DSBDA Assignment 8 : Tableau

* Aim : Perform following data visualization operations using Tableu on SuperStore Data set.

i) 1 D visualization
ii) 2 D planar data visualization
iii) 3 D volumetric data visualization
iv) temporal data visualization
v) muldimensional data visualisation
vi) Tree data visualisation
vii) network data visualisation

* Theory :

Q1) What is visualization ? Explain its importance.

Ans : i) Data Visualisation means pictorial representation or graphical representation so that user can analyze data quickly.

ii) Data visualization presents raw data through graphical representations that allows viewers, business analysts and executives to explore the data & uncover deep insights.

iii) Importance of data visualization:

a) helps decision makers understand how business data is being interpreted to determine business decisions.

b) Leads the target audience to focus on business insights to discover areas that require attention.

c) Visualising business data helps to manage growth & converts trends into business strategies by making sense of information.

d) Reveals previously unnoticed key points about data sources to help decision makers compose data analysis reports.

Q2) What is Tableau? Explain its features.

Ans:- i) Tableau is a business intelligence (BI) software tool. It supports interactive visualization of data.

ii) It provides faster visualisation because it has an inmemory data engine which speeds up visualisation.

iii) It merges graphical interface with traditional BI tools.

iv) Features of Tableau:

a) Quick & easy data acquisition
b) Publication of interactive graphics
c) Has 3 main products : Tableau desktop, Tableau Server, Tableau public
d) Can connect with advanced data sources (Hadoop, Oracle)

Q3) Explain various Tableau softwares available.

Ans : ① Tableau Desktop

It allows one to code & modify the reports starting from creating reports & charts to combing them to form a dashboard. It consists of Tableau Desktop personal & proffessional.

② Tableau Server

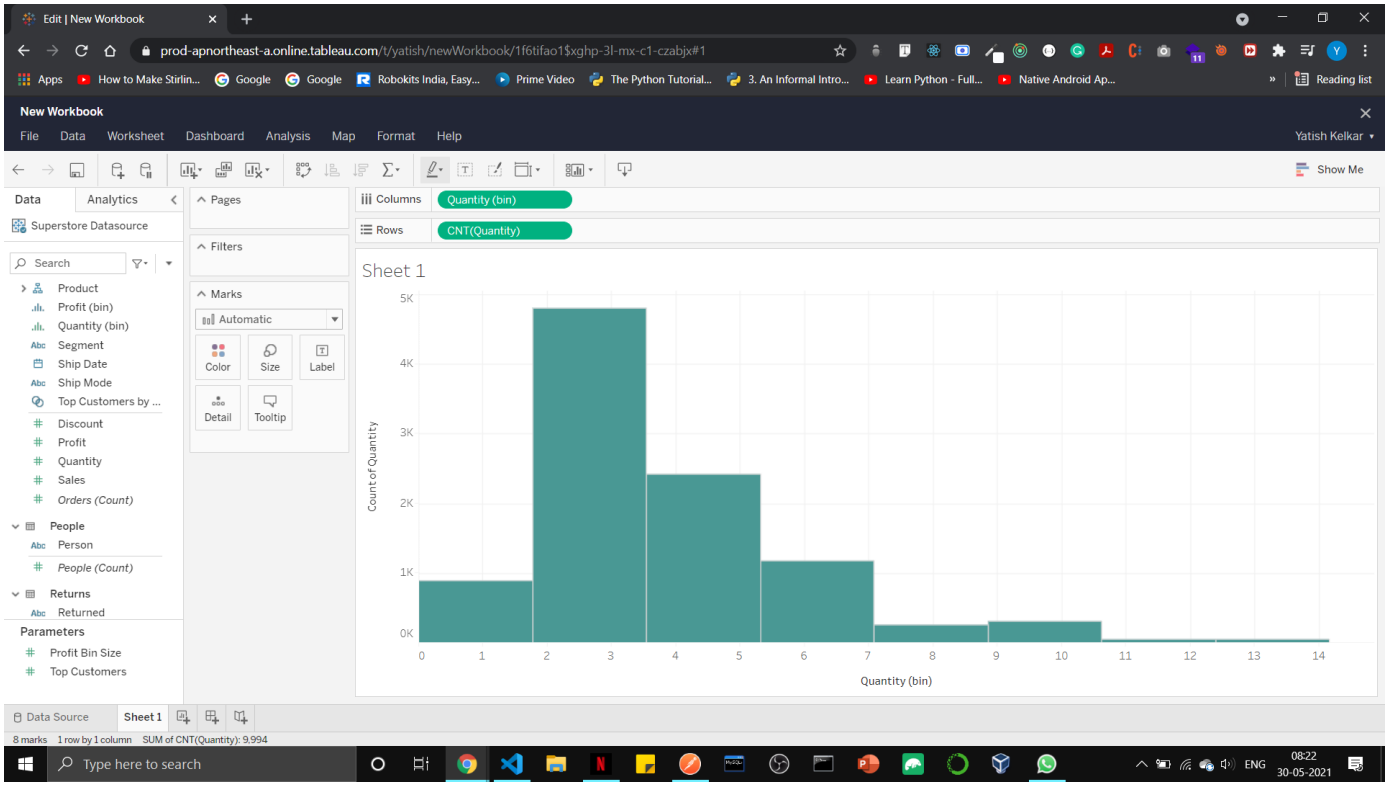
Used to share visualization & workbooks generated in Tableau desktop. Work becomes accessible once it is uploaded on their respective servers.

