Objectives for the Songs dataset:

Artist Analysis:

- Which artist has the most songs in the dataset?
- What is the geographic distribution of the artists based on latitude and longitude?

Album Analysis:

- Which album has the highest number of tracks?
- Are there any albums that feature multiple artists or are by the same artist?

Song Characteristics:

- What is the average danceability of songs in the dataset?
- How does the duration of songs vary across different albums or artists?

Temporal Trends:

- What is the distribution of song release years? Are there any noticeable trends or patterns over time?
- How does the tempo of songs vary by year or by artist?

Key and Signature Analysis:

- What are the most common key signatures in the dataset?
- Is there a relationship between key signature confidence and song popularity?

Geographic and Location-Based Analysis:

- How does the location of the artist (latitude and longitude) correlate with other song attributes like tempo and danceability?
- Are there any patterns or trends in song characteristics based on the artist's location?

Danceability and Tempo Correlation:

- Is there a correlation between danceability and tempo in the dataset?
- How does danceability vary between different albums or artists?

Song Duration and Time Signature:

- What is the average duration of songs with different time signatures?
- How does the time signature confidence vary across different genres or artists?

Album and Artist Location:

- Is there a noticeable difference in song characteristics between albums from different locations (e.g., California vs. London)?
- How does the artist's location influence the attributes of their songs?

Track-Specific Insights:

- Which song has the highest or lowest danceability?
- Are there any standout tracks in terms of tempo or duration that deviate significantly from the norm?

Objectives for E-Commerce Dataset

Sales by Product:

- **Bar Chart**: Display the total sales quantity for each product. This helps identify which products are the most and least popular.
- **Pie Chart**: Show the proportion of total sales contributed by each product. This can give a sense of the product mix and its significance in overall sales.

 Revenue Analysis:
- **Bar Chart**: Plot total revenue (Quantity * UnitPrice) for each product. This highlights which products generate the most revenue.
- **Line Chart**: Display revenue trends over time if you have data spanning multiple dates. This helps understand seasonal patterns or sales growth.

 Sales Trends by Date:
- **Line Chart**: Illustrate the total sales (sum of UnitPrice * Quantity) over time. This visual can reveal trends, spikes, or drops in sales.
- **Heatmap**: Show sales volume by day of the week and time of day. This can help identify peak sales periods and optimal shopping times.

 Customer Insights:
- **Bar Chart**: Display the number of transactions or total spending by each CustomerID. This identifies key customers and their purchase behaviors.
- **Geographical Map**: If you have data for multiple countries, map out sales by country to see which regions contribute most to sales.

 Unit Price Distribution:
- **Histogram**: Show the distribution of unit prices across different products. This helps in understanding the pricing strategy and range.
- **Box Plot**: Visualize the spread and outliers in unit prices. This can reveal pricing anomalies or trends.

 Quantity Sold Distribution:
- **Histogram**: Illustrate the distribution of quantities sold for each product. This helps understand typical purchase sizes and identify outliers.

 Product-Specific Revenue Contribution:
- **Stacked Bar Chart**: Show revenue contribution from different products over time or by invoice. This can highlight changes in product performance.

 Invoice Analysis:
- **Bar Chart**: Plot the number of items sold per invoice. This helps understand the average transaction size.
- **Pie Chart**: Show the proportion of total revenue per invoice. This can help identify high-value invoices.

 Sales by Country:
- **Bar Chart**: Compare total sales by country. This highlights which countries contribute the most to sales.
- **Map Visualization**: If applicable, visualize sales data on a map to show regional sales performance.

 Sales Performance by Product Group:
- **Treemap**: Show sales performance for each product category. This can be useful if you have hierarchical data (e.g., categories or groups of products).