

1. Data Loading:

- Reads the data from the CSV file "top_insta_influencers_data.csv" into a Pandas DataFrame.

2. Data Cleaning and Preparation:

- Defines a function **convert_units** to convert the numerical values in 'k' (thousand), 'm' (million), and 'b' (billion) to their respective numeric equivalents.
- Applies the **convert_units** function to convert the units for relevant columns like 'posts', 'followers', 'avg_likes', 'new_post_avg_like', and 'total_likes'.
- Saves the cleaned data to a new CSV file named "newdata.csv".

3. Top 10 Influencers by Number of Posts:

- Sorts the DataFrame by the 'posts' column in descending order and selects the top 10 influencers with the highest number of posts.
- Plots a horizontal bar chart showing the number of posts for each of the top 10 influencers.

4. Top 10 Countries in the Dataset:

- Calculates the counts of each country in the 'country' column.
- Selects the top 10 countries with the highest counts.
- Plots a pie chart showing the distribution of influencers among the top 10 countries.

5. Ratio of Average Likes to Followers:

- Adds a new column 'avg_likes_to_followers' to the DataFrame representing the ratio of average likes to followers for each influencer.
- Saves the DataFrame with the new column to a CSV file named "newdataandcolumn.csv".
- Sorts the DataFrame by the 'avg_likes_to_followers' column in descending order and selects the top 10 influencers with the highest ratio of average likes to followers.
- Prints the top 10 influencers based on this ratio.

6. Additional Analysis and Visualization:

- Plots the distribution of followers using a histogram.
- Creates a scatter plot of average likes vs total likes.
- Draws a box plot showing the distribution of average likes by country.
- Generates a pairplot for an insightful visualization of relationships between 'posts', 'followers', 'avg_likes', and 'total_likes'.