

LECTURE 26-28 & LAB 11

TABLEAU

Fast Analytics & Rapid-Fire Business Intelligence

What is Tableau ?



- ▶ Tableau is an amazing data visualization tool which is found to suitable especially for Business Intelligence (BI) and Analytics
 - ▶ Tableau provides features for easy and quick analysis of vast amount of business related data
 - ▶ Tableau provides features to analyze and interpret data in the form of
 - ▶ Different types of standard charts and graphs,
 - ▶ Interactive Maps (for geospatial data)
 - ▶ Interactive dashboards and Data Stories
- ▶ Effective graphical representation tools and features in Tableau further assist in making good business decisions and developing successful business

Tableau: **Features**



1. Tableau supports **powerful data discovery and exploration** that enables users to answer important questions in seconds.
2. **No prior programming knowledge** is needed; users without relevant experience can start immediately with creating visualizations using Tableau
3. It can **connect to several data sources** that other BI tools do not support. Tableau enables users to create reports by joining and blending different datasets
4. Tableau Server supports a **centralized location to manage all published data sources** within an organization

Tableau: Tools and Products

There are five major Tableau software platforms which are available, each one with a different scope:

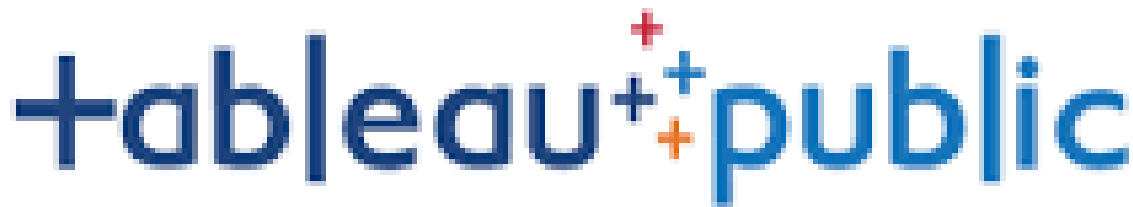
- ▶ **Tableau Desktop**—A desktop application that allows users to collect, transform, and visualize the data
 - ▶ It is available only with a subscription
 - ▶ Data visualization files can be saved both locally and online



<https://www.tableau.com/en-gb/products/desktop/download>

Tableau: Tools and Products

- ▶ **Tableau Public**—A free version of Tableau software that provides most of the functionalities provided by Tableau Desktop.
 - ▶ Unlike Tableau Desktop, it can only accommodate CSV, Excel, and text files.
 - ▶ There is also a limit of 15 million rows of data and any work you do cannot be saved locally - only on Tableau Server.

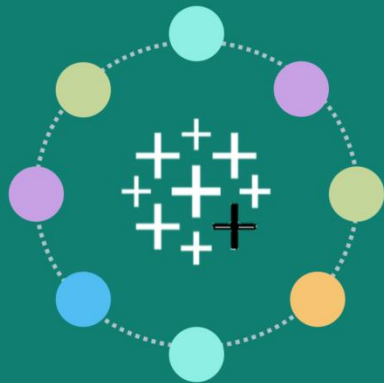


<https://public.tableau.com/app/discover>

Tableau: Tools and Products

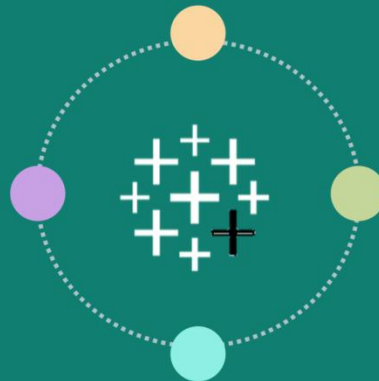
- ▶ **Tableau Reader**—A read-only application for opening and reading Tableau file types.
- ▶ **Tableau Online**—A cloud version of Tableau software that provides a way to publish and share dashboards online. It's fully hosted by Tableau
- ▶ **Tableau Server**—Like Tableau Online, it allows users to host and store data visualizations created with Tableau
 - ▶ The difference from Tableau Online is that it's not fully hosted by Tableau, but rather on public cloud platforms like AWS, Google Cloud Platform, and Microsoft Azure.

