Name :- Aniket Sable
Roll No. :- 54
Class :- TE(IT)
Practical 7B :- Perform the following data visualization operations using Tableau on Iris datasets.
a. 1D (Linear) Data visualization
b. 2D (Planar) Data Visualization
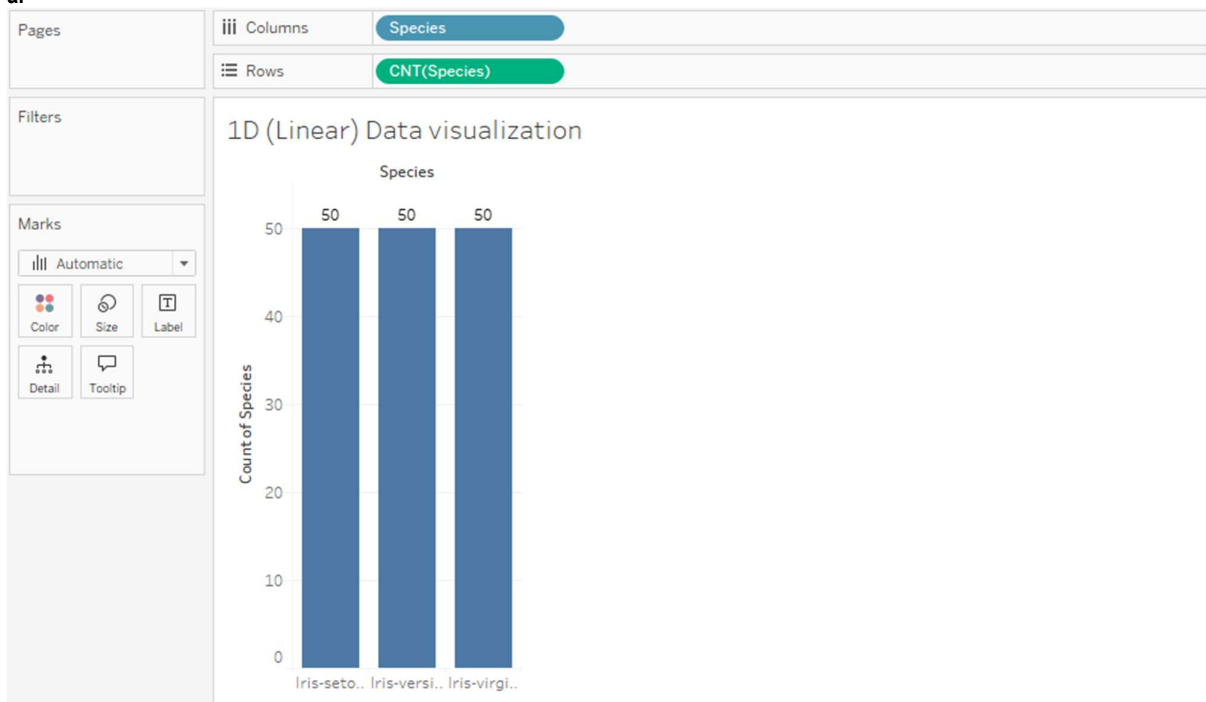c. 3D (Volumetric) Data Visualization
