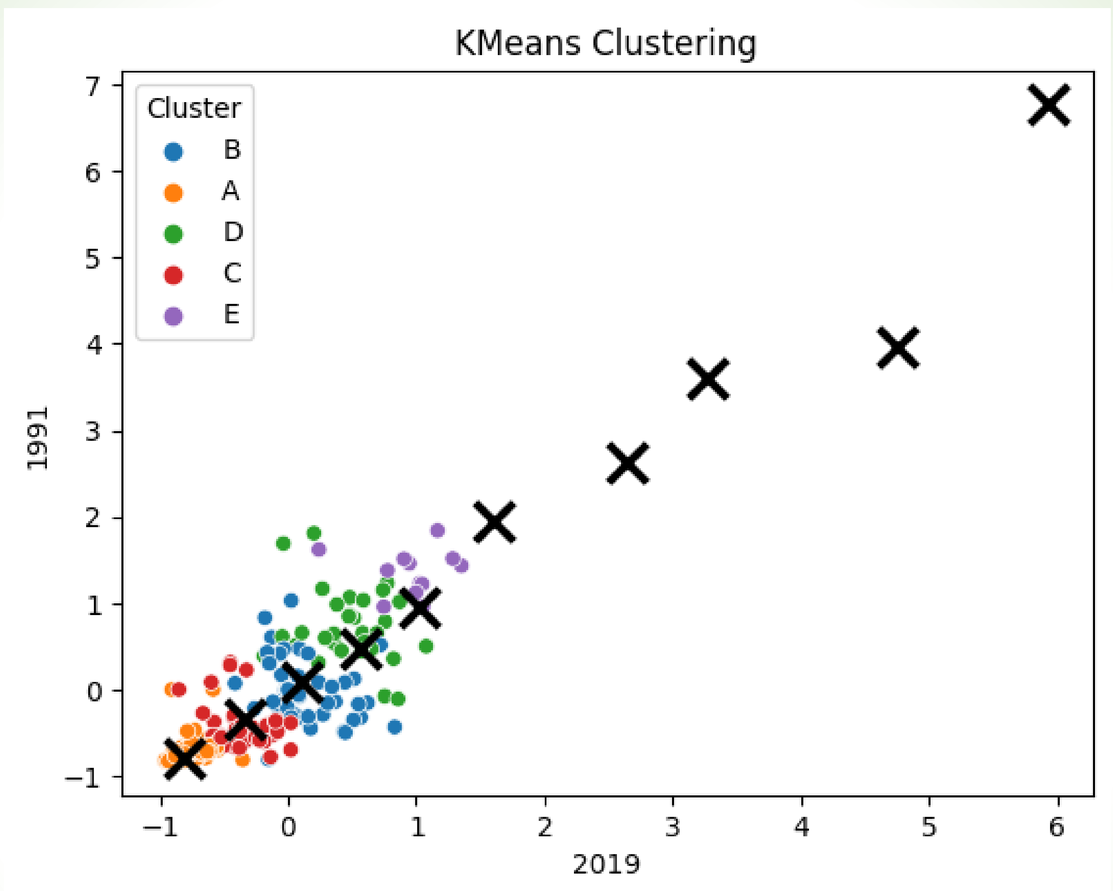
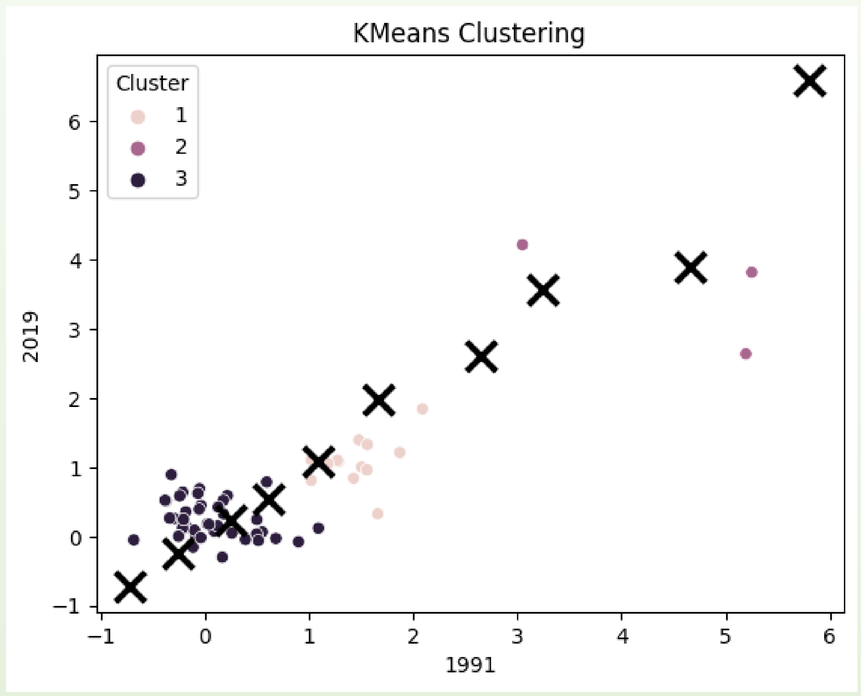
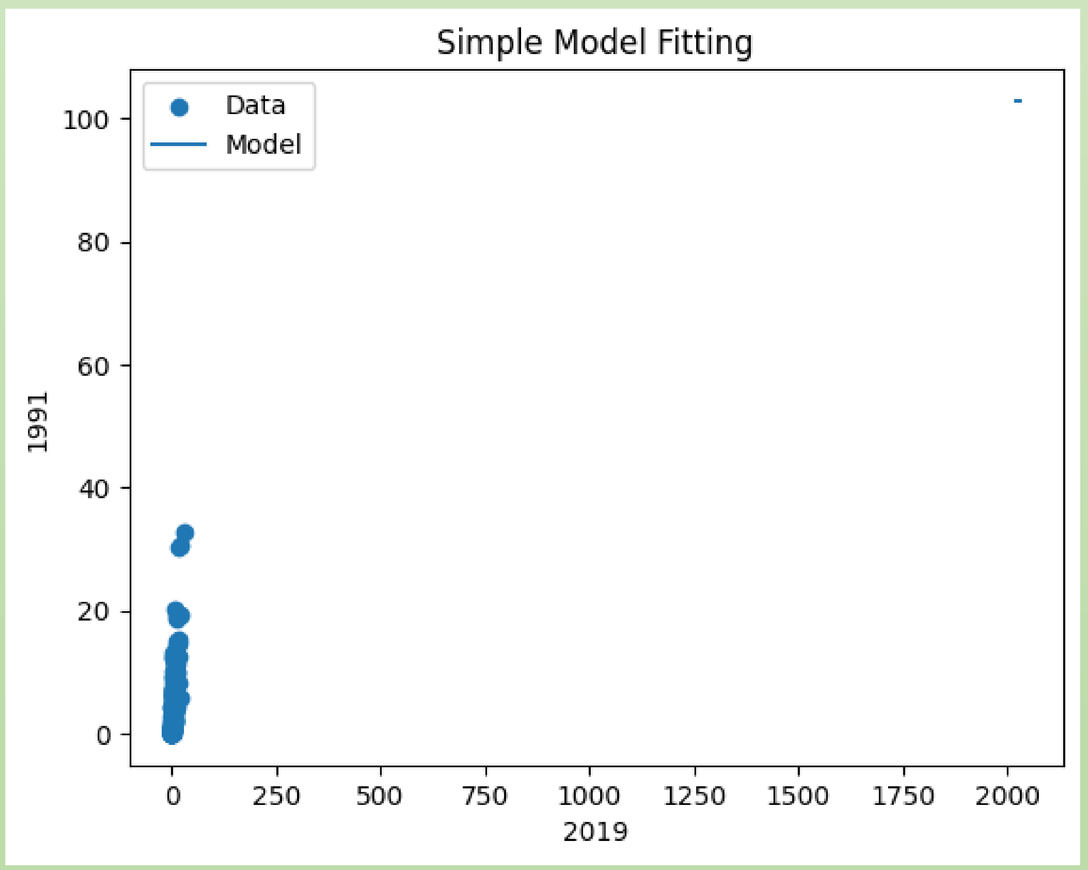
Analysis of CO2 Emissions Data: Mean Values, Maximum and Minimum Emissions

