Experiment No. 4

Aim: Explore data analysis and visualization of social media data for business data.

Theory:

Data visualization of social media analysis is the process of representing social media data in a visual format such as graphs, charts, and tables to make it easier to understand and identify patterns, trends, and insights. Social media data visualization is an important aspect of social media analysis as it helps to make complex data more accessible and understandable, and enables businesses to quickly identify areas that need improvement, measure the effectiveness of their social media campaigns, and make data-driven decisions.

Common types of social media data visualizations include:

- Line charts: Used to show trends over time, such as the number of followers or engagement rate.
- Bar charts: Used to compare different metrics or data points, such as the engagement rate on different social media platforms.
- Pie charts: Used to show the proportion of different metrics or data points, such as the distribution of followers by location.
- Heatmaps: Used to show the density of activity, such as the times of day when users are most active on social media.
- Scatter plots: Used to show the relationship between two variables, such as the correlation between the number of posts and the engagement rate.
- By using data visualization techniques, businesses can gain a better understanding of their social media performance and improve their social media strategy.

Result:

1. Line charts:

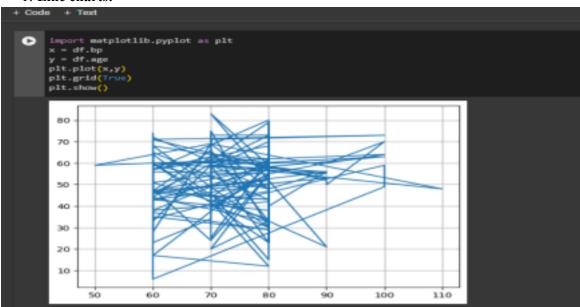


Fig1. Line chart for comparison between age and blood pressure.

2. Bar charts:

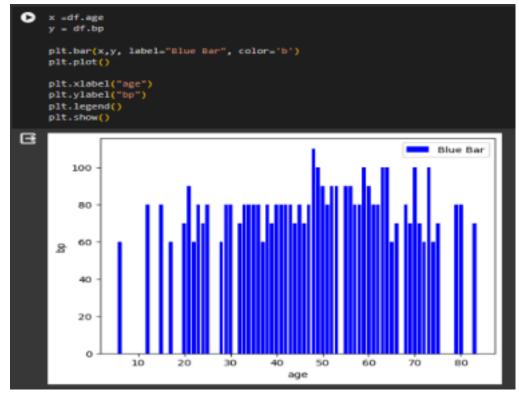


Fig2. Bar chart for comparison between age and blood pressure.

3. Pie charts:

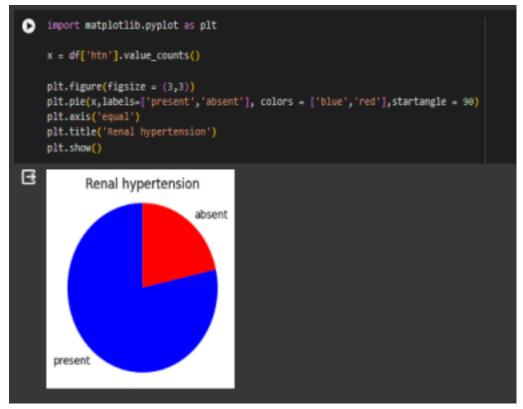


Fig3. Pie chart for Renal Hypertension

4. Heatmaps:



Fig4. Heatmaps of selected Patient Attributes.

5. Scatter plots:

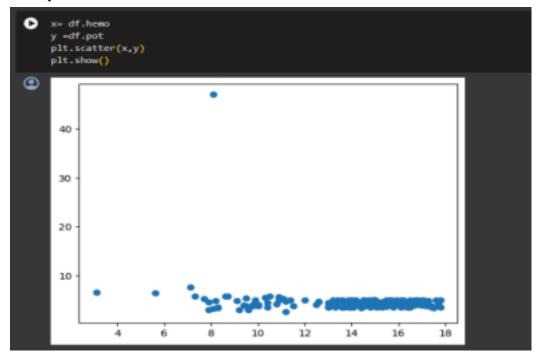


Fig5. Scatter plot to determine presence of hemo and pot in Blood.

<u>Conclusion</u>: In conclusion, our exploration into the realms of data analysis and visualization of social media data for business insights has proven both enlightening and invaluable. Through the meticulous plotting of graphs and charts, we've unraveled compelling patterns and trends, illuminating the intricacies of consumer behavior and market dynamics. These visualizations serve as powerful tools for decision-makers, offering actionable insights to inform strategic business endeavors. As we navigate the ever-evolving landscape of digital platforms, our proficiency in harnessing the potential of social media data empowers us to adapt, innovate, and thrive in an increasingly competitive marketplace, ensuring sustained growth and success for our ventures.