d. Temporal Data Visualization
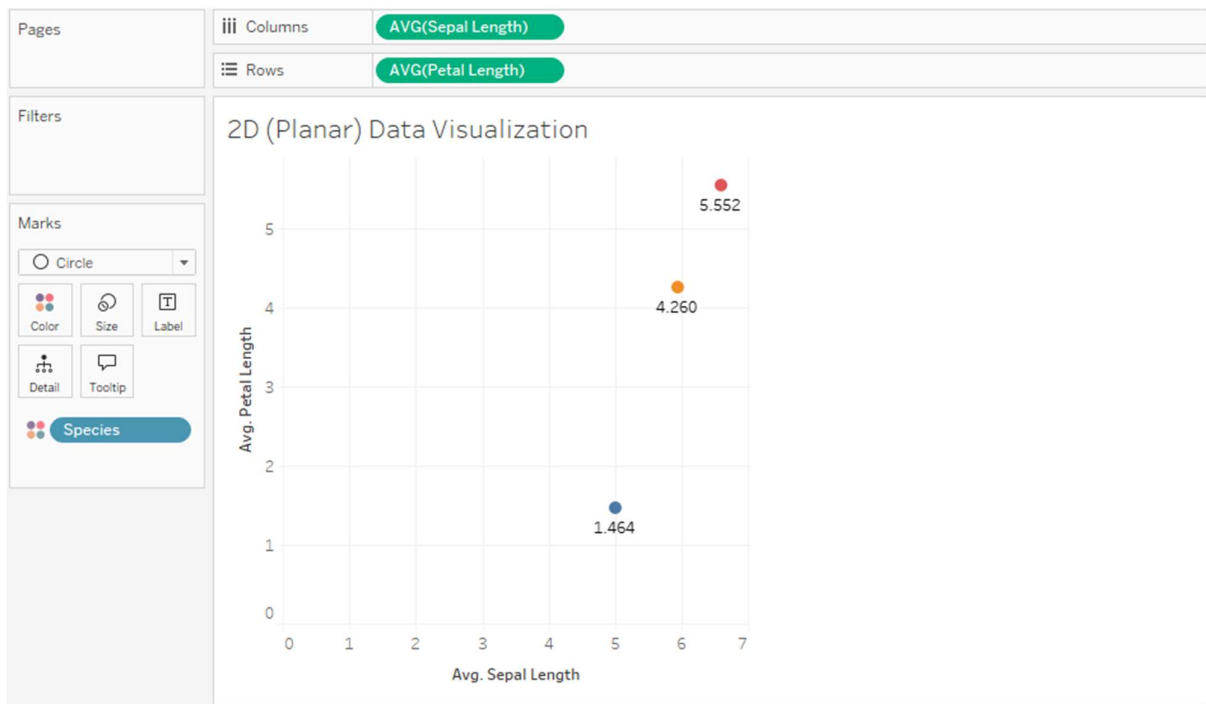e. Multidimensional Data Visualization
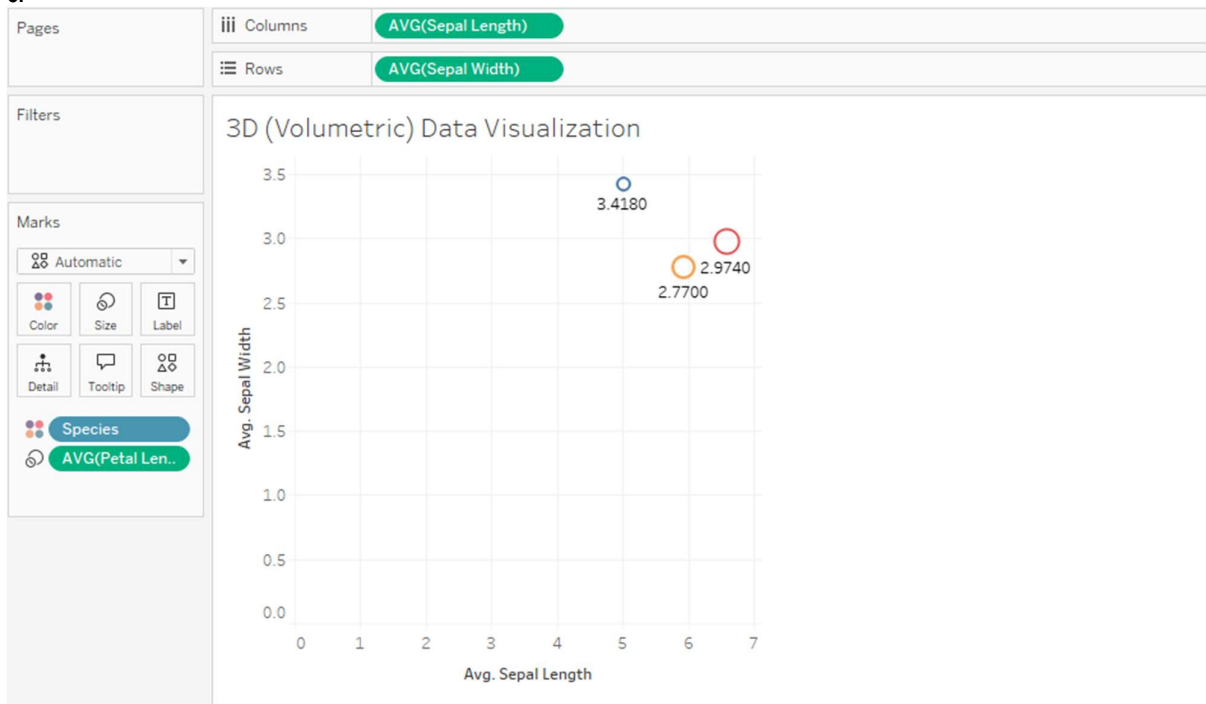f. Tree/ Hierarchical Data visualization
g. Network Data visualization

