

## Data Visualization and Story Telling course

### Assignment [20% of the Course Weight]

#### Key deliverable of the assignment:

Demonstrate the application of Effective Principles of Visualization Design for designing a dashboard that depicts change in the voter turnout ratio. [ Key aspects, by Gestalt Principles, Visualization Best Practices, color schema should be clearly demonstrated]

#### Data source:

- Election Commission of India ( Link: <https://www.eci.gov.in/statistical-reports> )
- 2024, 2019, and 2014 [last three General Elections]
- **Specific table:** PC Wise voter turnout [ e.g. 13.PC Wise Voters Turn Out under 2024]

#### Assignment Tasks

##### 1. Creation of data set [5 Marks]

Create a data set of select 10 constituencies (of your choice) for the last three general elections

*[4 marks will be given for consistency of the data set to support visualization – you should submit this file for evaluations]*

- Variables
  - Constituency name
  - State
  - Total voters with bifurcation of male, female voters
  - Total votes polled with bifurcation of male, female voters and postal votes
  - Voter turnout ratio – overall, male, female, postal votes
- Identify the variable types [1 Mark]

##### 2. Visualization Development [10 Marks]

Create appropriate visualizations based on aggregated data [e.g. by considering the full or aggregate data for the select 10 constituencies]

1.
  - a. Show case change in voter turnout ratio at the aggregate level – over time
  - b. Show case change in voter turnout ratio at the aggregate level – across genders
  - c. Show case distribution of voter turnout – across constituencies and across time
  - d. Show case distribution of voter turnout – across constituencies and genders

##### 3. Dashboard Design [ 5 Marks]

- a. Design a dashboard and it should have the four visuals covered in question 2
- b. Incorporate drill down or selection feature for showcasing the constituency details

**Platform for presenting the dashboard: POWERBI/ Tableau/ Python/ Even Excel is okay (if you can demonstrate the same) – you must share upload the final file along with the curated data set used for developing the visualization.**

Ensure enabling access for public view if using powerbi / tableau public applications, python (jupyter or colab file to be shared). All submissions should have the underlying data excel file.

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#### Reference :

**Data visualization – Storytelling Using Data by Sharada Sringswara, Purvi Tiwari, and U. Dinesh Kumar**  
<https://www.storytellingwithdata.com/>

**All the best**