Data Analysis (First Project)

In this project I used the data from Global and my city (Riyadh) temperature to make some observation. I just took the last hundred years a period from 1900 to 2013.

steps taken to prepare the data to be visualized in the chart, such as:

1- What tools did you use for each step?

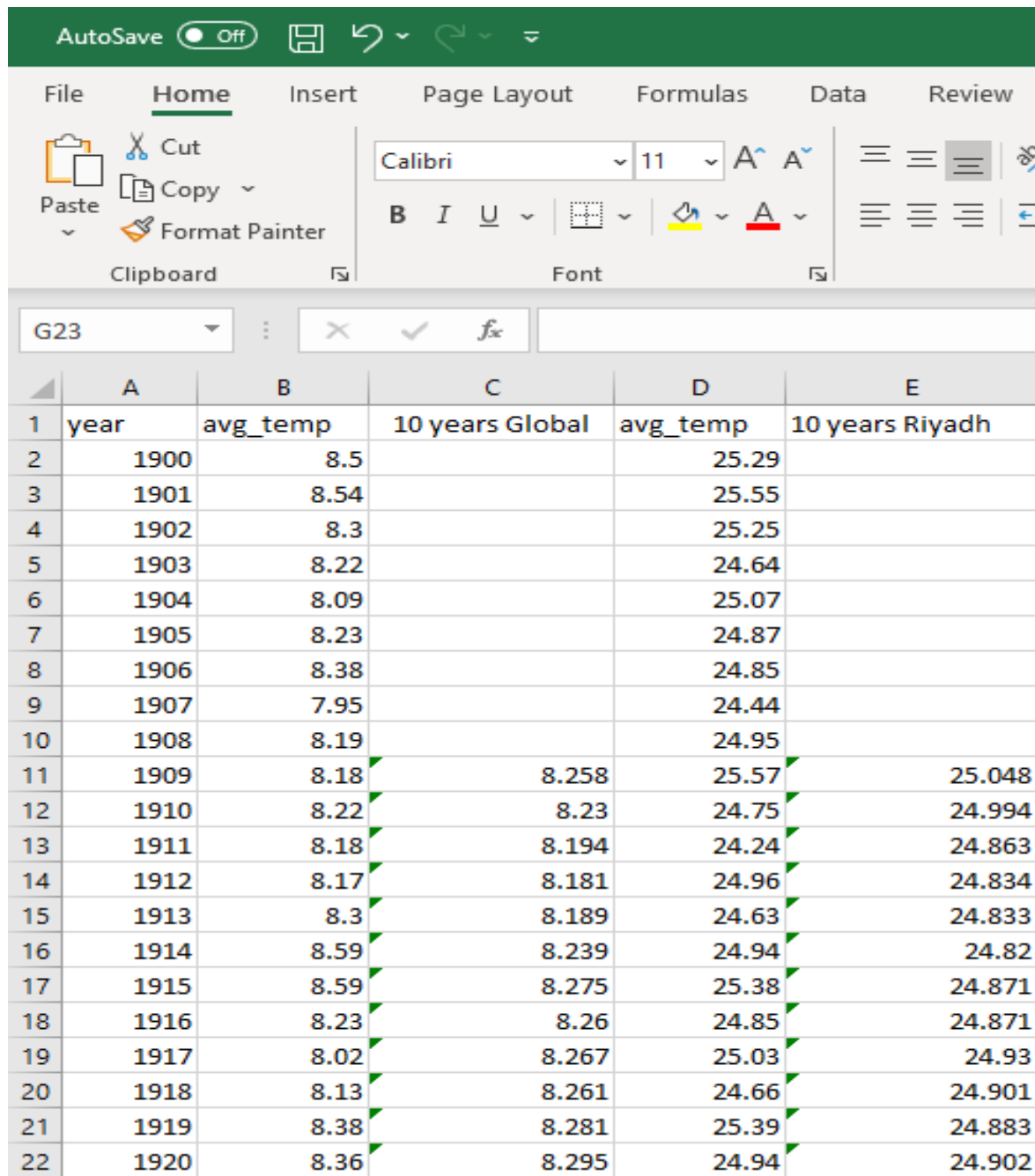I used SQL to extract needed data

SQL query to extract Riyadh data:

```
SELECT year, avg_temp FROM city_data
WHERE city = 'Riyadh' AND year >= 1900;
```

SQL query to extract Riyadh data:

```
SELECT year, avg_temp FROM global_data
WHERE year >= 1900 AND year <= 2013;
```

2- How did you calculate the moving average?