Tableau Desktop



All listed data sources can be connected to using this App.

Tableau Public



Only Excel and text files can be connected to using this App.

Tableau Reader



Does not need to connect to a Data Source.

Tableau Desktop

Public Edition



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+tableau+public

Signing up for Tableau Public

tableau public

Create ▾

Resources

Sign In



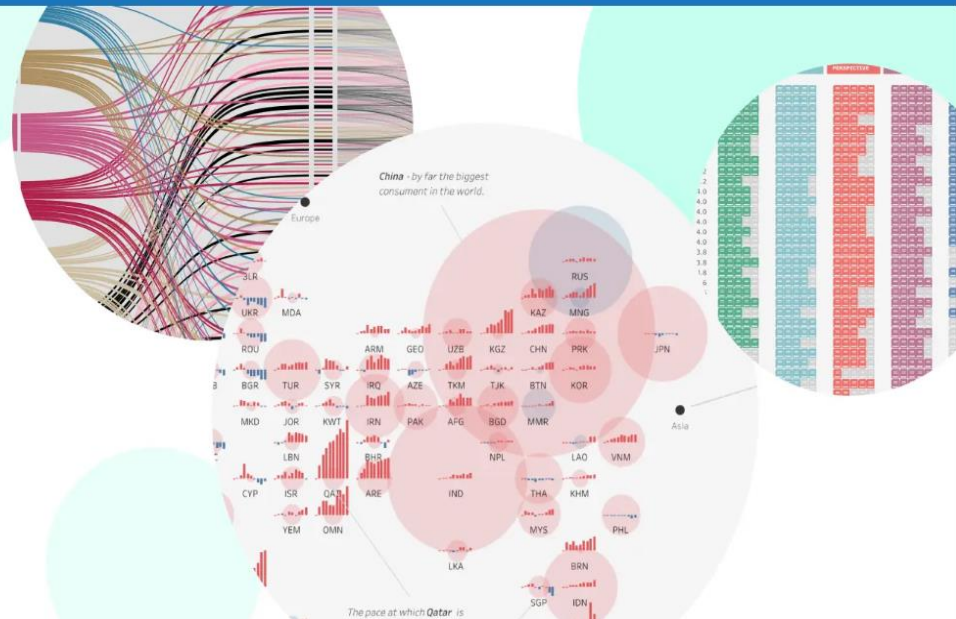
For a limited time: Create Sankey and Radial charts directly in Tableau Public web authoring until June 30. [Learn more](#)

Welcome to Tableau Public

A free platform to explore, create, and publicly share data visualizations online.

[Sign Up for Tableau Public](#)

[Learn More](#)



