

EXPLORE WEATHER TRENDS

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ANALYSIS

RETRIEVING DATA USING SQL QUERY

- TO CHECK WHETHER MY CITY IS PRESENT IN THE LIST

```
SELECT*  
FROM city_list  
WHERE country='India';
```

- TO SELECT THE CITY DATA(Bangalore)

```
SELECT*  
FROM city_data  
WHERE country='India' AND city='Bangalore';
```

- TO GET THE GLOBAL DATA

```
SELECT*  
FROM global_data;
```

APPROACH TO GET THE DESIRED DATA

- After retrieving data using sql query,I downloaded the CSV files.
- I used Microsoft Excel for making the line chart, calculating the Moving Average and then analysing.

MOVING AVERAGES

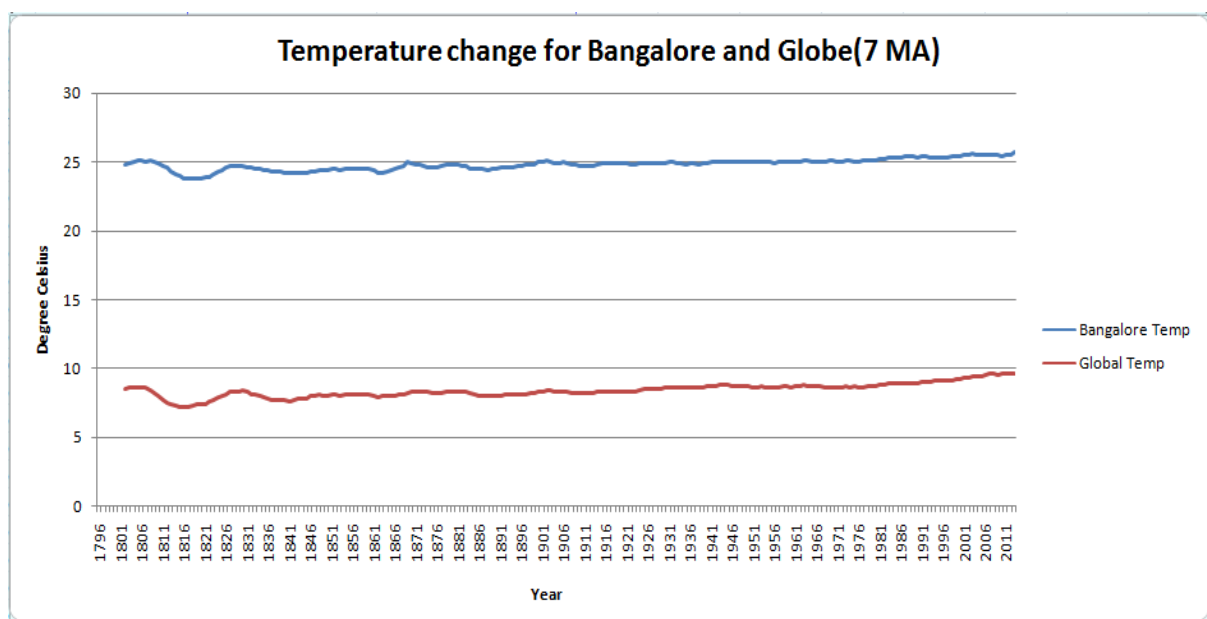
- To observe and study the trends in temperature I calculated Moving Average(MA) in Microsoft Excel.
- I used 7 years Moving Average for getting the line chart.

