Exploring Weather Trends

Overview:

In this project, I analyzed weather trends over past few hundred years. I compared Delhi average temperature with the Global average temperature and shared my analysis

Tools Used:

- SQL – To extract data from the Database
- Microsoft Excel – To visualize and compare the extracted data

- **Extracting Data from the Database**

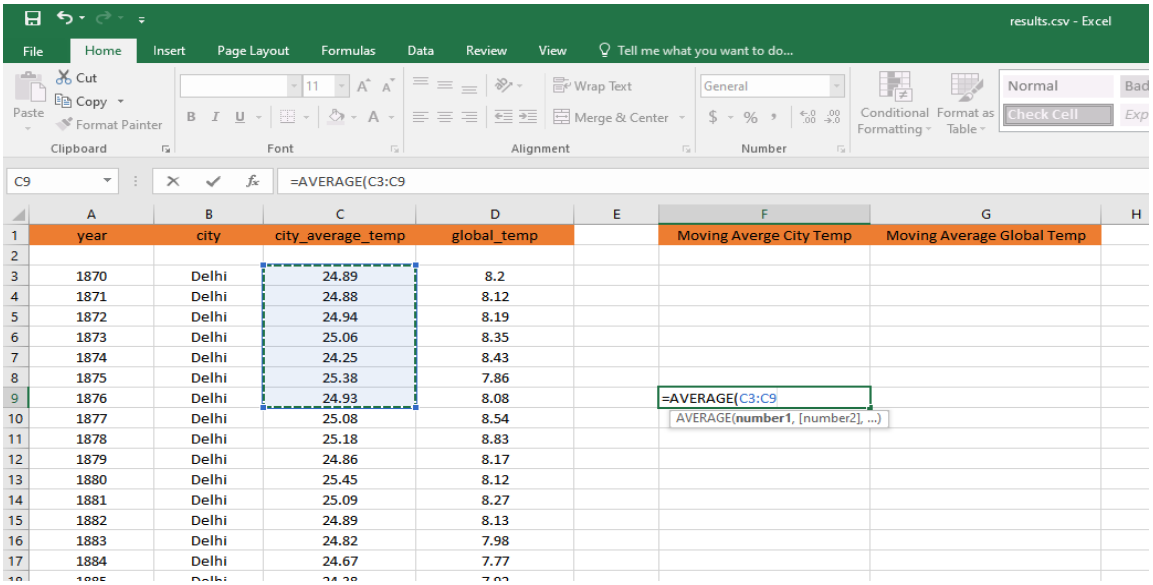
```
select city_data.year, city_data.city, city_data.avg_temp as City_Average_Temp,
global_data.avg_temp as global_temp
from city_data, global_data
where city_data.year = global_data.year and city_data.city='Delhi' and
city_data.year between 1870 and 2012
```

Success!

