

Assignment No. 9

* Problem statement :-

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

- ① 1D (Linear) Data visualization
- ② 2D (Planer) Data visualization
- ③ 3D (volumetric) data visualization
- ④ Temporal Data visualization
- ⑤ multidimensional Data visualization
- ⑥ Tree/Hierarchical Data visualization
- ⑦ Network data visualization

Theory :-

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

It involves the creation 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 dashboards 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 level of programming expertise, any user with access rights to data access 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, trend lines, charts & graphs.

④ Blend diverse data-set :-

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

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