

Step 1: The SQL query used to determine the city closest to me in Nigeria

```
SELECT *
```

```
FROM city_list
```

```
WHERE country = 'Nigeria';
```

Out of the seven results observed, Lagos is the city in Nigeria closest to me.

- **The SQL query used to extract the data.**

```
SELECT city.year, city, country, city.avg_temp as city_avg_temp,  
global.avg_temp as global_avg_temp
```

```
FROM city_data city
```

```
JOIN global_data global
```

```
ON city.year = global.year
```

```
WHERE city = 'Lagos'
```

```
AND city.avg_temp IS NOT NULL;
```

Step 2: Calculating the moving Average and Plotting the Line Chart

I calculated 10-Year Moving Average

I used Power BI to plot the line chart

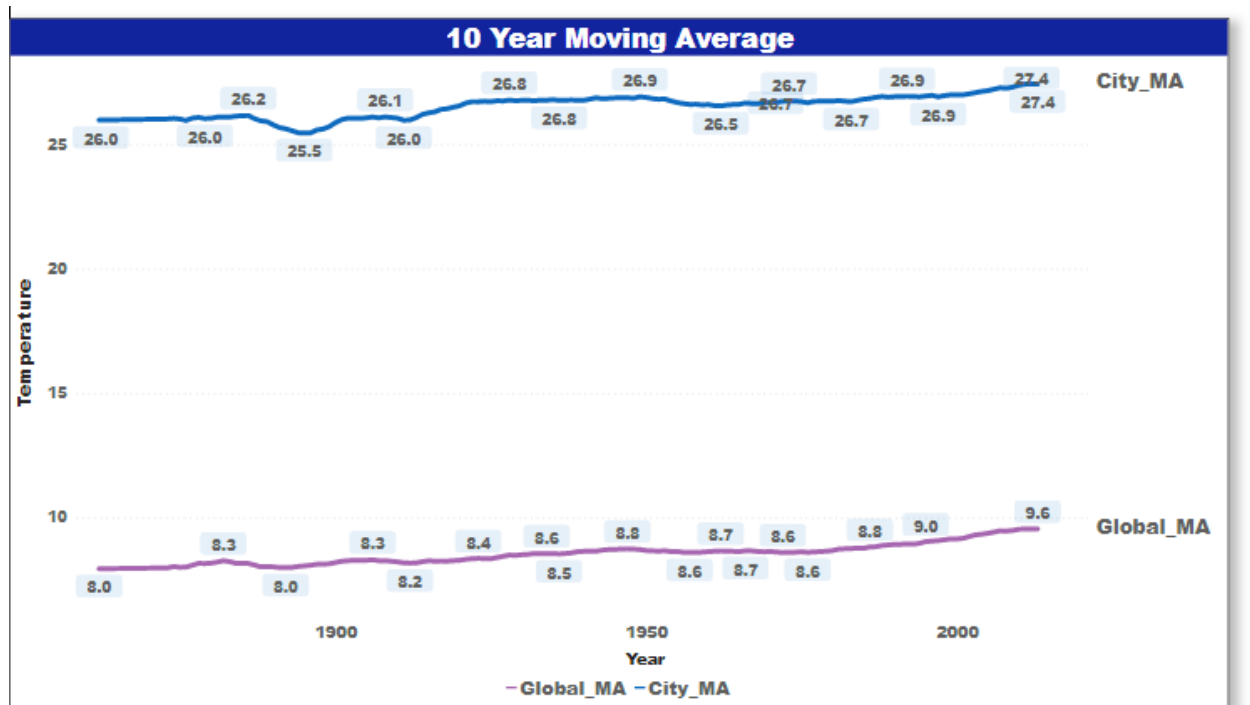
year	city	country	city_avg_temp	10-yr_Mov_Avg	global_avg_temp	10-yr_Mov_Avg
1849	Lagos	Nigeria	25.98		7.98	
1850	Lagos	Nigeria	25.87		7.9	