③ Tableau Online

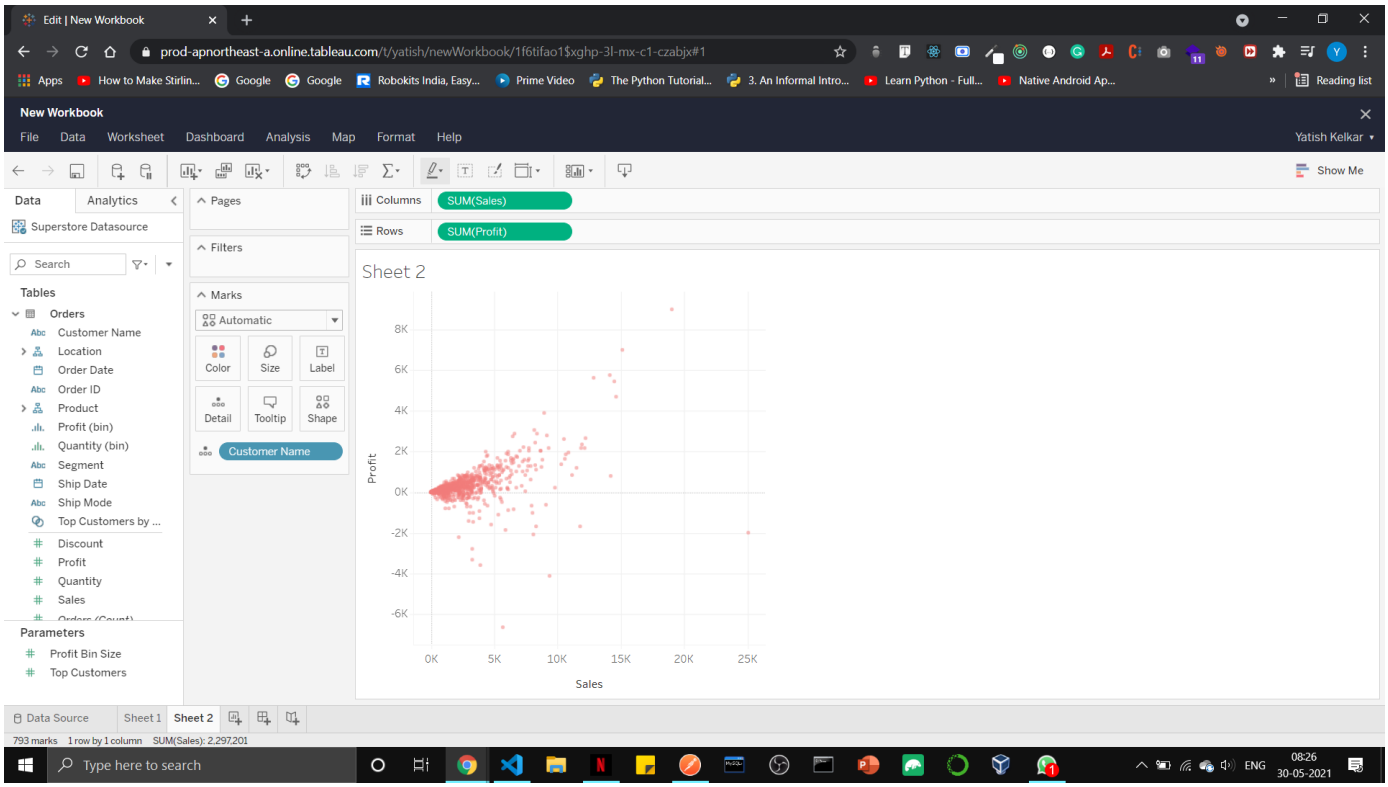
It is a sharing tool similar to Tableau Server but data is saved in servers which are provided in cloud provided by Tableau group.

