Name : Tejas Redkar
PRN : 1032210937
Panel - C
BDT-2 Batch - 1
Roll No : BDT-22

# BDT Assignment - 9

* Problem Statement

For suitable datasets of any application domain demonstrate big data analytics using D3.js

* Objectives : 1) To learn D3.js concepts
2) To perform data visualization on given dataset.

* Theory :

D3.js or Data-Driven Documents, it is a potent Javascript library tailored for crafting interactive data visualization on web browsers with its distinctive features of binding data to the Document Object Model (DOM) elements & employing a declarative approach to transformations, D3.js excels in creating dynamic & engaging visualizations for the web.

* Types of charts :-

1) Line chart: Shows trends over continuous interval
2) Bar chart: Uses bars to represent proportional values
3) Pie chart: Displays data proportions in a circular format.
4) Scatter Plot: Plots individual data points for correlation analysis.
5) Area chart: Emphasizes changes over time with filled areas.

* Importance of visualizations

- Data understanding
- Decision Making
- Pattern Recognition
- Communication of Data Insights.
- Exploration of Data.

* Conclusion

Hence, I learned to perform data visudlization using D3.js.

* FAQ's

Q1) Explain Data Visualization Factores.

Ans 1) Clarity: Ensure visual representation is clear & easily understandable.

2) Accuracy: Maintain accuracy in conveying intended

3) Simplicity: Keep visualization simple to avoid confusion

4) Relevance: Include only relevant data for effective communication.

Q2) Explain any 3 types of charts with example.

Ans 1) Line Chart : Shows trends over time

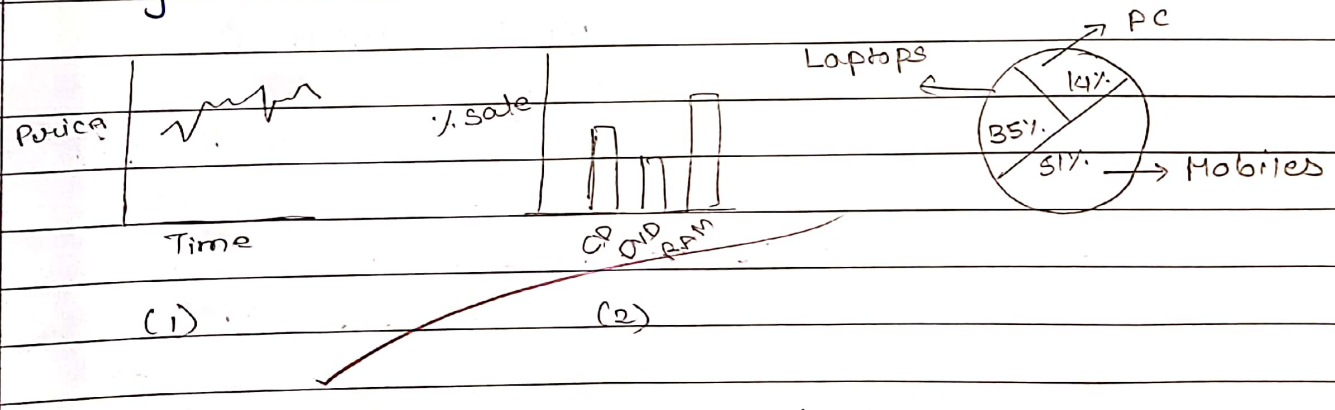
Eg) Stock Prices

2) Bar Chart : Represents categorical data with bars

Eg: Sales by category

3) Pie Chart: Displays parts of a whole as sectors

Eg: Market Share




Q3) State use of any 10 methods of D3.js.

Ans 1) Select : Selects elements in the DOM

2) Data : Binds data to selected elements.

3) Enter : Adds new elements based on data.
4) Append : Adds elements to DOM
5) ~~Attr~~Attr : sets attributes for selected elements
6) Style : Applies styles to selected elements
7) Transition : Creates smooth transition for visual elements
8) Scale : Defines scales for mapping data to visual representation.
9) Axis : Generate axes for charts
10) Event : handles user interaction & event.