<https://public.tableau.com/app/discover>

Create your Tableau Account

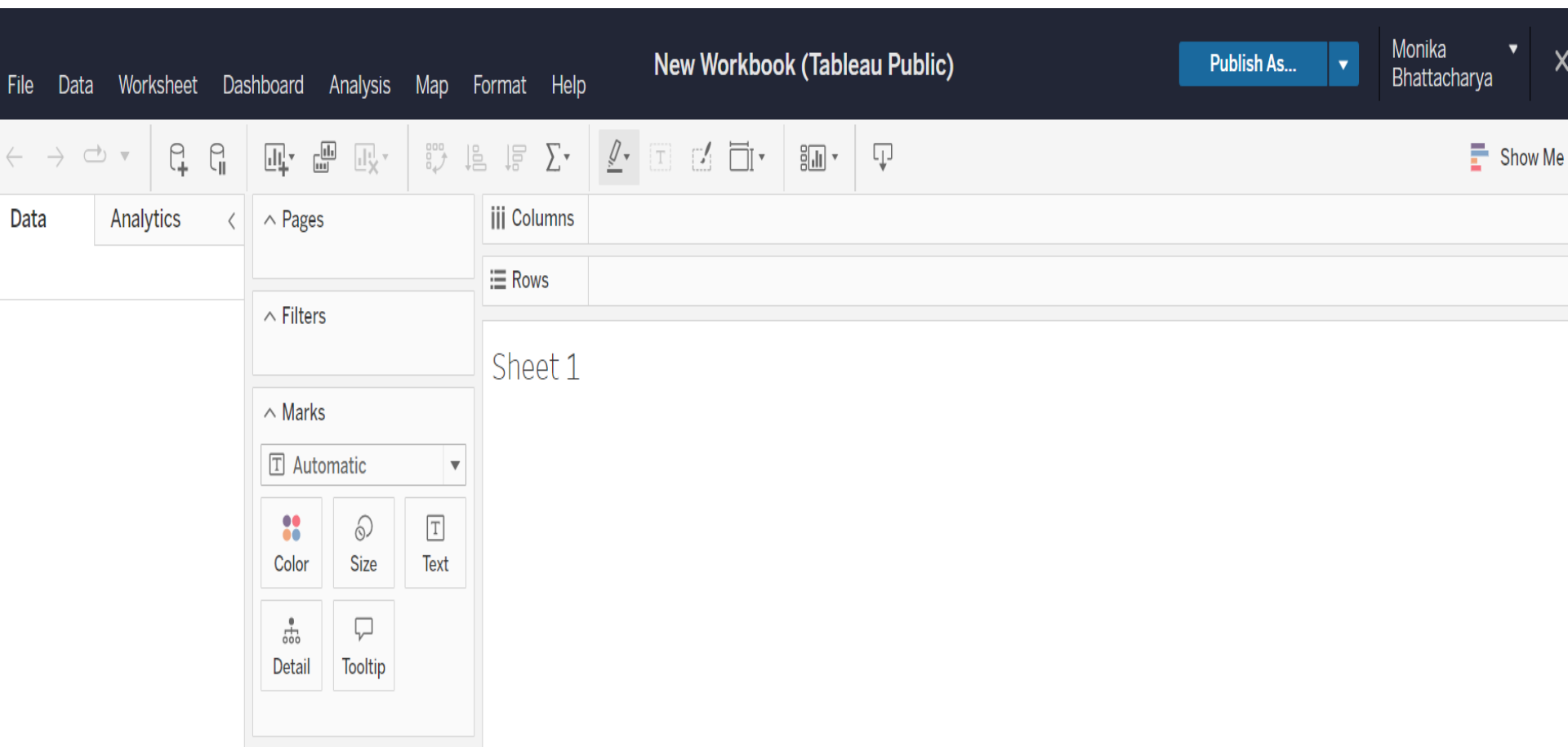
Passwords are case sensitive, 8-100 characters long. Requires at least one number (0-9), one uppercase letter, one lowercase letter, and one of the following characters: ! " \ # \$ % & ' () * + , - . / : ; < = > ? @ [] ^ _ ` { | } ~.

[CREATE MY ACCOUNT](#)