* Conclusion : Thus we have successfully performed data visualization using Tableau.

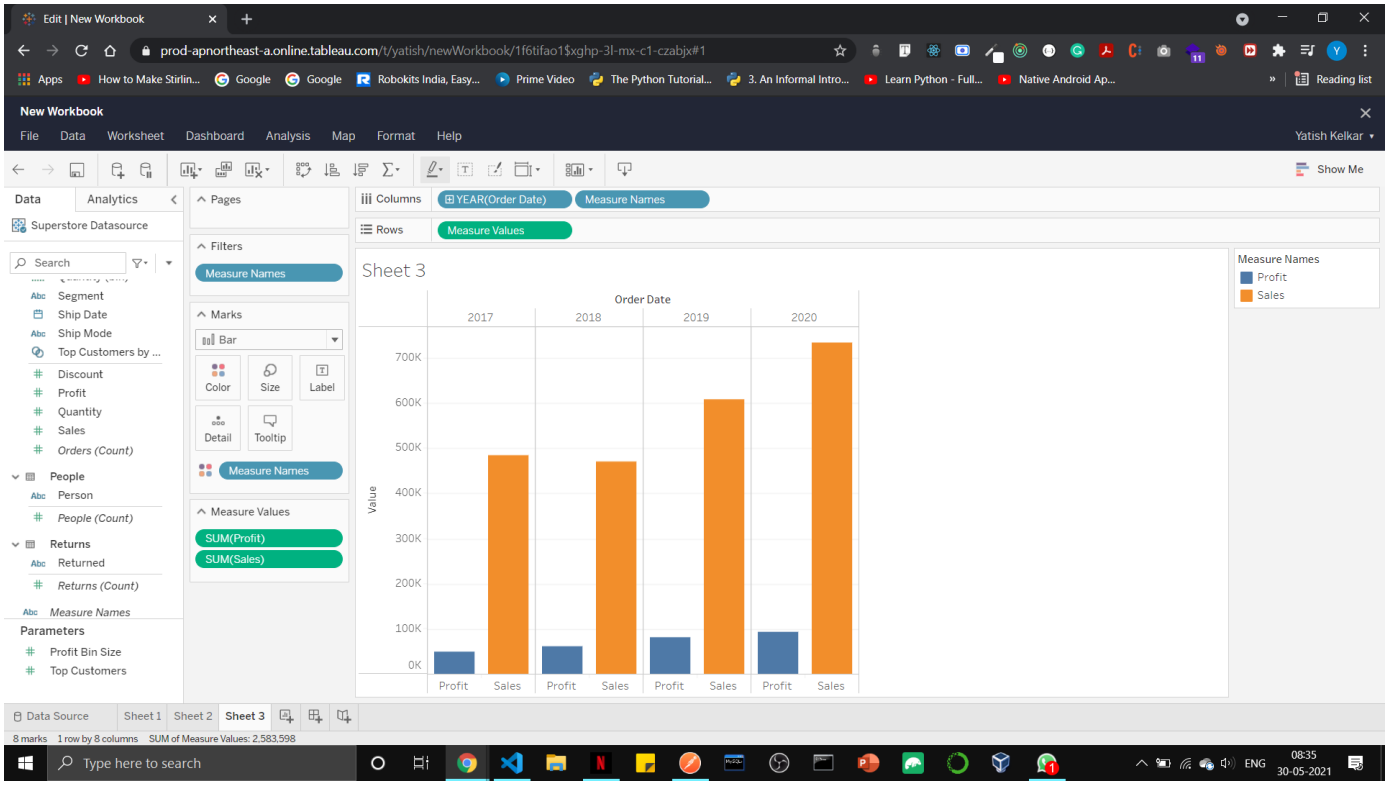
