PROJECT TITLE: EXPLORING WEATHER TRENDS

STEPS THAT WERE TAKEN:

1. First, I found the nearest city near me from the database by writing a query to find the city
   Select*
   From city_list
   Then clicked on evaluate
   This showed me various cities and country then I selected Port Harcourt

2. I then looked for the city data by writing the query below
   Select *
   From city_data
   Where city = 'Port Harcourt'
   Clicked on evaluate and downloaded the CSV file

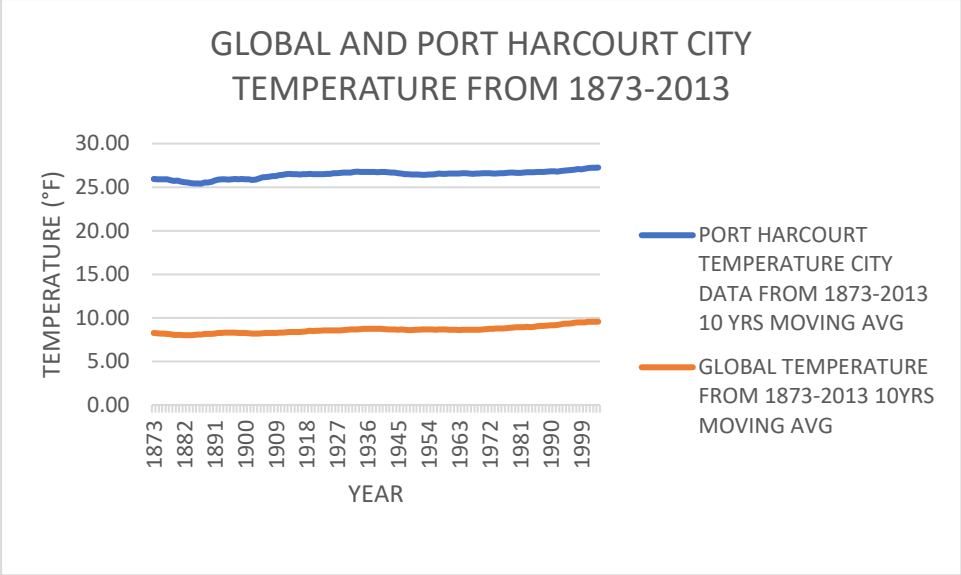
3. Wrote a query to get the global data.
   Select *
   From global_data
   Then clicked on evaluate and downloaded the CSV file
4. I calculated the moving average for the data. In calculating I used ten years moving average so that I will be able see the changes in the data clearly for both the city and global data. The formula used was [=AVERAGE(D3:D12)]

PORT HARCOURT TEMPERATURE CITY DATA FROM 1873-2013				
YEAR	CITY	COUNTRY	AVG_TEMP	10 YRS MOVING AVG
1873	Port Harcourt	Nigeria	26.39	
1874	Port Harcourt	Nigeria	25.97	
1875	Port Harcourt	Nigeria	25.76	
1876	Port Harcourt	Nigeria	25.63	
1877	Port Harcourt	Nigeria	26.25	
1878	Port Harcourt	Nigeria	26.08	
1879	Port Harcourt	Nigeria	25.42	
1880	Port	Nigeria	25.78	

	Harcourt			
1881	Port Harcourt	Nigeria	26.12	
1882	Port Harcourt	Nigeria	25.81	25.92
1883	Port Harcourt	Nigeria	26.2	25.90
1884	Port Harcourt	Nigeria	25.87	25.89

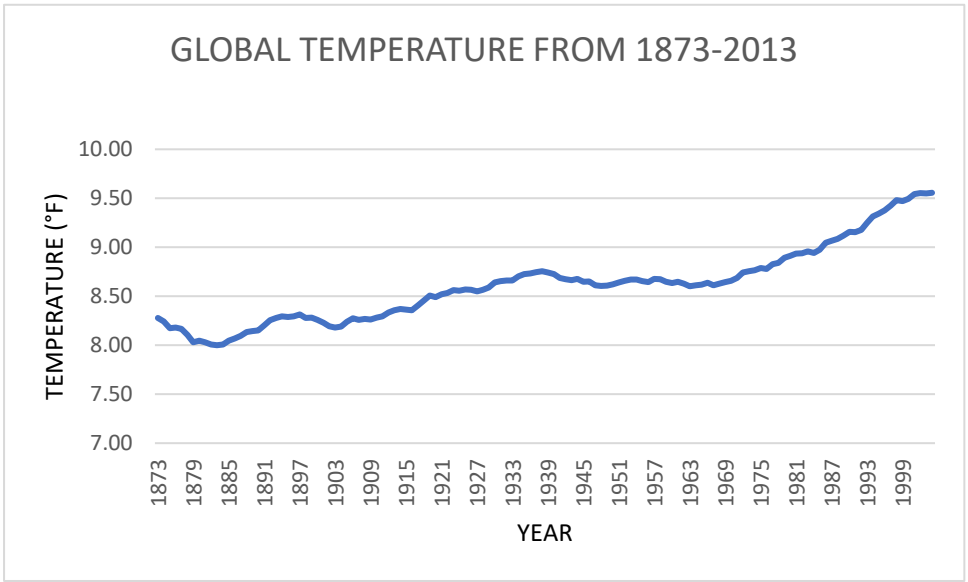
GLOBAL TEMPERATURE FROM 1873-2013		
YEAR	AVG_TEMP	10YRS MOVING AVG
1873	8.35	
1874	8.43	
1875	7.86	
1876	8.08	
1877	8.54	
1878	8.83	
1879	8.17	
1880	8.12	
1881	8.27	
1882	8.13	8.28
1883	7.98	8.24
1884	7.77	8.18