EVALUATE

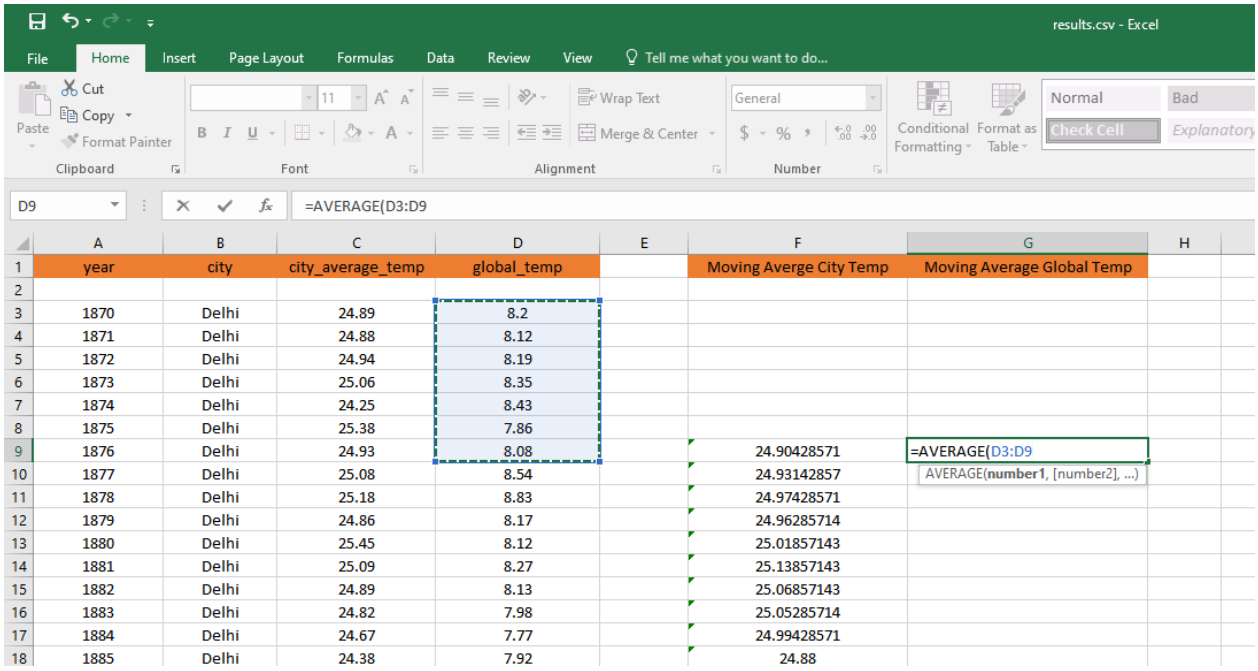
Download CSV

- **Calculating the MOVING AVERAGE of the City Average Temperature**



	A	B	C	D	E	F	G	H
1	year	city	city_average_temp	global_temp		Moving Averge City Temp	Moving Average Global Temp	
2								
3	1870	Delhi	24.89	8.2				
4	1871	Delhi	24.88	8.12				
5	1872	Delhi	24.94	8.19				
6	1873	Delhi	25.06	8.35				
7	1874	Delhi	24.25	8.43				
8	1875	Delhi	25.38	7.86				
9	1876	Delhi	24.93	8.08		=AVERAGE(C3:C9		
10	1877	Delhi	25.08	8.54				
11	1878	Delhi	25.18	8.83				
12	1879	Delhi	24.86	8.17				
13	1880	Delhi	25.45	8.12				
14	1881	Delhi	25.09	8.27				
15	1882	Delhi	24.89	8.13				
16	1883	Delhi	24.82	7.98				
17	1884	Delhi	24.67	7.77				

