

## **Project: Explore Weather Trends**

Goal: To create a visualization and prepare a write up describing the similarities and differences between global temperature trends and temperature trends in the closest big city to where you live.

Steps Taken:

1) Fetched the data for **Ranchi** (nearest big city) from the database using below sql query:

```
select * from city_list  
where country = 'India'  
and city = 'Ranchi'
```

```
select * from city_data  
where city = 'Ranchi'
```

Saved the csv file into local and then converted the file into .xlsx format

2) Fetched global data from the database using below sql query:

```
select * from global_data
```

Saved the csv file into local and then converted the file into .xlsx format

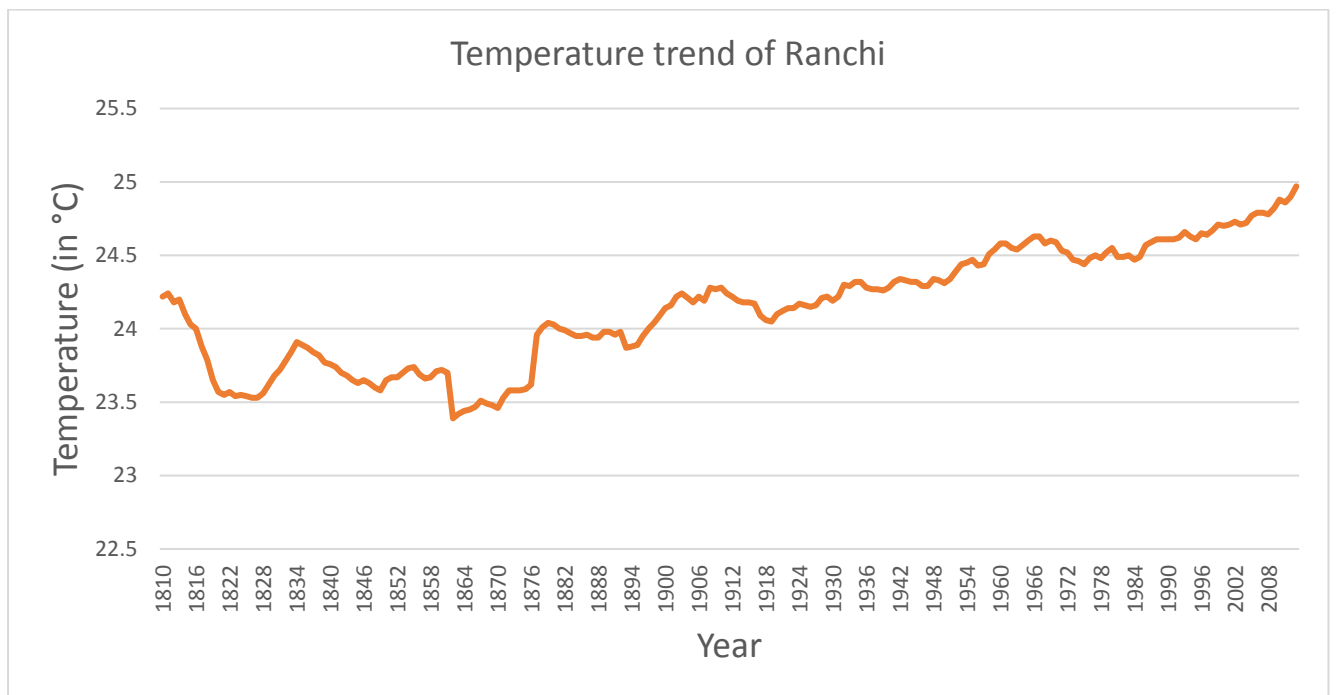
3) Merged whole data into a single excel sheet. Tool Used: Excel

4) As temperature moves are very less dynamic, I have taken 15 years moving average for chart preparation

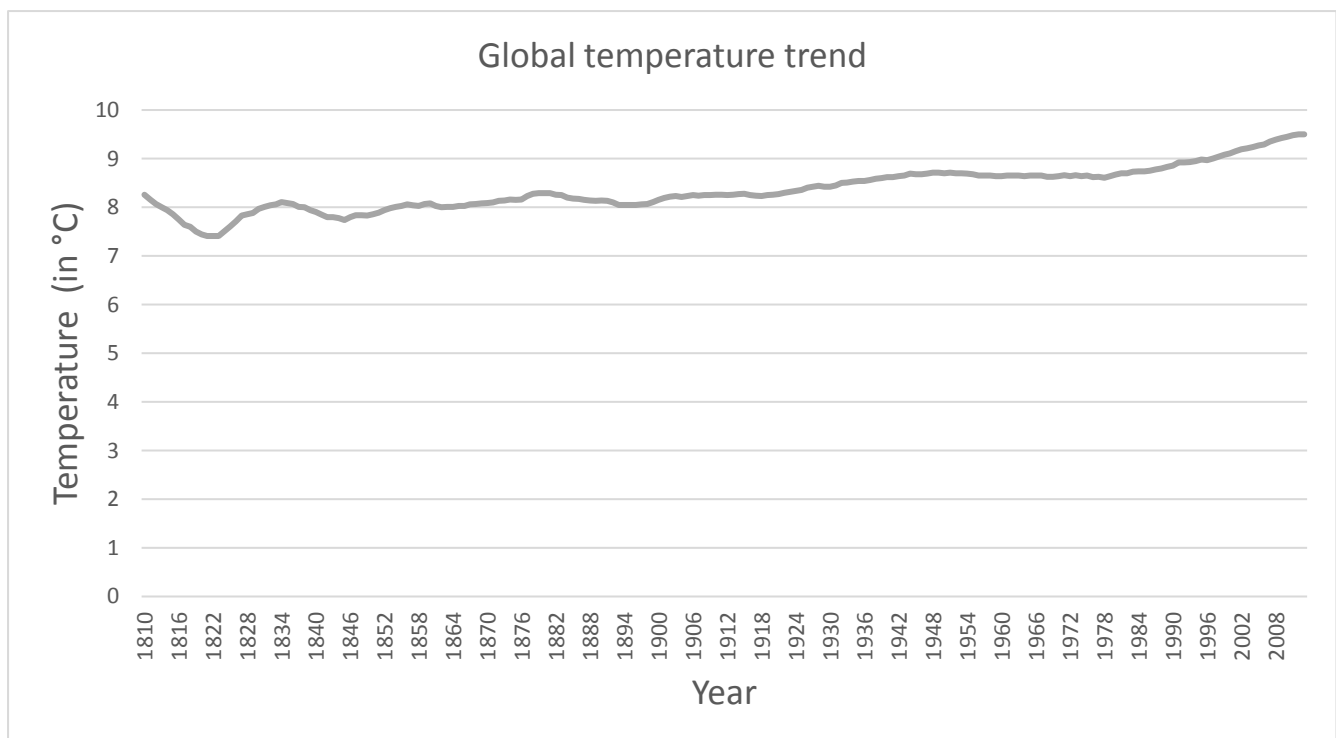
```
=ROUND(AVERAGE(B2:B16),2)
```

5) Some data points were missing from the local city data, which I derived using median of 10 previous year's data

### Local Temperature Trend:



### Global Temperature Trend:



Observations:

- 1) Local temperature fall had been more severe around 1817 in Ranchi than globally
- 2) Local temperature fall had been more severe around 1870 in Ranchi than globally
- 3) Global temperature as well as local temperature are rising over centuries
- 4) Global temperatures are rising more than my local city (for a period of 1810 – 2010)