**Tableau**

Tableau is a powerful and interactive data visualization software that allows users to create and publish dashboards, charts, graphs, and other visual representations of data. It is commonly used for business intelligence and data analysis purposes, and can connect to a wide variety of data sources, including spreadsheets, databases, cloud-based servers, and data lakes.

Tableau offers a drag-and-drop interface that makes it easy for users to create visualizations without requiring coding, and its robust data analysis tools allow for complex calculations and analysis.

**Learning Resource:** https://www.tableau.com/learn/training

**Installation:**

1. Go to tableau public -> https://www.tableau.com/products/public
2. Download tableau public Desktop.
3. Install the file.

**Load Data in Tableau**

1. First download any dataset on which you wanted to make charts.
2. Then go to documents -> My Tableau Repository -> Datasources -> Paste your data here.
3. It will be easy for you to upload the data.
4. Data Source tab contains the data definitions and use data interpreter.
5. Click on **Use Data Interpreter** -> clean your Microsoft workbook.
6. Rows = rows and fields = columns.
7. Text Files are CSV files in Tableau.

**Data Types check in Tableau Public**

**Type** = # 🡪 number

**Type** = ABC 🡪 string

https://codanics.com/books/abc-of-statistics-for-data-science/Chapter3.html

**Data Filtering and Sorting**

Top Right Corner you will see the filter button.

Add Filter 🡪 Click Add 🡪 Select column on which you want to apply filter 🡪 Adjust the parameters for filter 🡪 Click OK.

**Sheet**

We make plots in separate sheets.

**Data**

Categorical data 🡪 Abc

Numerical data 🡪 #

**Scatter Plot**

Scatter plot is between two continues variables. Click on variable and change sum to dimensions.

Changing the color, shape or size of points is to simply drag the column or feature on Marks tab of color, size, or shape etc.

**Flipping Chart**

**Ctrl + W** 🡪 Flip the chart

**Bar Plot**

You can sort the data or unsort the data i.e. ascending and descending

**Geo map Plot**

Works on Country names and location

**Saving Plot**

Sign into tableau public and export your project there and then you can download the plot in PNG.

**Tableau Dashboard Development**

You can click on create dashboard where you will see all your sheets.

You can set the size of your dashboard but recommended it to select Automatic.

Objects 🡪 contain the elements/containers to arrange the plots in dashboard.

Tiled 🡪 Fixed containers in space.

Floating 🡪 Floating containers in 2-D space.