Analysis of 2024 Election Data using Power BI or Tableau

Objective:

The objective of this task is to analyze the 2024 election data to gain insights into the election results, party performance, and voter trends across various constituencies. You will use Power BI or Tableau to create interactive visualizations and dashboards that will help stakeholders understand the election outcomes and the dynamics between different political alliances.

Data Description:

1. Election Results Data:
   - `_id`: Unique identifier for each record.
   - `State`: Name of the state.
   - `Const. No.`: Constituency number.
   - `Constituency`: Name of the constituency.
   - `Leading Candidate`: Name of the leading candidate.
   - `Leading Party`: Name of the leading party.
   - `Trailing Candidate`: Name of the trailing candidate.
   - `Trailing Party`: Name of the trailing party.
   - `Margin`: Vote margin between the leading and trailing candidates.
   - `Status`: Status of the election result (e.g., Won, Lost, Leading, Trailing).

2. Party Alliance Data:
   - `Party Name`: Name of the political party.
   - `Alliance Name`: Name of the political alliance the party belongs to.

Tasks:

1. Data Integration:
   - Combine the election results data with the party alliance data to get a comprehensive view of which alliances are leading or trailing in various constituencies.

2. Data Cleaning and Preparation:
   - Ensure data quality by checking for missing values, inconsistencies, and correcting any errors in the datasets.
   - Create calculated columns or measures if necessary (e.g., percentage margin, win rate).

3. Data Analysis and Visualization:
   - Overall Results: Create a summary of the overall election results including the total number of seats won by each party and alliance.
   - State-wise Analysis: Visualize the performance of leading parties and alliances across different states.
   - Constituency-wise Analysis: Analyze and visualize the margin of victory/defeat in various constituencies.
   - Party and Alliance Comparison: Compare the performance of different parties and their respective alliances in terms of seats won, margins, and status.
   - Trend Analysis: Identify and visualize trends in voting patterns, such as regions with high competition (small margins) or dominance by specific parties or alliances.

4. Interactive Dashboard:
  - Create an interactive dashboard that allows users to filter and explore the data by state, constituency, party, alliance, and status.
  - Include key performance indicators (KPIs) such as total seats won, average margin, and number of constituencies won by alliance.

5. Insights and Recommendations:
  - Provide a detailed report summarizing the key insights derived from your analysis.
  - Offer recommendations based on the data, such as strategies for parties to improve their performance in future elections.

Deliverables:
- A fully developed Power BI or Tableau file containing all the visualizations and interactive elements.
- PowerPoint presentation
- Video explaining analysis of election data.