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**Batch: D**

**Class: CSE(AI & ML)**

## EXPERIMENT NO: 2

### Aim:

Create advanced charts using Tableau / Power BI / R / Python / Plotly or Chart or D3.js to be performed on the dataset - Socio economic data.

- Advanced - Word chart, Box and whisker plot, Violin plot, Regression plot (linear and nonlinear), 3D chart, Jitter, Line, Area, Waterfall, Donut, Treemap, Funnel
- Write observations from each chart

### Visualizations:

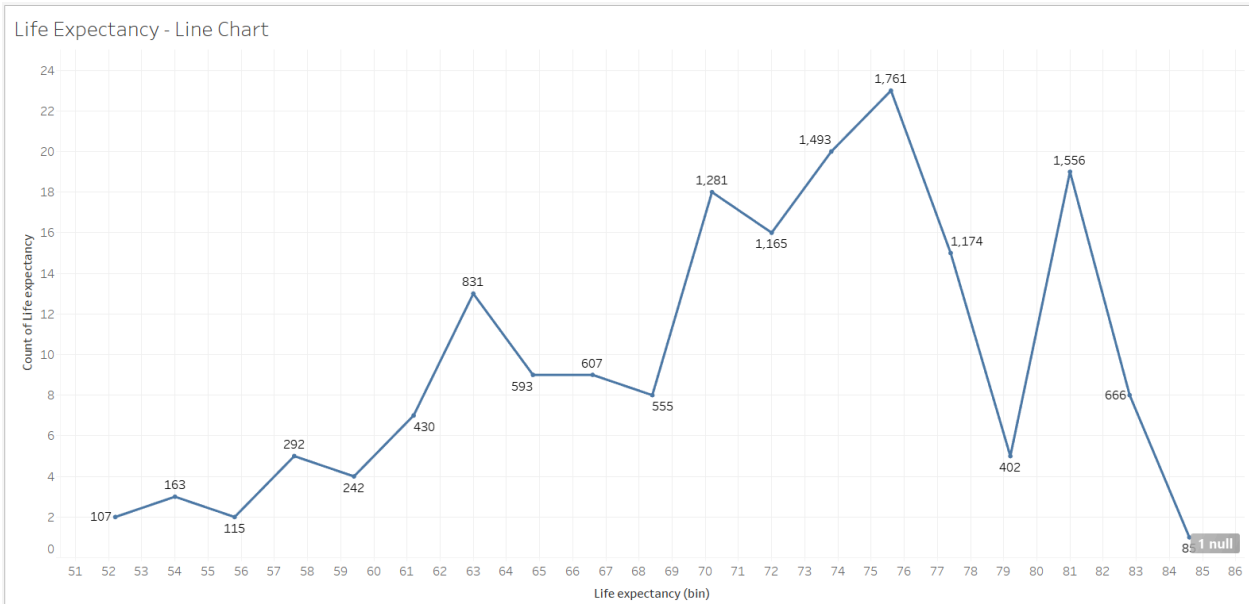
#### 1. Word Chart:

CO2-Emission - Word Chart



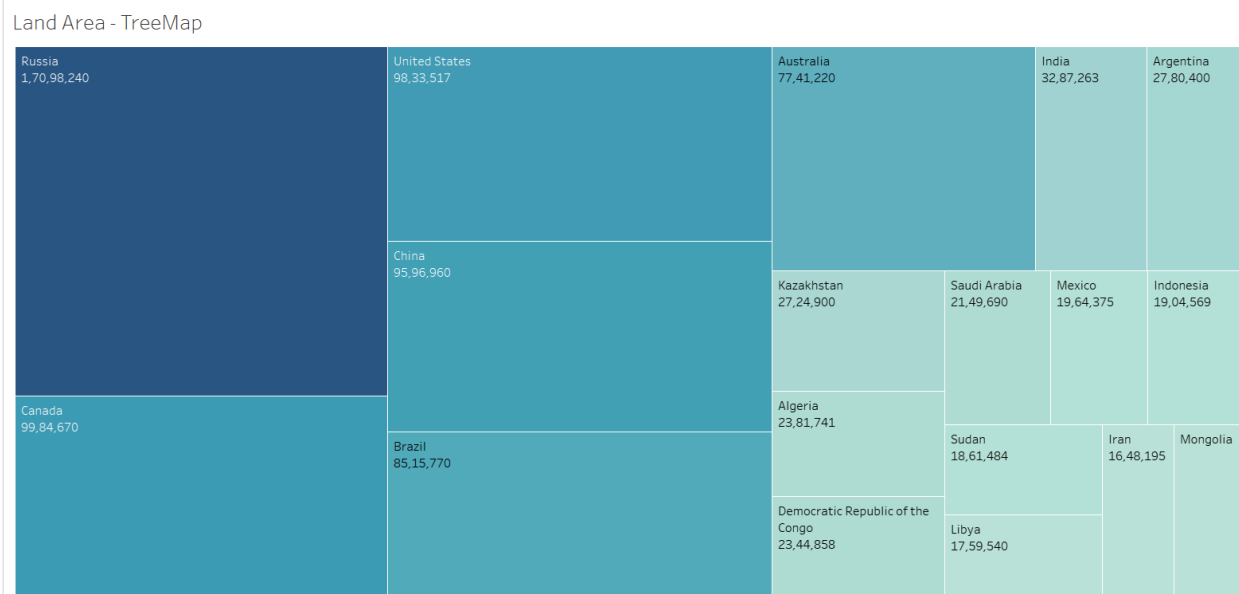
The above chart shows the names of the countries present in the top 20 list of highest CO2 emission. We can clearly see that China is the largest, meaning it has the highest emission rate, and also the United States, Russia and India are highlighted compared to the rest.