a.

b.

Pages		iii Columns	AVG(Sepal Length)
		☰ Rows	AVG(Petal Length)

2D (Planar) Data Visualization

Filters

Marks

○ Circle ▼

Color | Size | Label

Detail | Tooltip

:: Species

Avg. Petal Length (y-axis): 0, 1, 2, 3, 4, 5
Avg. Sepal Length (x-axis): 0, 1, 2, 3, 4, 5, 6, 7

Data points: 5.552, 4.260, 1.464

---

c.

Pages		iii Columns	AVG(Sepal Length)
		☰ Rows	AVG(Sepal Width)

3D (Volumetric) Data Visualization

Filters

Marks

⚇ Automatic ▼

Color | Size | Label

Detail | Tooltip | Shape

:: Species

⊘ AVG(Petal Len..

Avg. Sepal Width (y-axis): 0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5
Avg. Sepal Length (x-axis): 0, 1, 2, 3, 4, 5, 6, 7

Data points: 3.4180, 2.9740, 2.7700

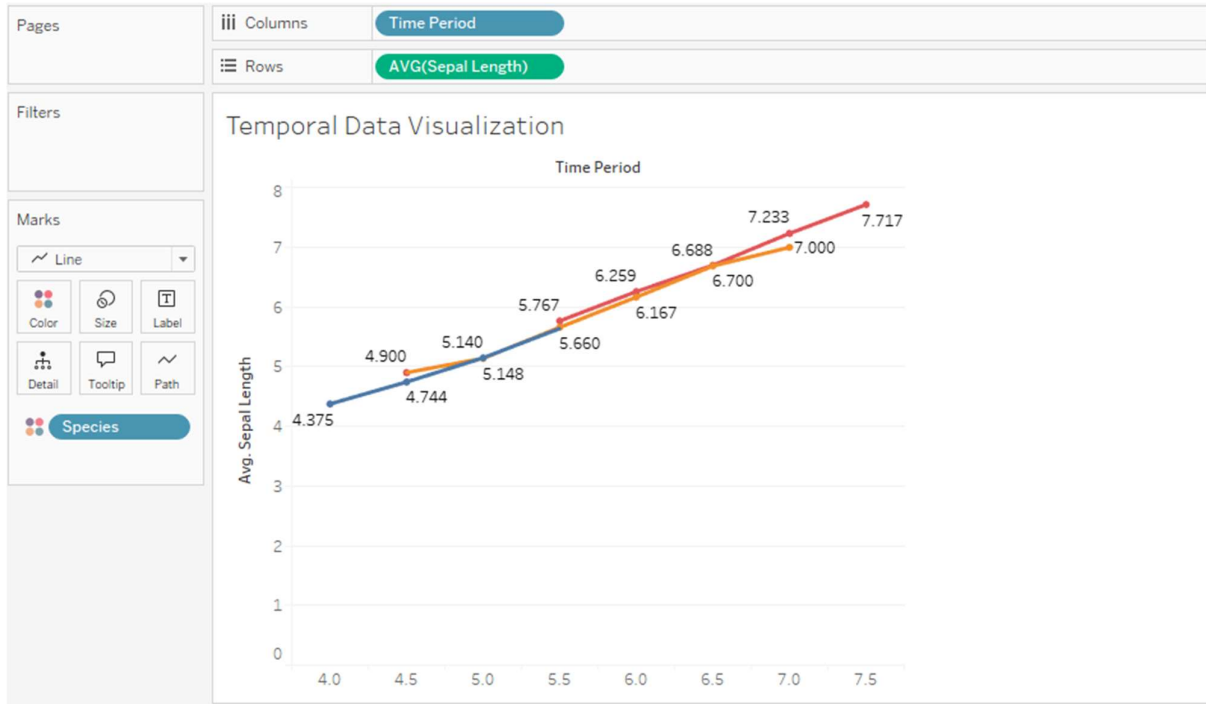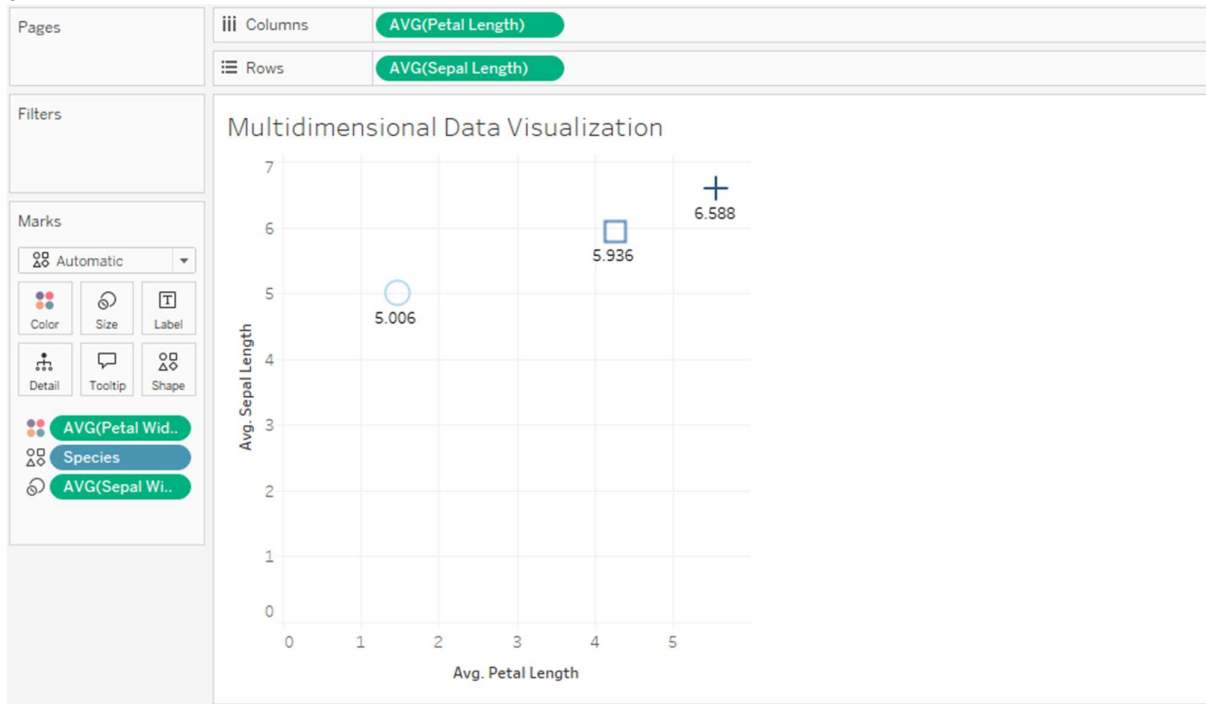**For d, there is no time related data. So, we used create bins on sepalLength with bin size 0.5 and named it as "Time Period".**

d.

iii Columns	Time Period
☰ Rows	AVG(Sepal Length)

Pages

Filters

Marks

~ Line ▾

| Color | Size | Label |
| Detail | Tooltip | Path |

●● Species

Temporal Data Visualization

Time Period

4.375, 4.744, 4.900, 5.140, 5.148, 5.660, 5.767, 6.167, 6.259, 6.688, 6.700, 7.000, 7.233, 7.717

(Y-axis: Avg. Sepal Length, 0–8; X-axis: 4.0–7.5)

---

e.

iii Columns	AVG(Petal Length)
☰ Rows	AVG(Sepal Length)

Pages

Filters

Marks

⊞ Automatic ▾

| Color | Size | Label |
| Detail | Tooltip | Shape |

●● AVG(Petal Wid..
⊞ Species
◔ AVG(Sepal Wi..

