Graphs are powerful visual representations that help in understanding and analyzing data. They provide a visual depiction of relationships, patterns, and trends within datasets. There are several types of graphs commonly used in data analytics. Here are some of them:

1.Line Graph:

Utility: Line graphs are ideal for displaying trends over time or continuous data. They help identify patterns, changes, or correlations in data.
Example: Tracking stock prices over a period, visualizing temperature variations throughout the year.

2.Bar Graph:

Utility: Bar graphs are useful for comparing categorical data. They provide a clear visual representation of different categories and their respective quantities or values.
Example: Comparing sales figures of different products, analyzing survey responses for multiple options.

3.Pie Chart:

Utility: Pie charts are effective for displaying the composition or distribution of categorical data. They provide a quick overview of proportions and percentages.
Example: Showing market share of different companies, representing the distribution of budget allocations.

4.Scatter Plot:

Utility: Scatter plots help visualize the relationship between two continuous variables. They are useful for identifying correlations, clusters, or outliers in data.
Example: Analyzing the relationship between income and expenditure, studying the correlation between height and weight.

5.Histogram:

Utility: Histograms are used to understand the distribution of continuous numerical data. They help identify patterns such as skewness, gaps, or peaks in the data.
Example: Analyzing the distribution of ages in a population, examining the frequency of exam scores.
6.Heatmap:

Utility: Heatmaps are beneficial for visualizing large datasets and identifying patterns or relationships between variables. They allow for quick identification of high or low values.
Example: Analyzing customer purchase behavior across different product categories, studying geographic temperature variations.
Network Graph:

Utility: Network graphs represent connections or relationships between entities. They help visualize complex systems or networks and understand the interactions between different

elements.
Example: Mapping social networks, visualizing connections between websites on the internet.

The choice of graph depends on the nature of the data and the specific analysis objectives. Data analysts and researchers select the most appropriate graph type to effectively communicate their findings and insights.