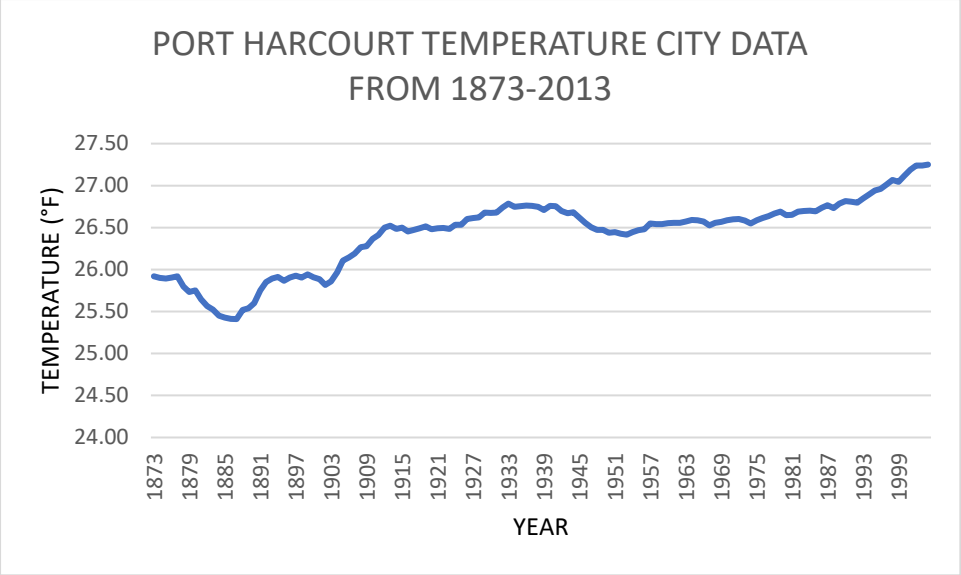
5. Next I plotted the line graph using the average moving data from both Port Harcourt and global data. I also added the years.
6. I highlighted the average moving data of Port Harcourt, the average moving data of global temperature and the years. Then I went to insert on excel clicked on graph, then line chart.
7. After that I gave the axes headings, included legends and gave the graph a title.
8. Years is on the horizontal axis while the moving average is on the vertical axis.



From the line graph above it can be seen that both Port Harcourt and global temperature keeps rises as the year go by.

9. Below is the individual chart of both global and Port Harcourt data that will be used to show the differences and similarities between both data.





DIFFERENCES BETWEEN PORT HARCOURT TEMPERATURE AND GLOBAL TEMPERATURE

1. During the period of 1913 to 1923 temperature stopped rising and fell in Port Harcourt while global temperatures kept rising during this period.
2. Temperature fell in the year 1888 in Port Harcourt while global temperature fell in the year 1883.
3. In 1903 the temperature kept increasing until it fell 1913 while global temperatures kept increasing slowly.
4. In 1953 global temperature rose while the temperature in Port Harcourt dropped.
5. The global data increases with small changes in temperature fall while Port Harcourt temperature rise and fall until the temperature increases in later years.

SIMILARITIES BETWEEN PORT HARCOURT TEMPERATURE AND GLOBAL TEMPERATURE

1. There was increase in temperature between 1933 and 1943 in both global and Port Harcourt data
2. There was increase in temperature from 1973 to 2003 for both Port Harcourt and global data.
3. In 1923 both global and Port Harcourt temperature rose.
4. In 1968 both global and temperature data dropped.
5. City and global temperature keeps increasing.