Assignment No. 9

Problem Statement :

Perform the following data visualization operation using Tableau on Adult, Iris dataset or retail dataset.

1) 1D (Linear) data visualization
2) 2D (Planar) data visualization
3) 3D (Volumetric) data visualization
4) Temporal data visualization
5) Multidimentional data visualization
6) Tree / Hierarchical data visualization
7) Network data visualization

Theory

Data visualization is viewed by many disciplines as a modern equivalent of visual communication.

It involves the creation & study of the visual representation of data, meaning "Information that has been abstracted in some schematic form, including attributes or variables for the units of information".

Tableau :

- Tableau is Business Intelligence Tool for visually analyzing the data.

- Users can create & distribute an interactive & shareable dashboard, which depict the trends, variations & density of the data in the form of graphs & charts.

- Tableau can connect to files, relational & big data sources to acquire & process data.

Features :

1) Speed of Analysis :

   As it does not require high level of programming expertise, any user with access to data can start using it to derive value from the data.

2) Self - Reliant :

   Tableau does not need a complex Software setup. The desktop version which is used by most users is easily installed & contains all the features needed to start & complete data analysis.

3) Visual Discovery :

The user explores & analyzes the data by using visual tools like colors, trends lines, charts & graphs.

4) Blend Diverse Data Sets :

Tableau allows you to blend different relational, semi-structured & raw data sources in real time, without expensive up-front integration costs.

5) Architecture Agnostic :

Tableau works in all kinds of devices where data flows. Hence, the user need not worry about specific hardware or software requirements to use Tableau.

Conclusion :

Thus, I to learnt how to visualize the data in different types of data visualization by using Tableau Software.