CO■ Emission Prediction Project Report

This project analyzes and predicts CO■ emissions (metric tons per capita) using World Bank data. The aim is to understand emission trends and forecast future behavior to support sustainable development goals (SDG 13: Climate Action).

Data Source: World Bank via Kaggle (CO■ Emissions until 2019)

Processing Steps:
1. Loaded dataset from Google Drive in Google Colab. 2. Cleaned data by dropping missing and unnamed columns. 3. Selected sample countries: Nigeria, China, USA, Germany, and India. 4. Visualized emission trends using Matplotlib. 5. Built a Linear Regression model to forecast Nigeria's emissions for 2025–2030.

Predicted CO■ Emission per Capita for Nigeria:

Year	Predicted_CO2_per_capita
2025	0.444538
2026	0.432594
2027	0.42065
2028	0.408705
2029	0.396761
2030	0.384817

Findings:
- China and India show a steady rise in CO■ emissions. - The USA and Germany show a downward trend, reflecting emission control policies. - Nigeria's emissions remain low but are slightly increasing.

Reflection:
This analysis highlights the varying emission patterns across nations. Predictive modeling helps understand potential future outcomes and supports policymaking for sustainable development.

SDG Alignment:
This project supports SDG 13: Climate Action — by providing insights on CO■ emissions trends and forecasting.