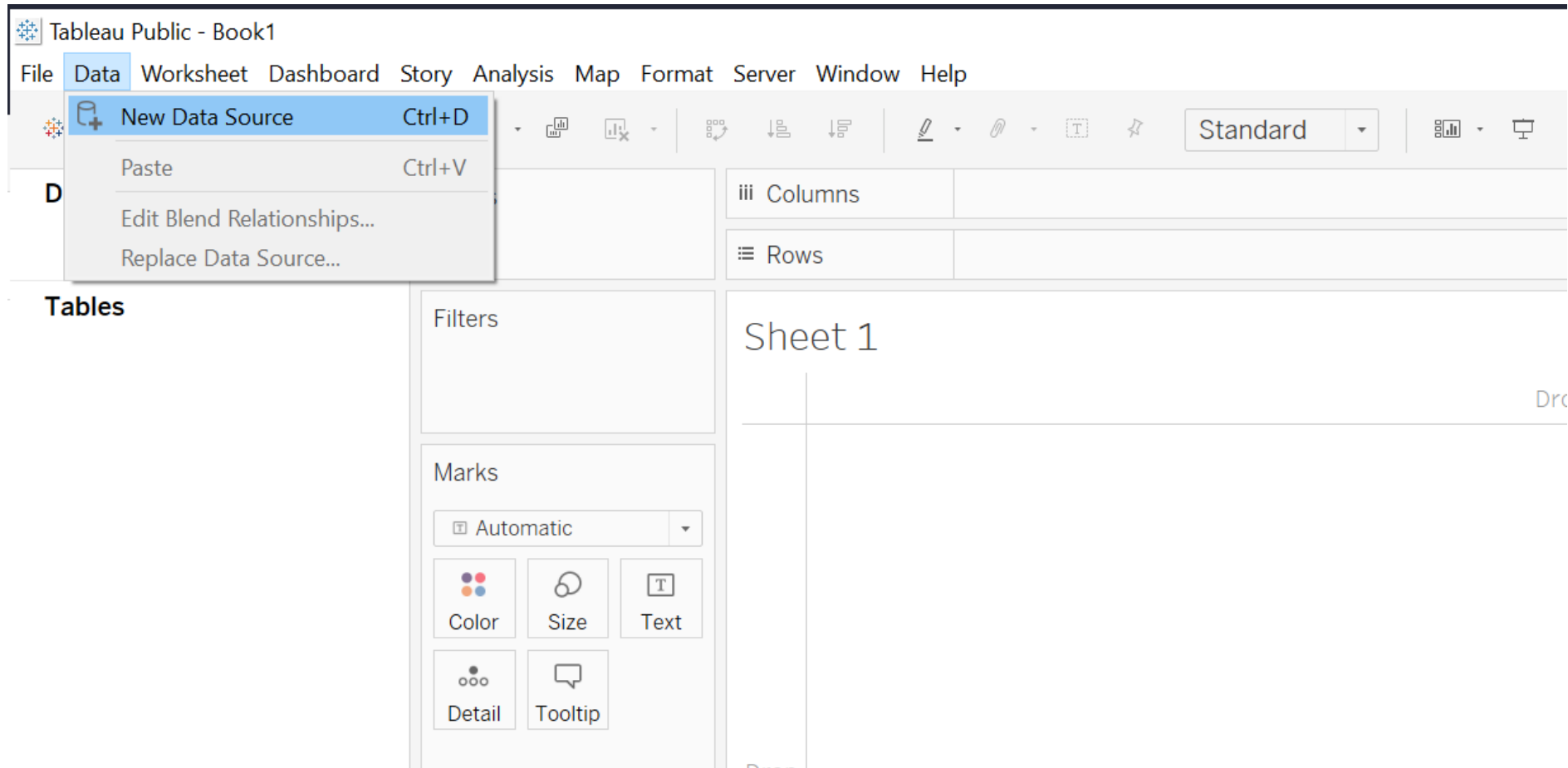
Viz of the Day

See a new viz featured every weekday





Loading Data Source (.csv,.xls,.xlsx file)



←

→

»

Connections [Add](#)

Iris

Microsoft Excel

Sheets

Iris

New Union

New Ta...ension

Iris (Iris)

