COVID-19 Deaths Data Analysis Report

Project Objective

This project analyzes COVID-19 deaths over a given time period using data storytelling techniques. The primary goal is to identify quarterly trends in death counts and present them through simplified, impactful visualizations.

Dataset Overview

The dataset used contains:

- Month: The time period for each observation (monthly data)
- New deaths: Number of new COVID-19-related deaths for each month

This structured data serves as the basis for quarterly aggregation and trend analysis.

Data Analysis Steps

- 1. Imported the dataset using pandas
- 2. Grouped the monthly data into 4 quarters (3 months each)
- 3. Calculated the cumulative death count for each quarter
- 4. Calculated **proportions** of each quarter relative to the highest quarter's deaths
- 5. Created multiple minimalist **line plots** using **matplotlib**, removing axis ticks and labels to focus attention on the trends

Key Insights

- Each quarter showed varying levels of COVID-19 deaths.
- Some quarters had death counts significantly higher than others.
- By comparing proportions visually, one can quickly identify which quarter was the most severe.
- The approach emphasizes **clarity over complexity**, ideal for storytelling and executive summaries.

Visualization Summary

- Four separate line plots were created, each representing a quarter.
- Transparency and positioning were used creatively to show intensity and comparison.
- Visual clutter (like ticks, labels, legends) was deliberately removed to focus on the narrative curve of deaths.

Conclusion

This analysis uses clean code, logical grouping, and minimalistic visuals to tell a story of COVID-19's impact over time. It effectively highlights critical differences in quarterly death rates and provides a compelling, easy-to-understand narrative using data.

*** END ***