**7PAM2000 Applied Data Science -1**

**Assignment 2: Statistics and trends**

**Topic:** **Renewable Energy analysis based on world bank data**

To begin with, here I selected 9 countries for analysis from different continents and interrelations of some factors which were investigate on climate data changes: renewable energy, electricity used, production of electricity from different source like nuclear and oil and many more.

In addition, the analysis found some correlation between some factors which below there.

Chart, bar chart

Description automatically generated

The following bar graph despite Renewable energy consumption over the 25 years in different countries. The first and foremost, Brazil and Canada are constant around 45% and around 22% in renewable energy consumption from 1990 to 2015. Many more, India is decreased over the period, which is down trade around 50% in 2015. Last but least, remain of the countries fluctuate over given of time.

|  |  |  |
| --- | --- | --- |
| Country name | 1960 | 2021 |
| Brazil | 7.2 | 2.01e+09 |
| Canada | 1.7 | 3.28e+08 |
| China | 6.67 | 1.41e+07 |
| Germany | 7.28 | 8.31e+07 |
| Spain | 3.02 | 4.73e+07 |
| United Kingdom | 5.24 | 6.73e+07 |
| India | 4.50 | 1.39e+09 |
| Italy | 5.03 | 5.90e+07 |
| World | 3.0 | 7.93e+09 |

Chart, bar chart

Description automatically generated

The bar graph represents the energy used by different 9 countries from 1990 to 2015. The prominent continent is Canada, which is used highest energy used given the period as well as Germany used above 4000 kg oil equivalent. In addition, China is slightly increased in the 25 years and Brazil is constant in energy used over the period. Lastly, remain of the countries are minor fluctuate in 25 years as per the graph.

The following table graph show that the population of different countries from 1960 to 2021. It can be seen from that; population dramatically shoot up given the time of period.

Chart

Description automatically generated

The above line graph represents, electricity production from nuclear sources in 8 countries from 1995 to 2015. France has been drastically increased 10% to 80% in production of electricity from nuclear sources in 40 years. Compared to any other countries are not noticeable, however Spain and Germany were increased over the 10 years after that which were constant around 25% remain of the years.

As an overall we can see that France given big moment and others fluctuate given the period of the time.

Repo: https://github.com/DannyP007/Assignment-2.git

Chart, histogram

Description automatically generated

The multiple line graph describes, there are 8 countries which are produce electricity from oil sources in 35 years of the time. All countries dramatically decreased given the period of the time. China produced highest electricity from oil sources in 1980 approximately 55% percentages and over the period which is trade down.

Many of the countries are nominal fluctuate

In 1980 to 2015 as per the graph.