**CMSC 636 – Data Visualization**

**Assignment 1 – Part 2 - Caption**

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For the part 2 Assignment, I have chosen **Matplotlib** as tool #2

Read the Aid dataset with the help of pandas library in python, visualized using matplotlib, the analysis question of “Which countries have consistently increased their aid over time? “ – Vis/Task #3

Below is the visualization of Vis/Task #3:

A graph of the country's average sales

Description automatically generated with medium confidence

**Fig. 1. The above subplots of the line graphs depict the linearly increasing aid provided by the top 6 donor countries over the given years. United States have good linear rate compared to the other donor countries. The graph is presented on an amount-based x-axis scale, providing a clear representation of the increasing aid amounts, while the years are depicted on the y-axis.**

Again, with the help of python, visualized using matplotlib, the analysis question of “ Which countries are the major donators and which are the major receivers? “ – Vis/Task #4

Below is the visualization of Vis/Task #4:

A blue rectangle with black text

Description automatically generated

A graph showing the amount of a number of individuals

Description automatically generated with medium confidence

**Fig. 2. a. [Donor] TreeMap representation of major aid provided by Donor countries to the recipient countries for a committed amount in USD. The graph depicts the details of the top donor countries like Germany, United States, France, United Kingdom where Germany as a significant donor. b. [Recipient] The graph depicts the details of the top recipient countries like Indonesia, Georgia, Malawi, Mayotte, India. The legend corresponds to the commitment amount, showcasing the scale of these donations where dark color represents major donations compared to the light color.**

References:

[1] Tierney, Michael J., Daniel L. Nielson, Darren G. Hawkins, J. Timmons Roberts, Michael G. Findley, Ryan M. Powers, Bradley Parks, Sven E. Wilson, and Robert L. Hicks. 2011. More Dollars than Sense: Refining Our Knowledge of Development Finance Using AidData. World Development 39 (11): 1891-1906

[2] Matplotlib

[Tutorials — Matplotlib 3.8.3 documentation](https://matplotlib.org/stable/tutorials/index.html)