Filter: 0 | A

Iris

6 fields 150 rows

100 → rows

Name

Iris

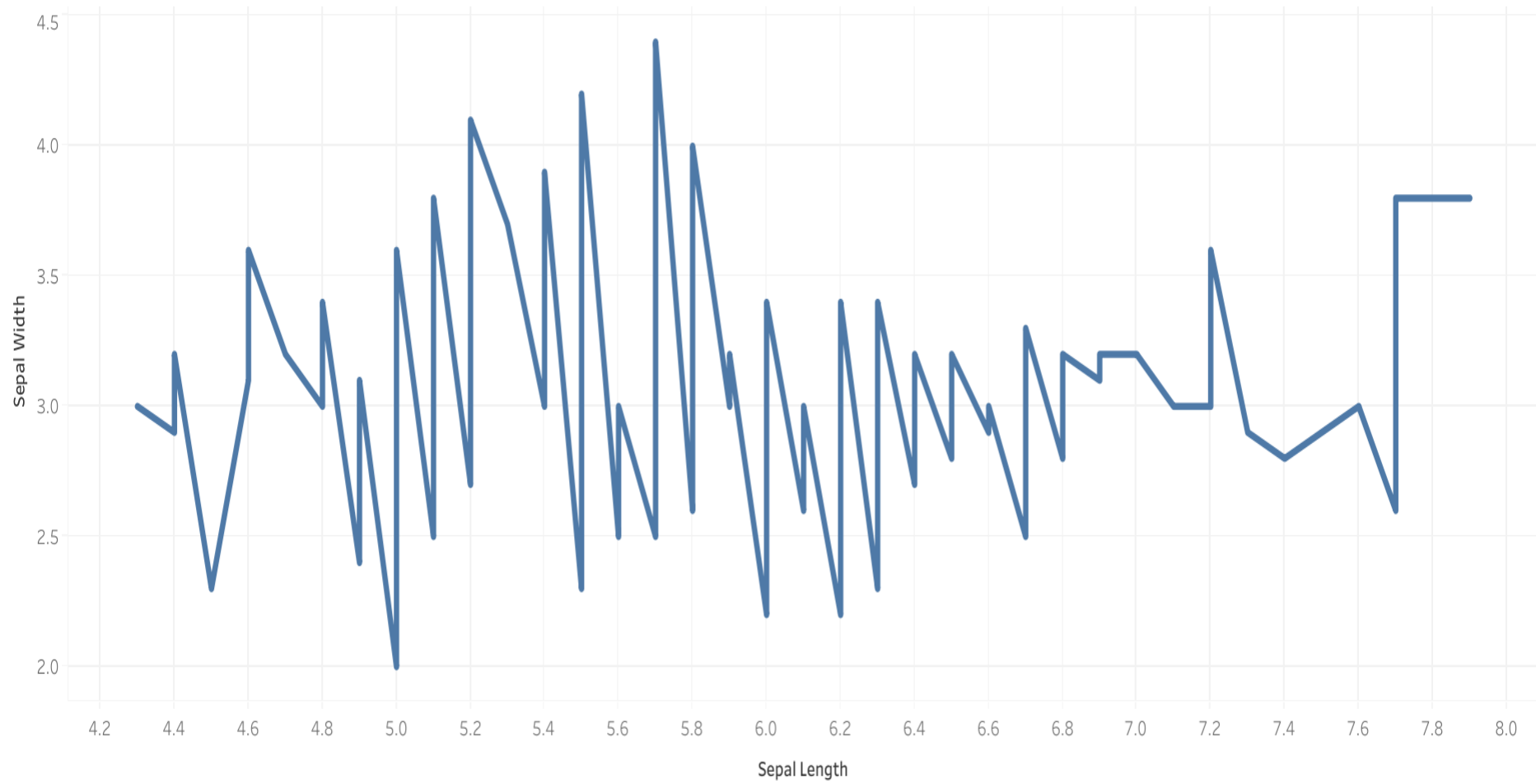
Fields

Type	Field Name	Physical Table	Remote Field N...
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#	Sepal Length	Iris	Sepal Length
#	Sepal Width	Iris	Sepal Width
#	Petal Length	Iris	Petal Length

#	#	#	#	#	Abc
Iris	Iris	Iris	Iris	Iris	Iris
S.No.	Sepal Length	Sepal Width	Petal Length	Petal Width	Species
1	5.10000	3.50000	1.40000	0.20000	Iris-setosa
2	4.90000	3.00000	1.40000	0.20000	Iris-setosa
3	4.70000	3.20000	1.30000	0.20000	Iris-setosa
4	4.60000	3.10000	1.50000	0.20000	Iris-setosa
5	5.00000	3.60000	1.40000	0.20000	Iris-setosa
6	5.40000	3.90000	1.70000	0.40000	Iris-setosa
7	4.60000	3.40000	1.40000	0.30000	Iris-setosa

