

Explore Weather Trends:

1. Extracting Data:

Data is retrieved from the databases using SQL queries and saved in CSV format.
Queries used to retrieve data are as below:

To retrieve global data:

```
SELECT * FROM global_data;
```

To retrieve city(Bangalore) data:

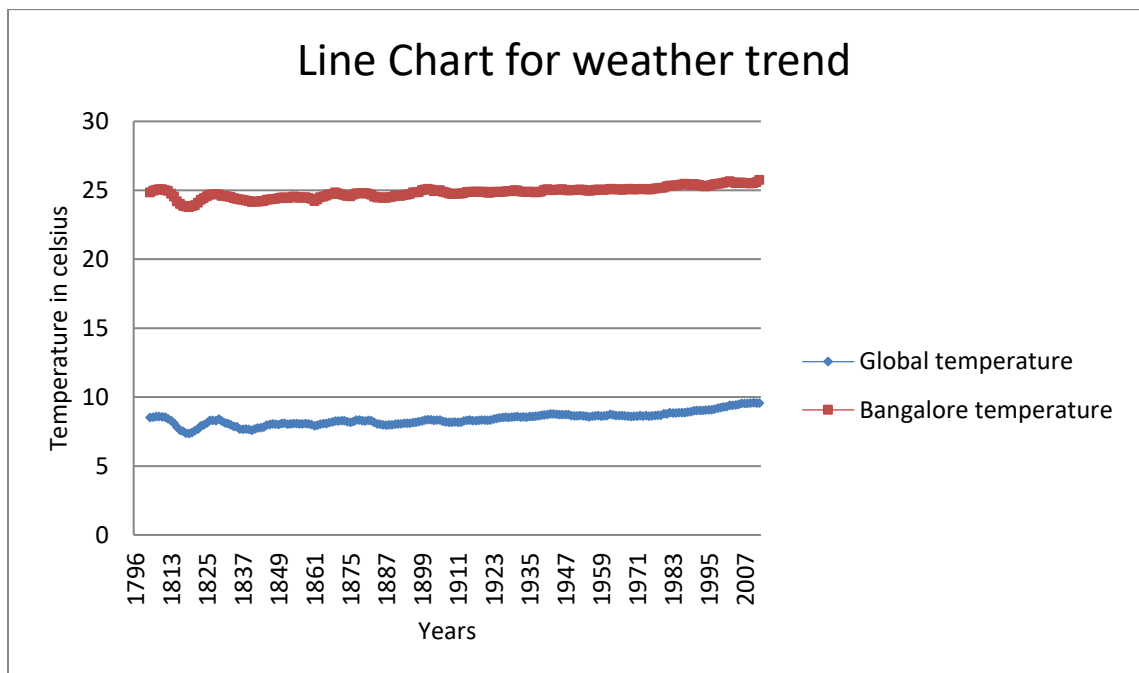
```
SELECT * FROM city_data  
WHERE city='Bangalore';
```

2. Data Manipulation and Moving Average:

- Excel is used to view and explore the trend.
- Data considered for visualizing is from 1796 to 2013; because there is no data available prior to 1796 for Bangalore city.
- Before calculating moving average, years containing empty values are removed for better accuracy in comparing data.
- Then, moving average (duration: 7 years) is calculated for both global and city data using the moving average function in Excel.

3. Line chart:

Below is the line chart with global and Bangalore city weather trends.



4. Observations from Line Chart:

- Average temperature of Bangalore (approximately 25° Celsius) is more than that of global temperature (approximately 8° Celsius).

- There was a drop in temperature between 1813 and 1825 both globally as well as in Bangalore and there has been a consistent rise in temperature since then.
- Weather trend in Bangalore is following the global trend i.e. average increase/decrease in temperature is similar to the weather globally i.e. Bangalore/global temperature lines look almost the same.
- From the data and line chart, we can say that the world is getting hotter. The average temperature globally has increased to 9.5° from 8.5°.