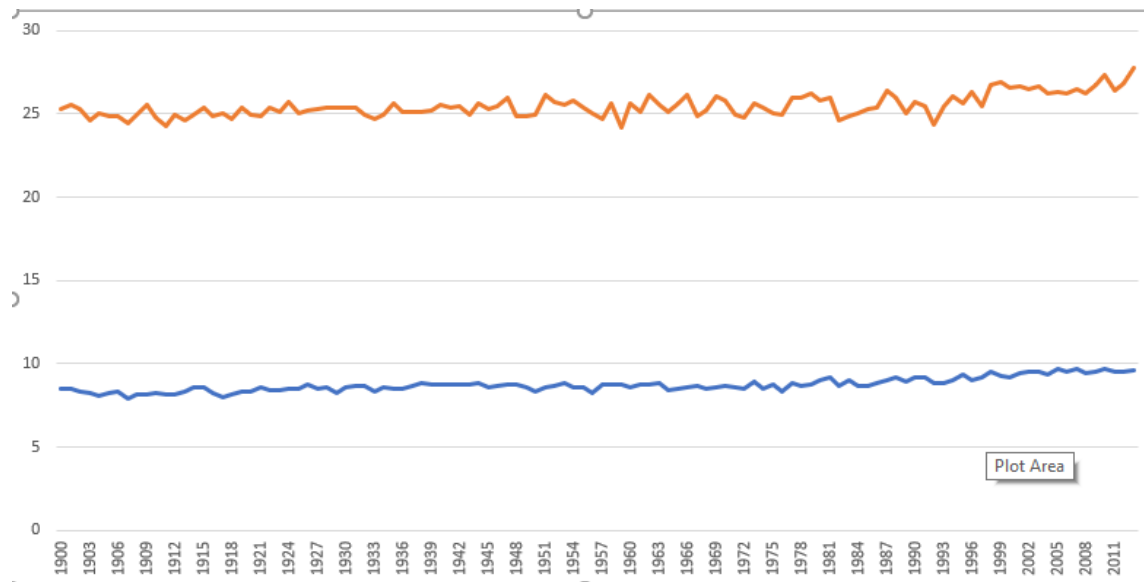To calculate the moving average I calculated for 10 years using the AVREAGE function.

year	avg_temp	10 years Global	avg_temp	10 years Riyadh
1900	8.5		25.29	
1901	8.54		25.55	
1902	8.3		25.25	
1903	8.22		24.64	
1904	8.09		25.07	
1905	8.23		24.87	
1906	8.38		24.85	
1907	7.95		24.44	
1908	8.19		24.95	
1909	8.18	8.258	25.57	25.048
1910	8.22	8.23	24.75	24.994
1911	8.18	8.194	24.24	24.863
1912	8.17	8.181	24.96	24.834
1913	8.3	8.189	24.63	24.833
1914	8.59	8.239	24.94	24.82
1915	8.59	8.275	25.38	24.871
1916	8.23	8.26	24.85	24.871
1917	8.02	8.267	25.03	24.93
1918	8.13	8.261	24.66	24.901
1919	8.38	8.281	25.39	24.883
1920	8.36	8.295	24.94	24.902

I use a line chart because it will give me a good vision to extract some observations.

-Line chart :

-My observations:

1-Riyadh average temperature is hotter than Global average temperature with a big difference.

2-the period from 1900-1990 is almost without changes on Riyadh and Global.

3-After 1991 until now Riyadh average temperature increases faster than the world.

4-Overall the world getting hotter but after 2001 it increases faster.