Outline:

1. Extraction of data was done using SQL

The code used to extract city data was:

```
SELECT *
FROM city_data
```

The code used to extract global data was:

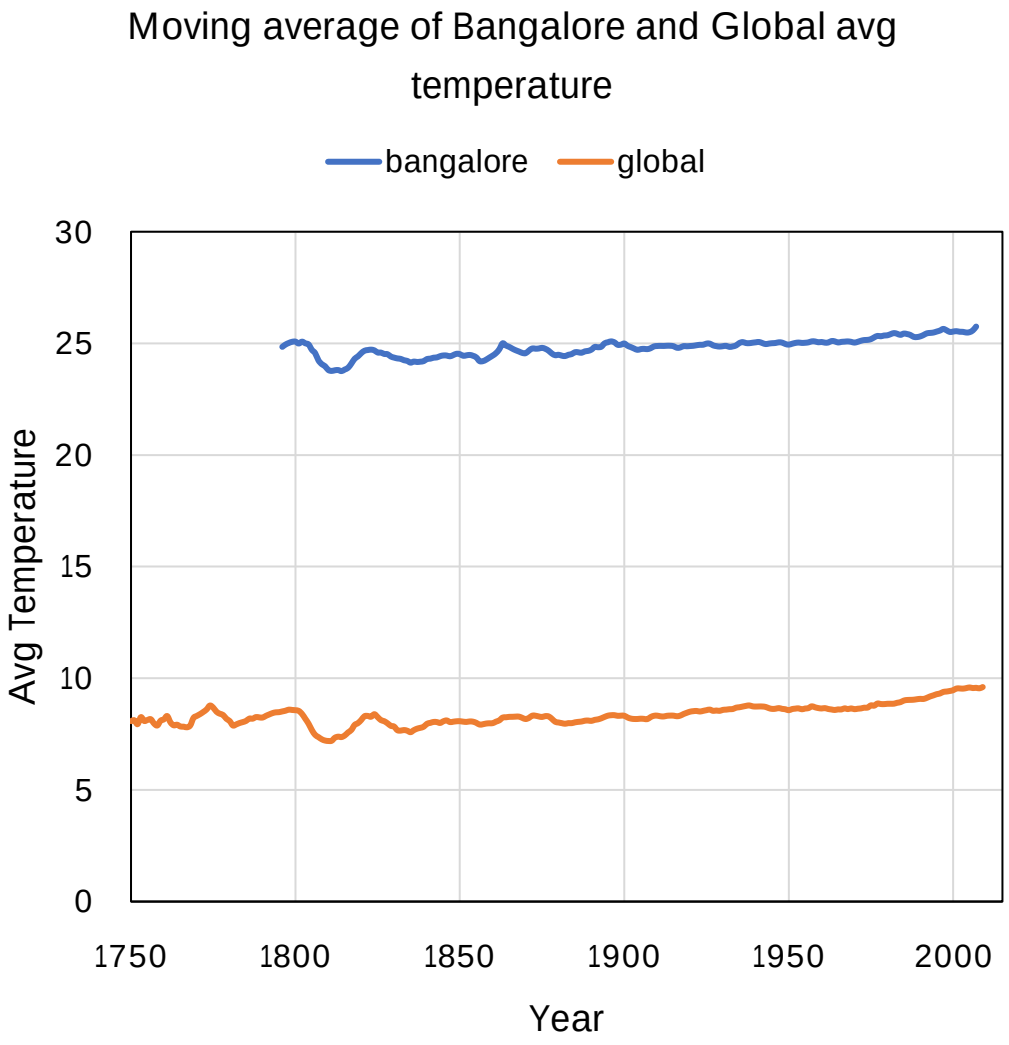
```
SELECT *
FROM global_data
```

2. The 7-day moving average was calculated for city and global temperature data to smooth out the data and make easy observations of the long term trends and to reduce fluctuations.

It was calculated by summing up the average temperature of the first 7 days in a new column on the 7th row [using =AVERAGE()], then I dragged the same formula for the remaining rows.

3. The trends were visualized in the excel file and moving average was calculated to smooth out the fluctuations.

Line Chart:



Observations:

1. I live in Bangalore and it is hotter than the global average and the difference has been somewhat consistent over the years.
2. There was a dip in temperature around 1810 in the global temperature, Bangalore also shows a dip in temperature around the same time.
3. Before 1850, it seemed like the world was getting colder during some decades and hotter during others but after 1850, this trend vanished. It is observed that, the work is getting hotter rapidly.
4. In the past century the world has gotten atleast a degree hotter and it seems that after 2000, the slope is getting steeper, we will be seeing greater gradients of temperature in the coming years.