One Dimensional Visualisation



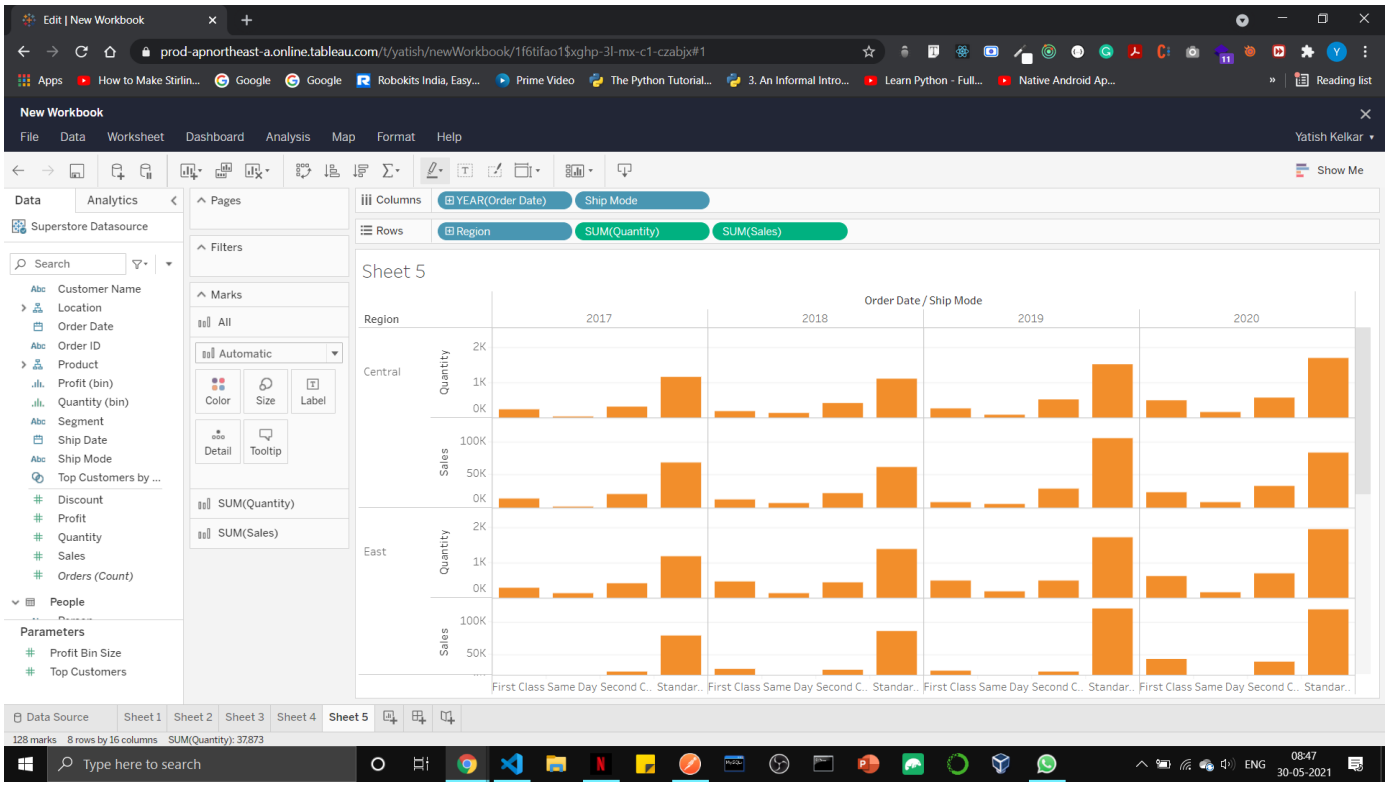
Two Dimensional Visualisation



