

INDIA GENERAL ELECTION RESULTS 2024 – SQL + POWER BI

PROJECT

1. Project Overview

This is an end-to-end SQL + Power BI project based on the India General Election Results 2024. The aim of the analysis is to understand alliance-wise, state-wise, party-wise, and constituency-wise performance using real election datasets. The project demonstrates complete data analytics skills including SQL cleaning, SQL analysis, Power BI data modeling, DAX, and interactive dashboard design.

2. Problem Statement

The goal is to analyze the 2024 election results to answer key questions such as:

- How many seats were won by NDA, I.N.D.I.A, and Other parties?
- Which states contributed the most seats to each alliance?
- Who won each constituency and by what margin?
- What is the distribution of EVM vs Postal votes?
- Which candidates ranked first, second, and third?
- Which parties dominated in each state?

3. Tools Used

- *SQL Server* – Data import, cleaning, transformations, and analysis
- *Power BI* – Data modeling, DAX, and dashboard development
- *Power Query* – Additional data shaping
- *Excel/CSV* – Raw data source

4. Skills Used

- SQL Joins, Aggregations, Window Functions
- Data Cleaning & Standardization
- Data Modeling (Star Schema)
- DAX Measures (Vote Share %, Margins, Rankings)
- Interactive Visualizations
- Drill-through, Bookmarks & Navigation

5. Project Workflow

Step 1: Data Import

Imported multiple CSV files into SQL Server.

Step 2: Data Cleaning (SQL)

- Removed duplicates
- Standardized constituency & party names
- Created alliance column (NDA, I.N.D.I.A, OTHER)
- Merged EVM + Postal votes
- Created analysis-ready tables

Step 3: SQL Analysis

- Total seats in India
- Seats per state
- Seats won by NDA / I.N.D.I.A
- Seats per party
- Winner details
- Vote margin
- EVM vs Postal votes
- State-wise alliance results
- Top candidates by votes
- Winner vs runner-up for each constituency

Step 4: Load into Power BI

Connected Power BI to SQL database.

Step 5: Data Modeling

Created fact & dimension tables:

- Fact Votes
- Dim State
- Dim Constituency
- Dim Party
- Dim Alliance
- Dim Candidate

Step 6: Dashboard Development

Designed 6 interactive dashboards:

- Overview Analysis
- State Demographic Analysis
- Political Landscape by State
- Constituency Analysis
- Details Grid (Drill-through)
- Landing Page (Navigation)

6. Key Insights

- NDA and I.N.D.I.A alliances had strong competition across several key states.
- Some states showed clear majority dominance by one alliance.
- Several constituencies were won with very small vote margins.
- Independent candidates performed significantly in selected states.
- State-wise maps revealed clear regional voting patterns.

7. Conclusion

This project demonstrates the complete Data Analytics lifecycle:

- SQL data cleaning
- SQL analytical queries

- Power BI Data Modeling
- DAX calculations
- Multi-page dashboards
- Drill-through & navigation
- Insight generation

It provides a comprehensive view of India's 2024 election results and showcases strong technical & analytical skills.