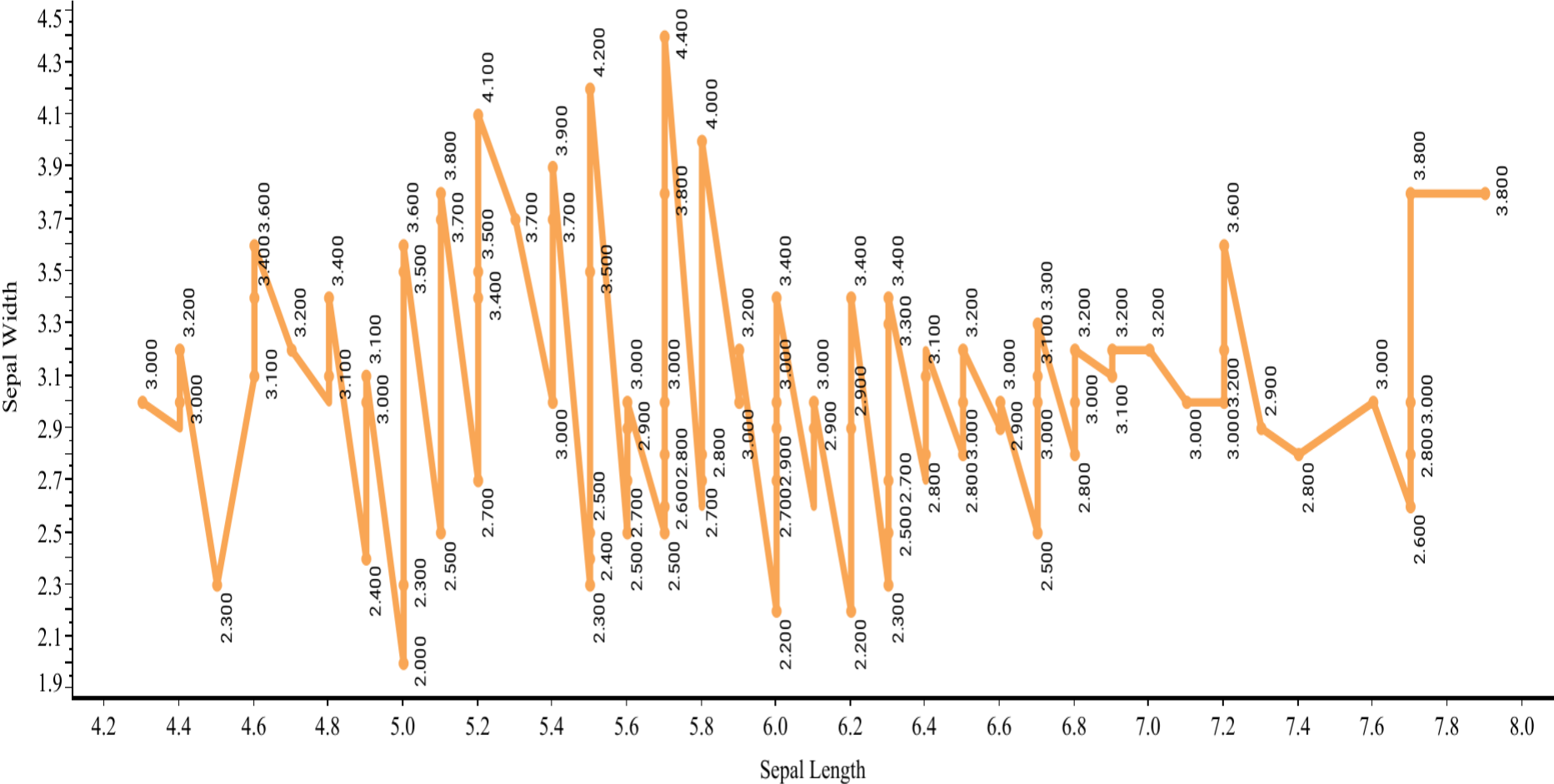
Tableau-BasicsPlots-Part1

Sepal Width Vs. Sepal Length