The Poster shows the CO2 (metric tons per capita) for various countries from 1990 to 2019. The data has been preprocessed to fill in missing values with 0 and normalize the data using the StandardScaler method. The data has also been clustered using the KMeans algorithm with 10 clusters. It provides insights into the provided data in three parts. The first part analyzes the mean values of CO2 emissions for a selected cluster of countries. Also The given data represents the error range and cluster centers for a clustering algorithm. There are 10 clusters, each with a center represented as an array of values. The error range for each cluster center is given as [-2, 2]. The minimum and maximum values for each cluster are not provided, only the centers.





- **CO2 emissions for the selected cluster of countries decreased from 1990 to 2000, fluctuated until 2009, and then steadily increased until 2019.**
- **The selected cluster of countries has made some progress in reducing their CO2 emissions, but more work is needed to achieve sustainable levels.**
- **There is a wide variation in CO2 emissions per capita between countries, and this data can be used to understand global trends and develop policies to mitigate their effects.**



Strong Points

- **The provided data is a valuable resource for understanding global trends in CO2 emissions.**
- **It can be used to analyse trends and compare emissions across countries.**
- **The data can identify countries making progress in reducing emissions and those needing to take more action.**
- **The data has been pre-processed to fill in missing values with 0 and normalize using the StandardAero method, ensuring completeness and comparability.**
- **The data has been clustered using the KMeans algorithm with 10 clusters, enabling grouping of similar countries and comparison of emissions over time.**

Conclusion: The provided data is a valuable resource for understanding global trends in CO2 emissions. While it has some limitations, it can still be used to identify countries that are making progress in reducing their emissions and those that need to take more action to reduce their emissions. The data can also be used to inform policy decisions aimed at reducing global emissions and mitigating the effects of climate change.