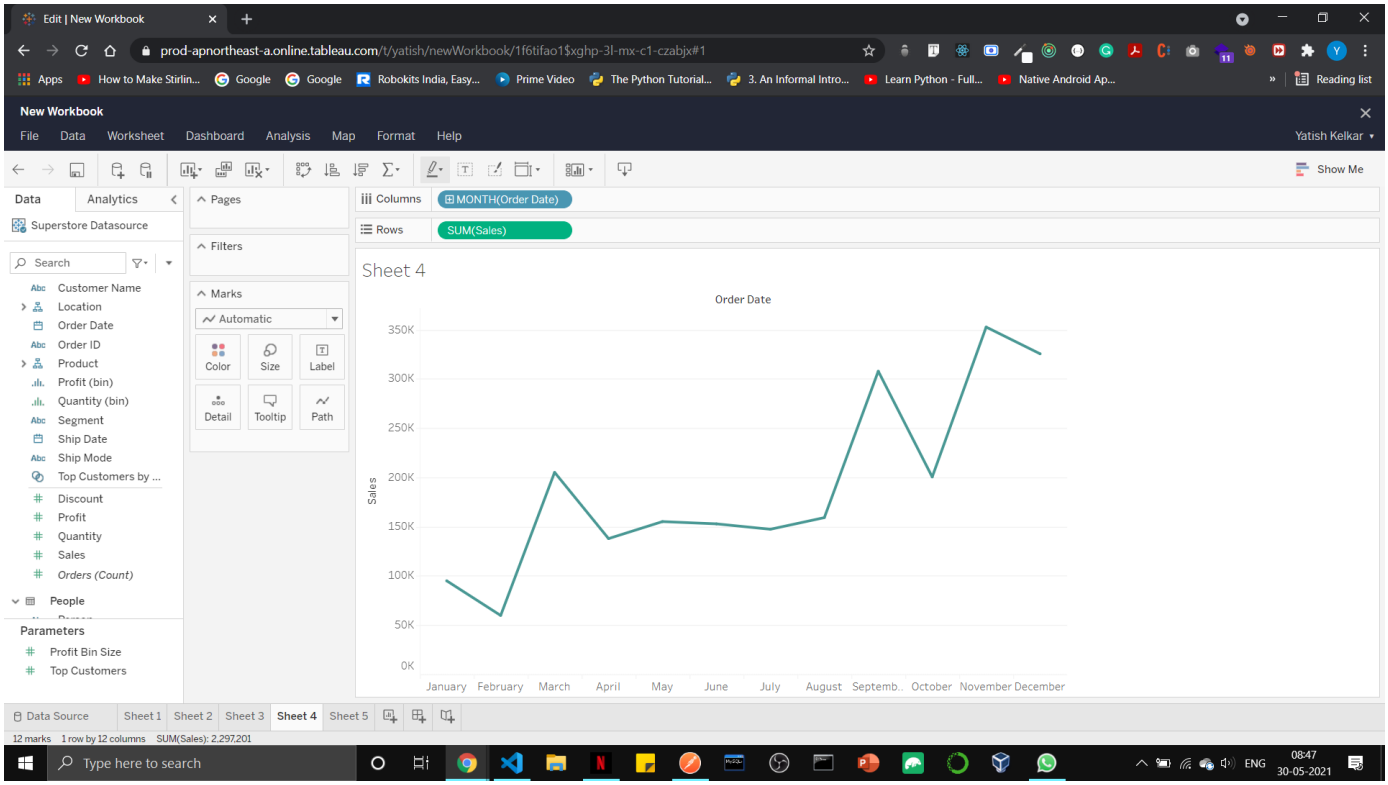
Three Dimensional Visualisation



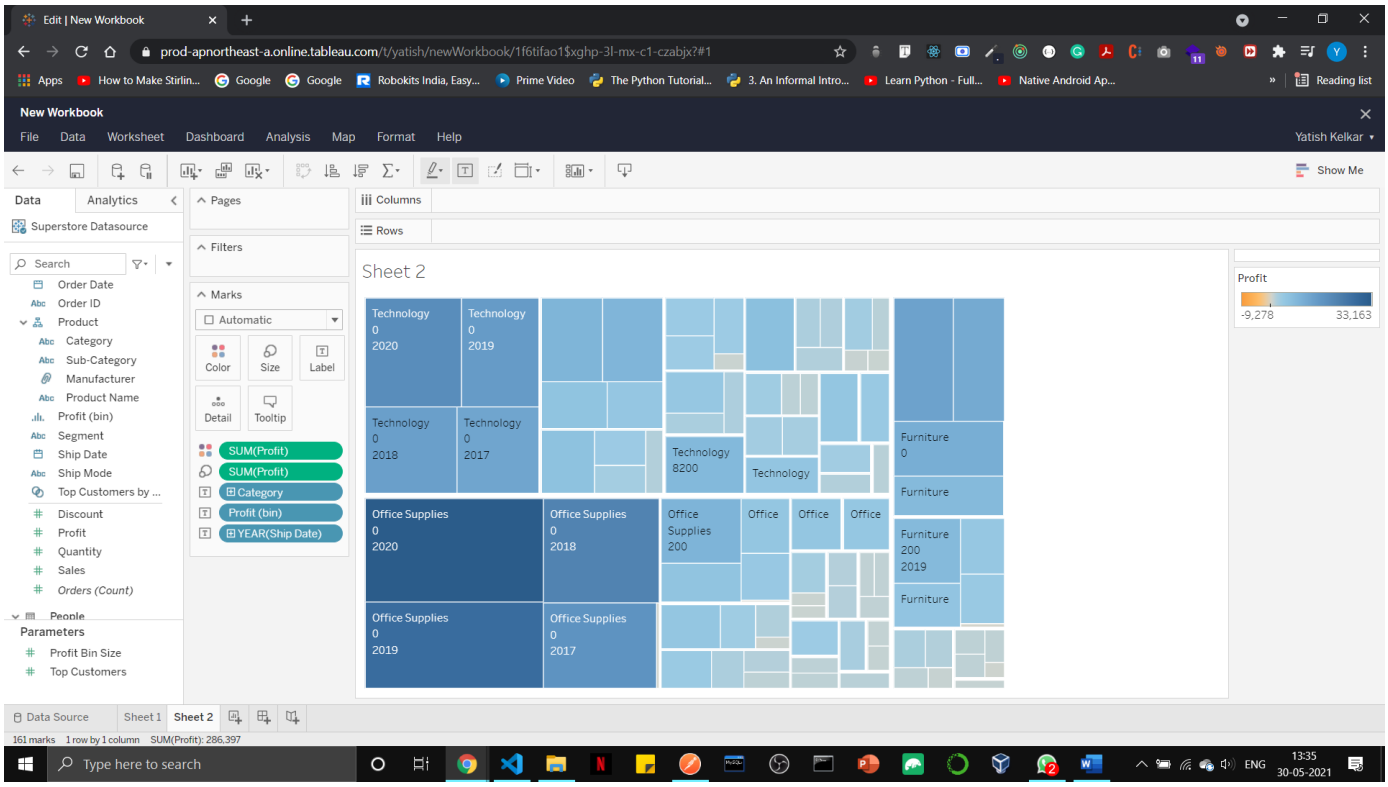
Multi Dimensional Visualisation



Temporal Visualisation



Tree Visualisation



Network Visualisation