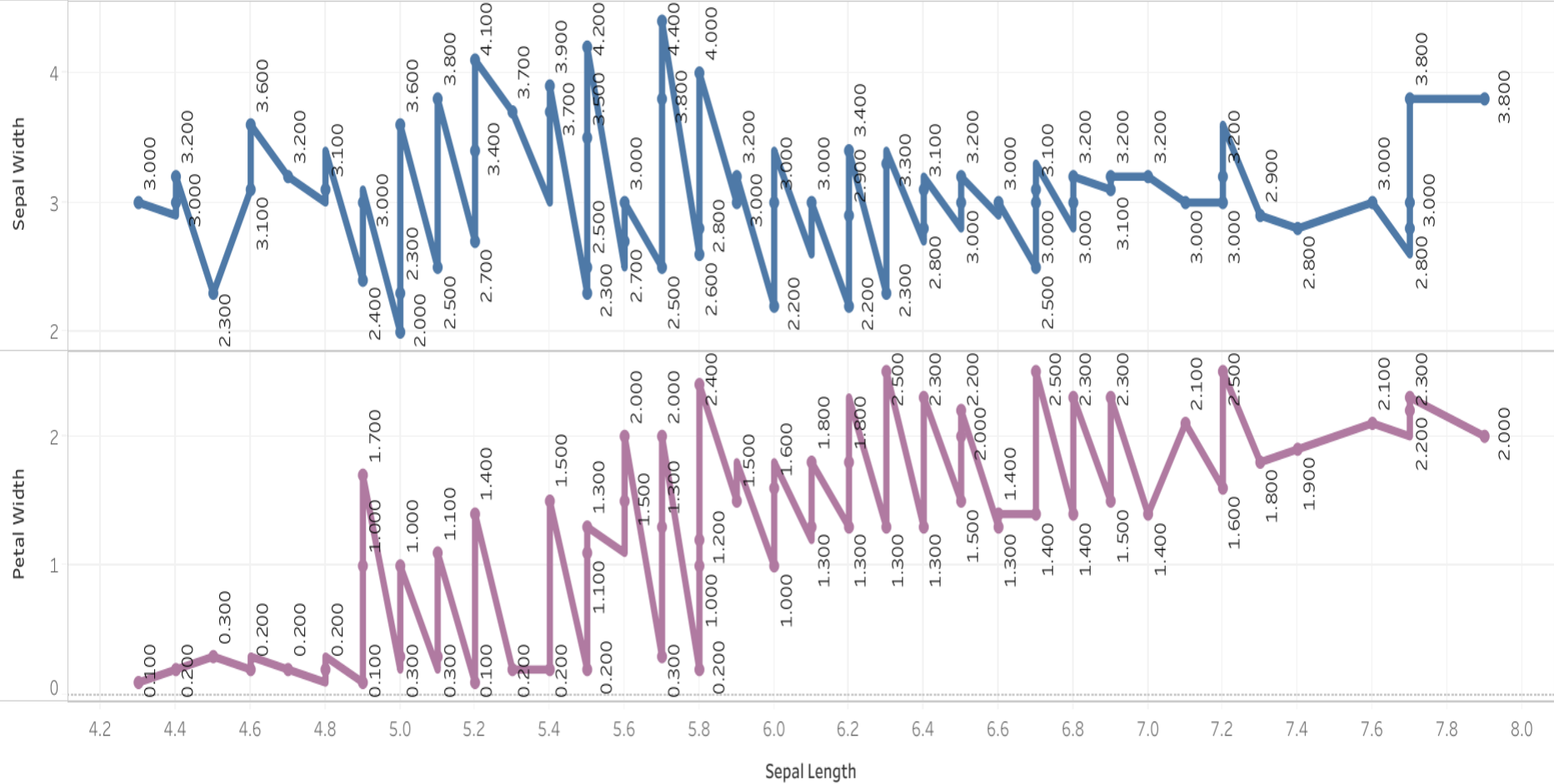


Sepal Length vs. Sepal Width.