1851	Lagos	Nigeria	26.1		8.18	
1856	Lagos	Nigeria	26.35		8	
1857	Lagos	Nigeria	25.45		7.76	
1858	Lagos	Nigeria	25.92		8.1	
1859	Lagos	Nigeria	26.18		8.25	
1860	Lagos	Nigeria	26.01		7.96	
1861	Lagos	Nigeria	25.95		7.85	
1862	Lagos	Nigeria	25.9	25.971	7.56	7.954
1873	Lagos	Nigeria	26.46	26.019	8.35	7.991
1874	Lagos	Nigeria	26.08	26.04	8.43	8.044
1875	Lagos	Nigeria	25.82	26.012	7.86	8.012
1876	Lagos	Nigeria	25.82	25.959	8.08	8.02
1877	Lagos	Nigeria	26.35	26.049	8.54	8.098
1878	Lagos	Nigeria	26.26	26.083	8.83	8.171
1879	Lagos	Nigeria	25.67	26.032	8.17	8.163
1880	Lagos	Nigeria	26.14	26.045	8.12	8.179
1881	Lagos	Nigeria	26.39	26.089	8.27	8.221
1882	Lagos	Nigeria	26.01	26.1	8.13	8.278
1883	Lagos	Nigeria	26.42	26.096	7.98	8.241
1884	Lagos	Nigeria	26.43	26.131	7.77	8.175
1885	Lagos	Nigeria	26.01	26.15	7.92	8.181
1886	Lagos	Nigeria	25.87	26.155	7.95	8.168
1887	Lagos	Nigeria	25.09	26.029	7.91	8.105
1888	Lagos	Nigeria	25.42	25.945	8.09	8.031
1889	Lagos	Nigeria	25.34	25.912	8.32	8.046
1890	Lagos	Nigeria	24.86	25.784	7.97	8.031
1891	Lagos	Nigeria	25.29	25.674	8.02	8.006
1892	Lagos	Nigeria	25.49	25.622	8.07	8
1893	Lagos	Nigeria	25.67	25.547	8.06	8.008
1894	Lagos	Nigeria	25.59	25.463	8.16	8.047
1895	Lagos	Nigeria	25.92	25.454	8.15	8.07
1896	Lagos	Nigeria	25.87	25.454	8.21	8.096
1897	Lagos	Nigeria	26.29	25.574	8.29	8.134
1898	Lagos	Nigeria	25.79	25.611	8.18	8.143
1899	Lagos	Nigeria	26.31	25.708	8.4	8.151
1900	Lagos	Nigeria	26.42	25.864	8.5	8.204
1901	Lagos	Nigeria	26.53	25.988	8.54	8.256
1902	Lagos	Nigeria	26.09	26.048	8.3	8.279
1903	Lagos	Nigeria	25.68	26.049	8.22	8.295
1904	Lagos	Nigeria	25.48	26.038	8.09	8.288
1905	Lagos	Nigeria	26.16	26.062	8.23	8.296

1906	Lagos	Nigeria	26.21	26.096	8.38	8.313
1907	Lagos	Nigeria	25.96	26.063	7.95	8.279
1908	Lagos	Nigeria	26.15	26.099	8.19	8.28
1909	Lagos	Nigeria	26.08	26.076	8.18	8.258
1910	Lagos	Nigeria	26.13	26.047	8.22	8.23
1911	Lagos	Nigeria	25.72	25.966	8.18	8.194
1912	Lagos	Nigeria	26.17	25.974	8.17	8.181
1913	Lagos	Nigeria	26.65	26.071	8.3	8.189
1914	Lagos	Nigeria	26.75	26.198	8.59	8.239
1915	Lagos	Nigeria	26.81	26.263	8.59	8.275
1916	Lagos	Nigeria	26.6	26.302	8.23	8.26
1917	Lagos	Nigeria	26.96	26.402	8.02	8.267
1918	Lagos	Nigeria	26.41	26.428	8.13	8.261
1919	Lagos	Nigeria	26.7	26.49	8.38	8.281
1920	Lagos	Nigeria	26.72	26.549	8.36	8.295
1921	Lagos	Nigeria	26.77	26.654	8.57	8.334
1922	Lagos	Nigeria	26.73	26.71	8.41	8.358
1923	Lagos	Nigeria	26.63	26.708	8.42	8.37
1924	Lagos	Nigeria	26.95	26.728	8.51	8.362
1925	Lagos	Nigeria	26.64	26.711	8.53	8.356
1926	Lagos	Nigeria	26.97	26.748	8.73	8.406
1927	Lagos	Nigeria	26.88	26.74	8.52	8.456
1928	Lagos	Nigeria	26.75	26.774	8.63	8.506
1929	Lagos	Nigeria	26.48	26.752	8.24	8.492
1930	Lagos	Nigeria	26.84	26.764	8.63	8.519
1931	Lagos	Nigeria	26.85	26.772	8.72	8.534
1932	Lagos	Nigeria	26.46	26.745	8.71	8.564
1933	Lagos	Nigeria	26.93	26.775	8.34	8.556
1934	Lagos	Nigeria	26.89	26.769	8.63	8.568
1935	Lagos	Nigeria	26.9	26.795	8.52	8.567
1936	Lagos	Nigeria	26.66	26.764	8.55	8.549
1937	Lagos	Nigeria	26.96	26.772	8.7	8.567
1938	Lagos	Nigeria	26.82	26.779	8.86	8.59
1939	Lagos	Nigeria	26.39	26.77	8.76	8.642
1940	Lagos	Nigeria	26.81	26.767	8.76	8.655
1941	Lagos	Nigeria	27.36	26.818	8.77	8.66
1942	Lagos	Nigeria	26.95	26.867	8.73	8.662
1943	Lagos	Nigeria	26.53	26.827	8.76	8.704
1944	Lagos	Nigeria	27.07	26.845	8.85	8.726
1945	Lagos	Nigeria	27.07	26.862	8.58	8.732
1946	Lagos	Nigeria	26.72	26.868	8.68	8.745