Multidimensional Data Visualization

5.006, 5.936, 6.588

(Y-axis: Avg. Sepal Length, 0–7; X-axis: Avg. Petal Length, 0–5)

---

f.

Tree/Hierarchical Data visualization

Iris-virginica	Iris-setosa
Iris-versicolor	

Marks panel:
- Automatic
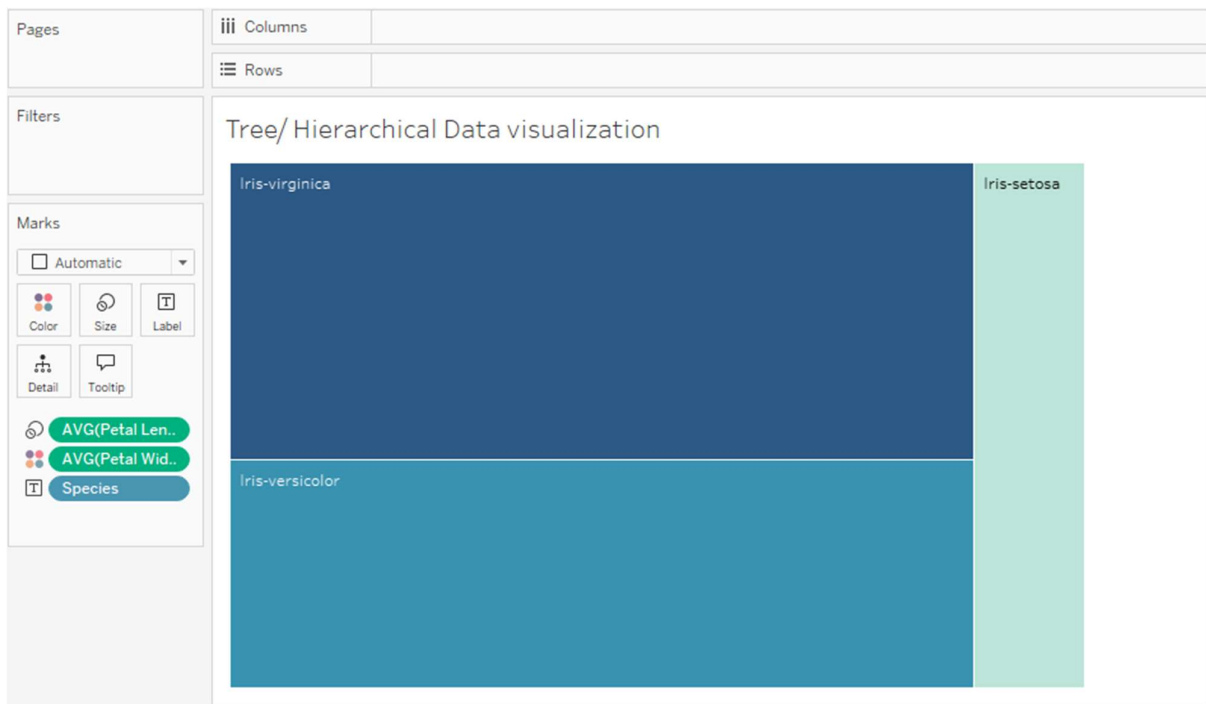- Color, Size, Label
- Detail, Tooltip
- AVG(Petal Len..)
- AVG(Petal Wid..)
- Species

For g, we have used external extension "Network".

g.

Network Data visualization

(Network diagram with nodes labeled 8, 6, 4, 7, 5)

Marks panel:
- Network
- Source, Target, Size
- Detail, Tooltip
- Format Extension
- Time Period
- Species

© 2024 LaDataViz