DATE __/__/__
PAGE NO _____

33304

Assignment - 09

* Aim :- Perform various data visualisation techniques using Tableau

* Problem statement :- Perform the following data visualisation operations using Tableau on adult ~~for~~ iris dataset
  1. 1D (Linear) Data Visualisation
  2. 2D (Planar) Data Visualisation
  3. 3D (Volumetric) Data Visualisation
  4. Temporal
  5. Multidimensional
  6. Tree / Hierarchical
  7. Network

* Theory :-

- Data visualisation :
  It refers to the technique used to communicate data or information by encoding it as a visual object

1D (Linear) →
Eg - lists of data item, organised by a single feature (alphabetical order)

2D (planar) →
Eg - Geospatial (choropleth)

3D (volumetric) →
Broadly, example of scientific visualisation
  i) 3D computer models
  ii) Surface and volume rendering
  iii) Computer simulation

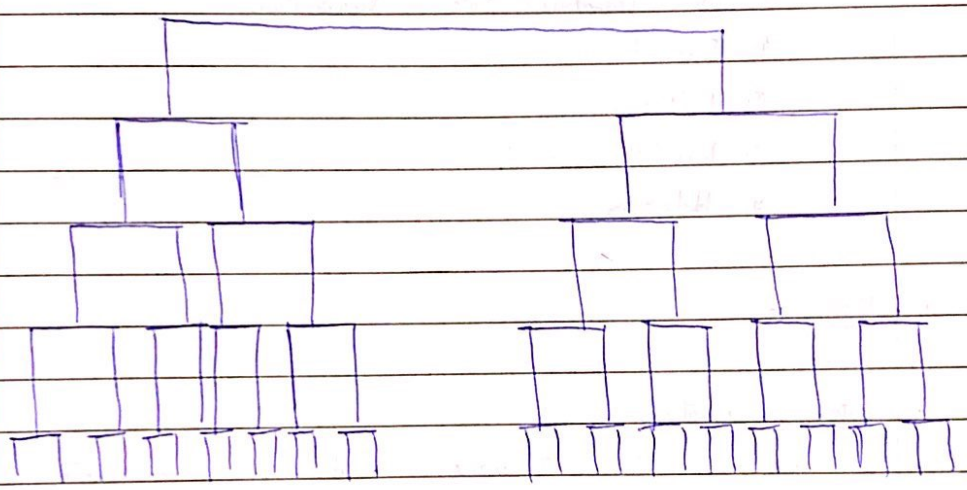
Multidimensional →

Eg : Histogram → Bechart
(category of proportions, counts)

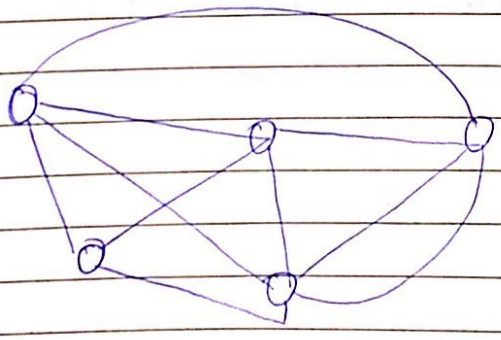
Tree / Hierarchial →

Eg : General tree visualisations
Directory structure

Dendogram →



Network →



Matrix →

Eg : Node - link diagram

- **Tableau :**

It is a business intelligence tool for visually analysing the data. Tableau can connect to files, relational and big data sources to acquire and process data. The software allows data blending and real-time collaboration which makes it very unique.

Features →

1. Speed
2. Self-reliant
3. Visual discovery
4. Blends diverse datasets
5. Architecture agnostic
6. Centralized data

There are 3 basic steps involved in creating any Tableau data analysis report

1. Connect to a data source
2. Choose dimensions and measures
3. Apply visualization technique

33304

* Conclusion :- Thus I have learnt how to use Tableau software and visualise data