1947	Lagos	Nigeria	26.98	26.87	8.8	8.755
1948	Lagos	Nigeria	26.61	26.849	8.75	8.744
1949	Lagos	Nigeria	26.98	26.908	8.59	8.727
1950	Lagos	Nigeria	26.57	26.884	8.37	8.688
1951	Lagos	Nigeria	26.89	26.837	8.63	8.674
1952	Lagos	Nigeria	26.66	26.808	8.64	8.665
1953	Lagos	Nigeria	26.66	26.821	8.87	8.676
1954	Lagos	Nigeria	26.28	26.742	8.56	8.647
1955	Lagos	Nigeria	26.42	26.677	8.63	8.652
1956	Lagos	Nigeria	26.31	26.636	8.28	8.612
1957	Lagos	Nigeria	26.65	26.603	8.73	8.605
1958	Lagos	Nigeria	26.68	26.61	8.77	8.607
1959	Lagos	Nigeria	26.72	26.584	8.73	8.621
1960	Lagos	Nigeria	26.68	26.595	8.58	8.642
1961	Lagos	Nigeria	26.46	26.552	8.8	8.659
1962	Lagos	Nigeria	26.55	26.541	8.75	8.67
1963	Lagos	Nigeria	27.01	26.576	8.86	8.669
1964	Lagos	Nigeria	26.48	26.596	8.41	8.654
1965	Lagos	Nigeria	26.53	26.607	8.53	8.644
1966	Lagos	Nigeria	26.84	26.66	8.6	8.676
1967	Lagos	Nigeria	26.43	26.638	8.7	8.673
1968	Lagos	Nigeria	26.67	26.637	8.52	8.648
1969	Lagos	Nigeria	26.89	26.654	8.6	8.635
1970	Lagos	Nigeria	26.92	26.678	8.7	8.647
1971	Lagos	Nigeria	26.56	26.688	8.6	8.627
1972	Lagos	Nigeria	26.91	26.724	8.5	8.602
1973	Lagos	Nigeria	27.2	26.743	8.95	8.611
1974	Lagos	Nigeria	26.44	26.739	8.47	8.617
1975	Lagos	Nigeria	26.27	26.713	8.74	8.638
1976	Lagos	Nigeria	26.37	26.666	8.35	8.613
1977	Lagos	Nigeria	27.01	26.724	8.85	8.628
1978	Lagos	Nigeria	26.73	26.73	8.69	8.645
1979	Lagos	Nigeria	26.99	26.74	8.73	8.658
1980	Lagos	Nigeria	26.85	26.733	8.98	8.686
1981	Lagos	Nigeria	26.79	26.756	9.17	8.743
1982	Lagos	Nigeria	26.66	26.731	8.64	8.757
1983	Lagos	Nigeria	26.99	26.71	9.03	8.765
1984	Lagos	Nigeria	26.98	26.764	8.69	8.787
1985	Lagos	Nigeria	26.74	26.811	8.66	8.779
1986	Lagos	Nigeria	26.65	26.839	8.83	8.827
1987	Lagos	Nigeria	27.51	26.889	8.99	8.841

1988	Lagos	Nigeria	27.04	26.92	9.2	8.892
1989	Lagos	Nigeria	26.71	26.892	8.92	8.911
1990	Lagos	Nigeria	27.06	26.913	9.23	8.936
1991	Lagos	Nigeria	26.88	26.922	9.18	8.937
1992	Lagos	Nigeria	26.73	26.929	8.84	8.957
1993	Lagos	Nigeria	26.9	26.92	8.87	8.941
1994	Lagos	Nigeria	26.84	26.906	9.04	8.976
1995	Lagos	Nigeria	27.07	26.939	9.35	9.045
1996	Lagos	Nigeria	26.92	26.966	9.04	9.066
1997	Lagos	Nigeria	26.91	26.906	9.2	9.087
1998	Lagos	Nigeria	27.53	26.955	9.52	9.119
1999	Lagos	Nigeria	27.03	26.987	9.29	9.156
2000	Lagos	Nigeria	27.02	26.983	9.2	9.153
2001	Lagos	Nigeria	26.92	26.987	9.41	9.176
2002	Lagos	Nigeria	27.13	27.027	9.57	9.249
2003	Lagos	Nigeria	27.37	27.074	9.53	9.315
2004	Lagos	Nigeria	27.32	27.122	9.32	9.343
2005	Lagos	Nigeria	27.39	27.154	9.7	9.378
2006	Lagos	Nigeria	27.53	27.215	9.53	9.427
2007	Lagos	Nigeria	27.46	27.27	9.73	9.48
2008	Lagos	Nigeria	27.3	27.247	9.43	9.471
2009	Lagos	Nigeria	27.53	27.297	9.51	9.493
2010	Lagos	Nigeria	27.79	27.374	9.7	9.543
2011	Lagos	Nigeria	27.35	27.417	9.52	9.554
2012	Lagos	Nigeria	27.15	27.419	9.51	9.548
2013	Lagos	Nigeria	27.36	27.418	9.61	9.556



Observations

1. Both global temperature and my city temperature have been increasing on the average though the increase has not been steady.
2. My city temperature is generally warmer than the global temperature.
3. The increase in both the global and city temperature has not been steady over time.
4. The world is getting hotter.
5. The trend has been consistent over the last few years.