

Α	В	С	D
year	city	avg_temp	10years_moving_avg
1843	Manama	25.26	
1844	Manama	25.71	
1845	Manama	21.18	
1846	Manama		
1847	Manama		
1848	Manama	25.12	
1849	Manama	25.37	
1850	Manama	24.95	
1851	Manama	25.62	
1852	Manama	25.44	24.83125
1853	Manama	25.47	24.8575
1854	Manama	25.26	24.80125
1855	Manama	25.5	25.34125
1856	Manama	25.15	25.32
1857	Manama	24.84	25.272
1858	Manama	25.57	25.317



#### **4-** Observations:

• "Is your city hotter or cooler on average compared to the global average? Has the difference been consistent over time?

Manama is hotter than the global average

**The Manama graph**, it can clearly be seen that there has been a large increase in weather temperature from the year 1997

• "How do the changes in your city's temperatures over time compare to the changes in the global average?"

Both my city temperature and the global temperature are getting hotter over time which means increasing in the number of temperatures.

What does the overall trend look like? Is the world getting hotter or cooler? Has the trend been consistent over the last few hundred years?

The global graph shows that the temperature almost remains constant then it shows a slightly increase in the temperature.

The minimum temperature is almost 5.7 in the year 1752.

The maximum temperature is almost 9.8 in the year 2015.

**The Manama graph** shows that the temperature shows a slightly increase from the year 1853 then it shows slightly differences tell the year 1997 which show a clear increase in the temperature.

The minimum temperature is almost 21.1 in the year 1845.

The maximum temperature is almost 27.8 in the year 2010.