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Explore Weather Trends

Extracting Data

Step 1:

Look at the list of cities

```
SELECT *
  FROM city_list;
```

Returns 345 cities

Step 2:

Identify Bangalore data

```
SELECT *
  FROM city_list
 WHERE city LIKE 'B%' AND
       country LIKE 'India'

SELECT *
  FROM city_data
 WHERE city = 'Bangalore';

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

Step 3:

Get global data

```
SELECT *
  FROM global_data;
```

Step 4:

Get data from other cities

```
SELECT *
  FROM city_data
 WHERE country LIKE 'India' AND
       city LIKE 'Delhi'
```

```
SELECT *
  FROM city_list
 WHERE country LIKE '%tates%' AND
       city LIKE 'San Francisco'

SELECT *
  FROM city_data
 WHERE country LIKE '%nited%' AND
       city LIKE ‘London'
```

Merging datasets

- Import data into a spreadsheet (Google Doc)
- Merge data across cities and global places into one
- Moving average computed using ***AVERAGE*** formula within google docs
- Summary of sheets

Sheet Name	What does it hold?
Temp: Merged	Average temperature of all cities merged in one sheet and other computations like moving averages
Temp: Global	Average Global Temperature between 1750-2013
Temp: BLR	Average temperature in Bangalore between 1796-2013 with breaks in data across different years
Temp: Delhi	Average temperature in Delhi between 1796-2013 with breaks in data across different years
Temp: London	Average temperature in London between 1743-2013
Temp: SF	Average temperature in San Francisco between 1849-2013
Charts	Line charts for visualisation

Observations

- In general average global temperature is lower than the averages across the 4 cities . My city Bangalore is consistently hotter than the global average temperature
- Bangalore & Delhi has a higher average temperature compared to London & SF.
- Based on the moving averages, average global temperatures & city level averages has been on an upward trend in the last decades. This rise has been slow and steady.
- Trend line for my city Bangalore & Global average temperature trend line seems to be matching.

Average Temperature Comparison