#### 2. Line Chart:



The above chart shows the life expectancy of people all over the world. We can see that most of the people live in the range of 70-81 with an average value of 1200+. We can also see that there are people with a life expectancy of 51 years.

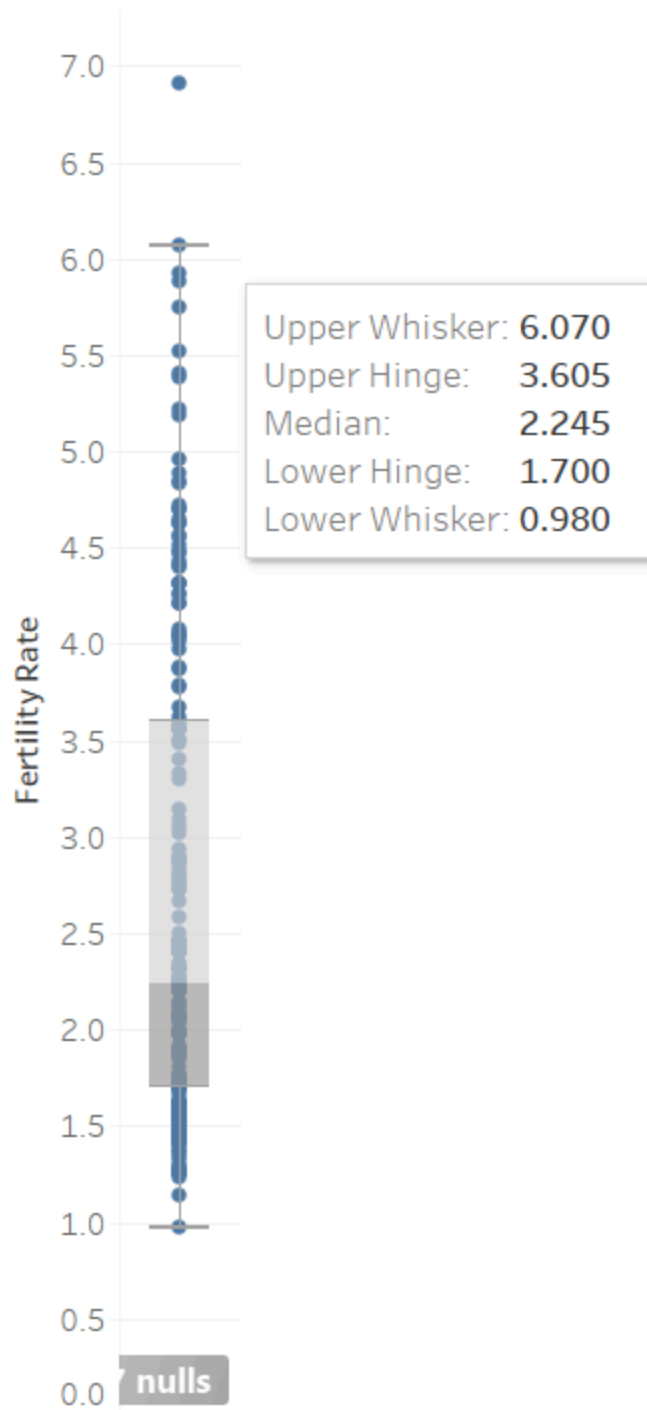
### 3. TreeMap:



The above chart shows the land area occupied by different countries. Russia covers the most land whereas we can see India in the top 10 of the above chart.

### 4. Box Plot:

## Fertility Rate - Box Plot



The above chart shows a box plot showing the fertility rate all over the world. We can see that the lower whisker is at 0.980 and the upper whisker is at 6.070, the lower hinge at 1.700 and the upper hinge at 3.605, and also the median of the fertility rate being 2.245.