- **Calculating the MOVING AVERAGE of the Global Average Temperature**



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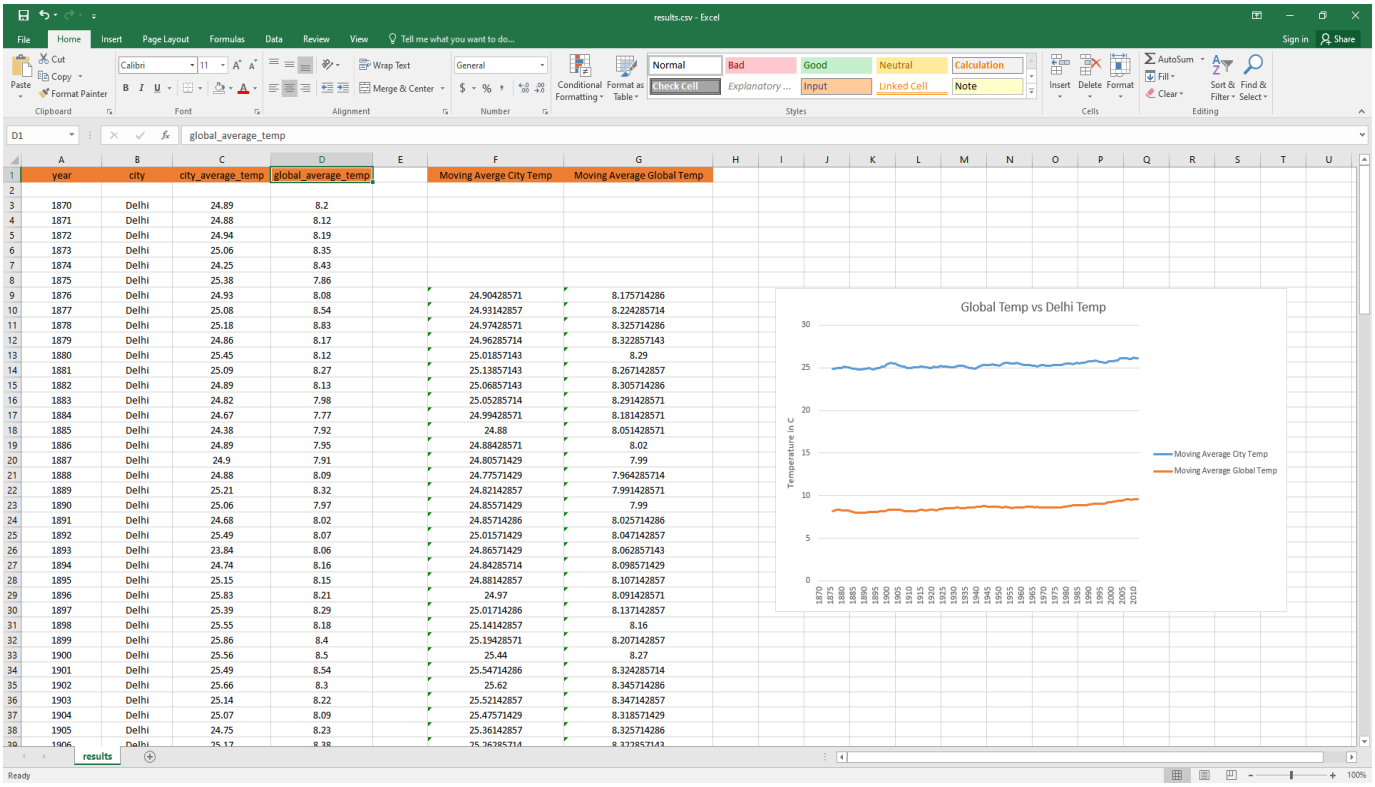
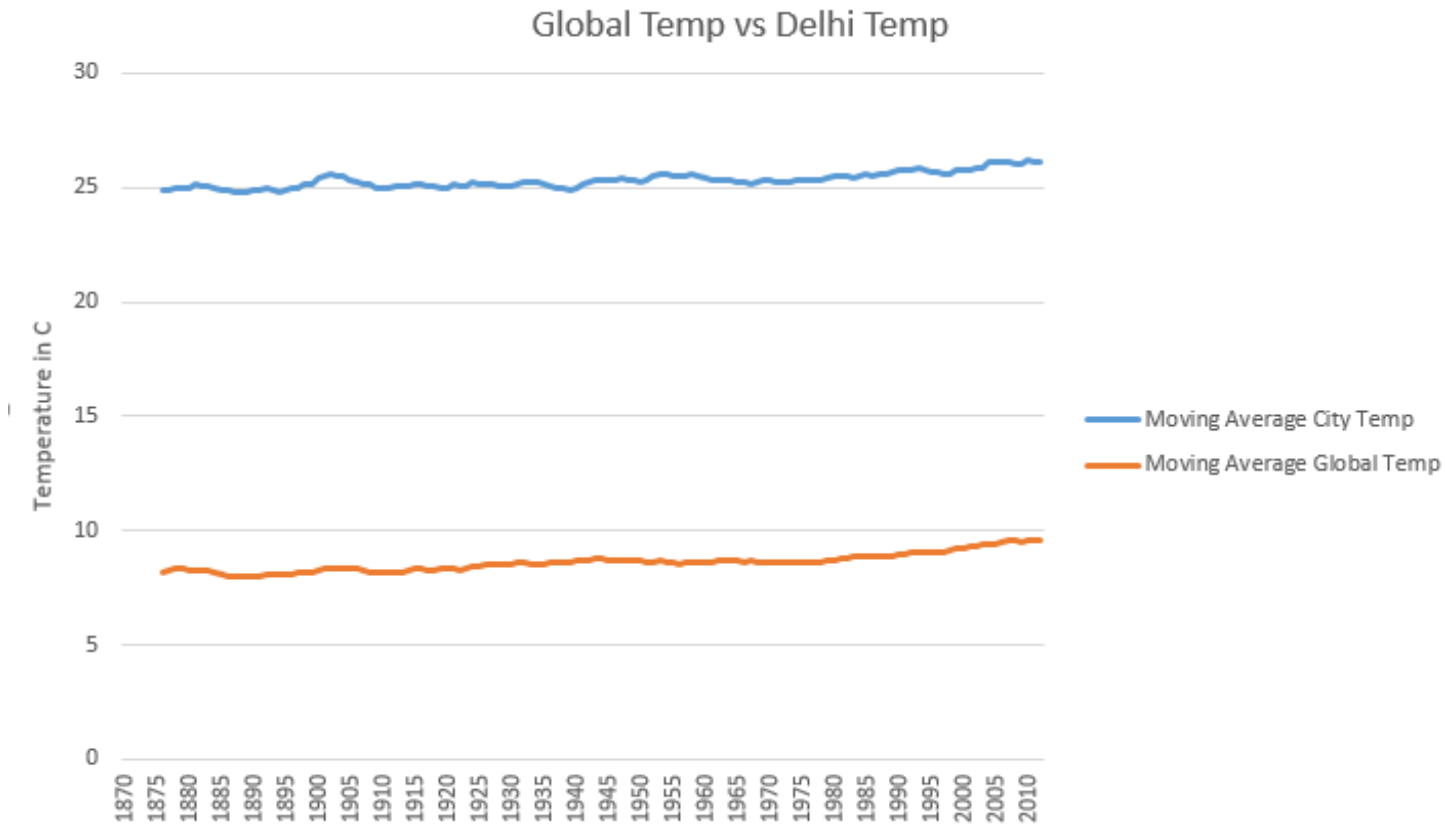
9	1876	Delhi	24.93	8.08		24.90428571	=AVERAGE(D3:D9	
10	1877	Delhi	25.08	8.54		24.93142857		
11	1878	Delhi	25.18	8.83		24.97428571		
12	1879	Delhi	24.86	8.17		24.96285714		
13	1880	Delhi	25.45	8.12		25.01857143		
14	1881	Delhi	25.09	8.27		25.13857143		
15	1882	Delhi	24.89	8.13		25.06857143		
16	1883	Delhi	24.82	7.98		25.05285714		
17	1884	Delhi	24.67	7.77		24.99428571		
18	1885	Delhi	24.38	7.92		24.88		

- **Plotting the DATA**



OBSERVATIONS



- City Average Temperature is directly proportional to the Global Average Temperature as City Temperature is rising with the rise in Global Temperature.
- Global Temperature has increased approximately 2-3 Degrees over the period of time.
- It can be observed that the Local and global temperatures are rising constantly.
- Delhi temperature had a hard rise and fall between the years 1900-1910.