

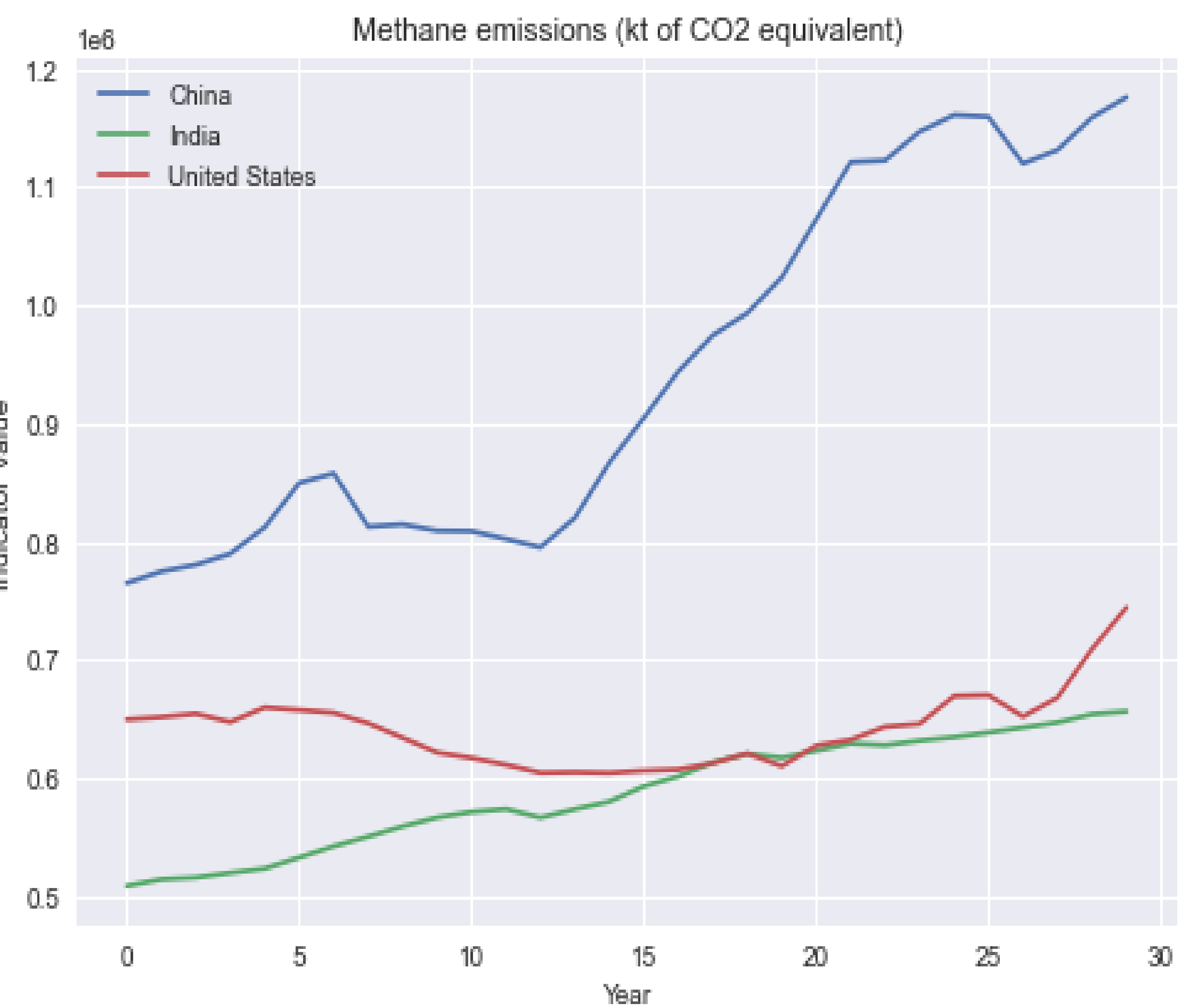
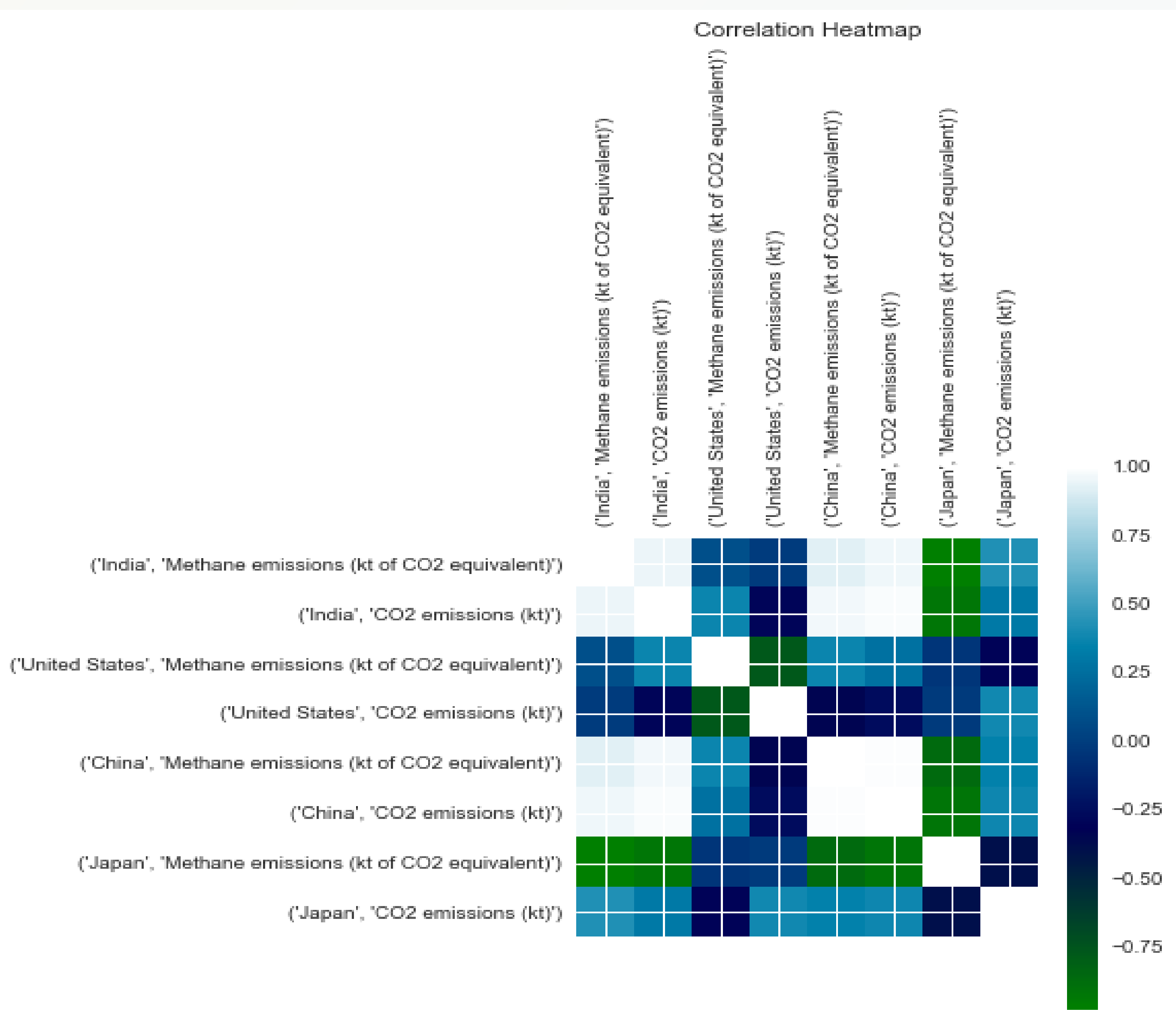
Exploring Data Analysis and Modelling Techniques: Clustering, Curve Fitting, and Trend Analysis

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Repo-Link: <https://github.com/indhu-parimi/Ads-Assignment3>

Abstract This project employed clustering analysis and curve fitting to gain insights into data modeling and analysis. Specifically, K-Means clustering was used to group countries based on normalized indicators like 'CO2 emissions (kt)' and 'Methane emissions (kt of CO2 equivalent)'. Simple models were created using curve_fit, and the results were analyzed to uncover trends, differences, and similarities among countries. These techniques have broad applications and can help make informed decisions across various domains and datasets.



Result:Cluster centers are the mean values of data points in each cluster in unsupervised learning. They represent the center point around which other data points in that cluster are located. By comparing the values of cluster centers, patterns and trends in the data can be identified, aiding in understanding each cluster's unique characteristics and relationships. However, the interpretation of results depends on the context and feature selection.

Conclusion:

In this project, I explored different tasks related to data analysis and modelling, including clustering, curve fitting, and trend analysis. These tasks allowed me to gain insights into various datasets and extract valuable information that can be used for decision-making purposes.