EXCEL COMMAND FOR CALCULATING MOVING AVERAGES

MOVING AVERAGES	EXCEL COMMANDS
For 7 years Moving Average	=Average(B2:B8)

D8 fx =AVERAGE(B2:B8)			
A	B	C	D
year	city_avg_temp	global_avg_temp	7 day moving avg city
1796	24.49	8.27	
1797	25.18	8.51	
1798	24.65	8.67	
1799	24.81	8.51	
1800	24.85	8.48	
1801	24.49	8.59	
1802	25.44	58	24.84428571

LINE CHART FOR BANGALORE CITY AND GLOBAL TEMPERATURE



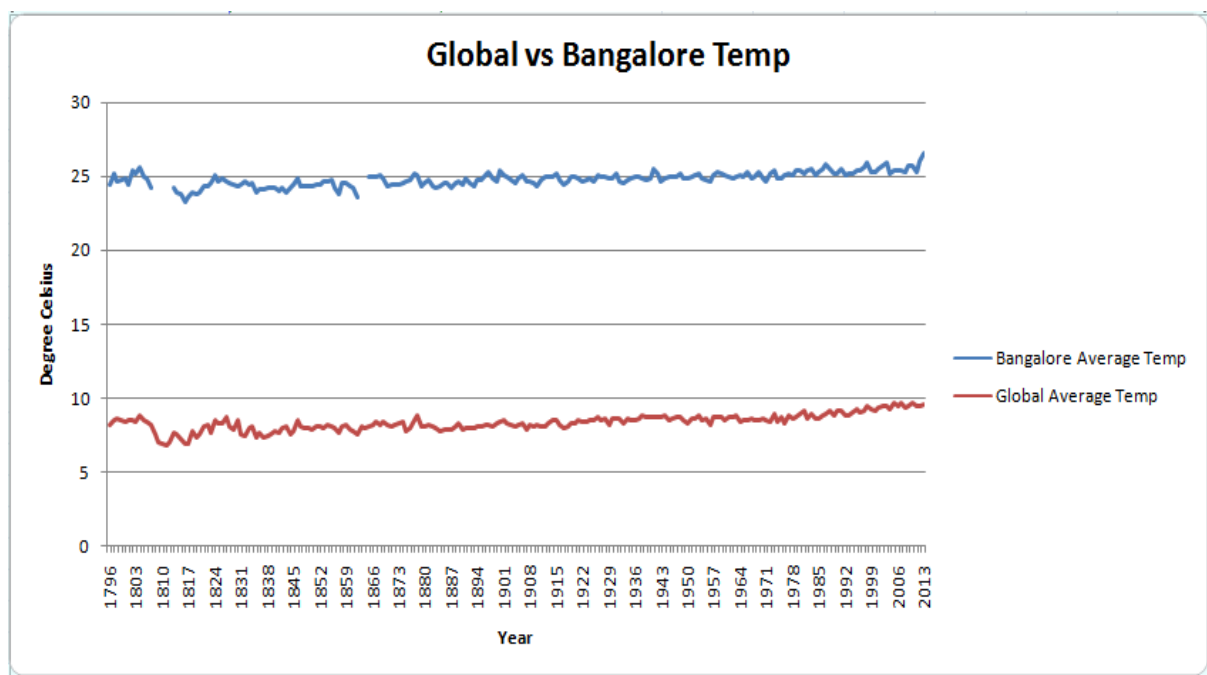
OBSERVATION

- Global Average Temperature varies between 6.86 to 9.73 Degree Celsius but Bangalore city's average temperature varies between 23.3 to 26.61 Degree Celsius.
- So if we compare, we can see that Bangalore city's temperature is hotter than global average Temperature.

OBSERVATIONS ABOUT THE SIMILARITIES AND/OR DIFFERENCES IN THE TRENDS

Year	Change in global average Temp	Change in Bangalore average Temp	Increasing/Decreasing over time
1817-1827	6.98-8.81	23.6-24.67	Increasing
1847-1857	8.09-7.76	24.35-23.87	Decreasing
1903-1913	8.22-8.30	24.82-25.00	Increasing
1991-2001	9.18-9.41	25.49-25.53	Increasing

CONCLUSION LINE CHART



CONCLUSION

- According to the graph and the table the difference between Global average Temperature and Bangalore's average Temperature has been almost consistent over time.
- According to the graph we can see that the temperature is increasing for both Bangalore city and the world.
- From the Conclusion line chart graph, we can see that the graph is moving upwards, which means the global temperature is rising, which is directly proportional to the increase in temperature of the city.
- So we can finally conclude that the World is getting hotter.