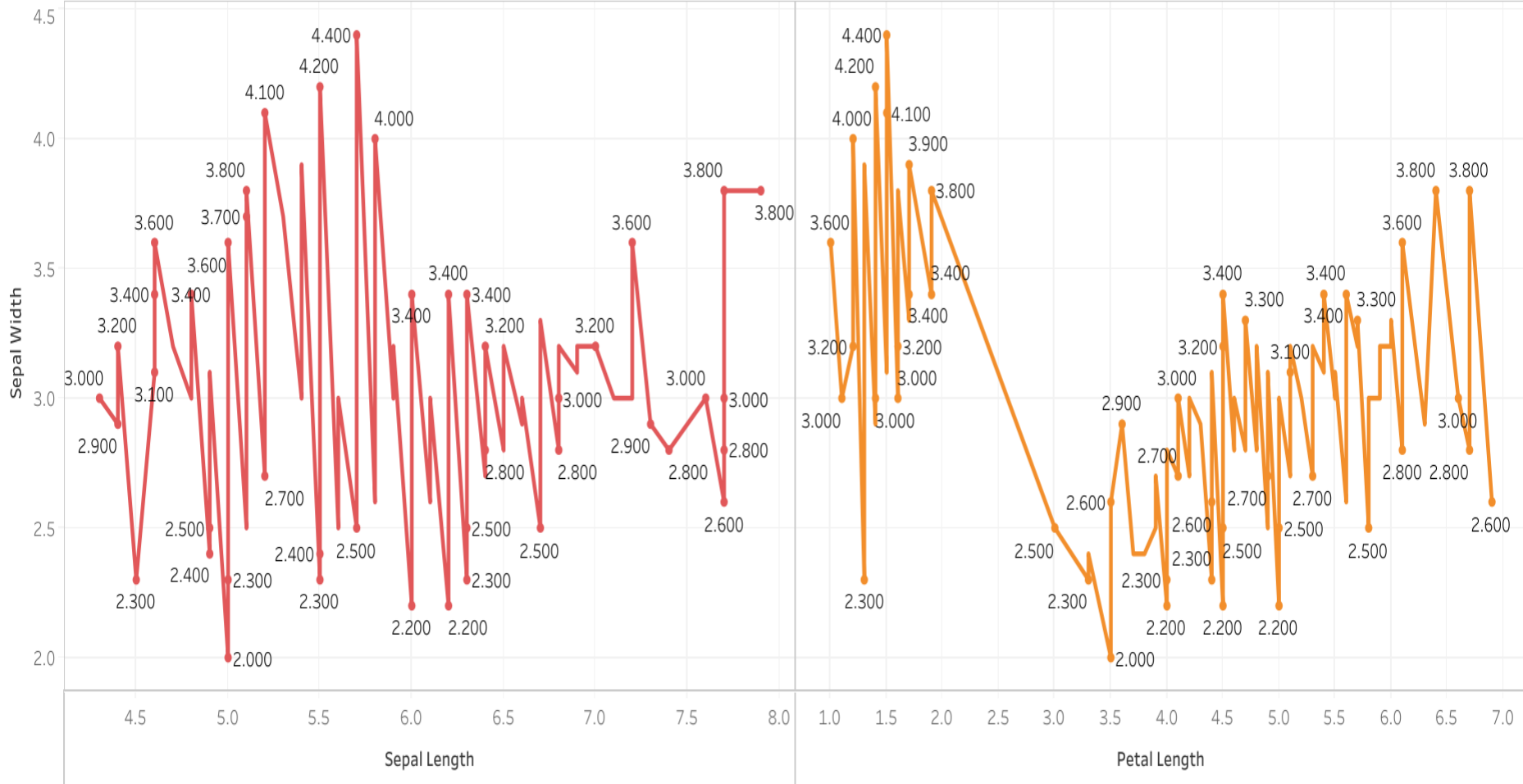
Sepal Width Vs. Sepal Length



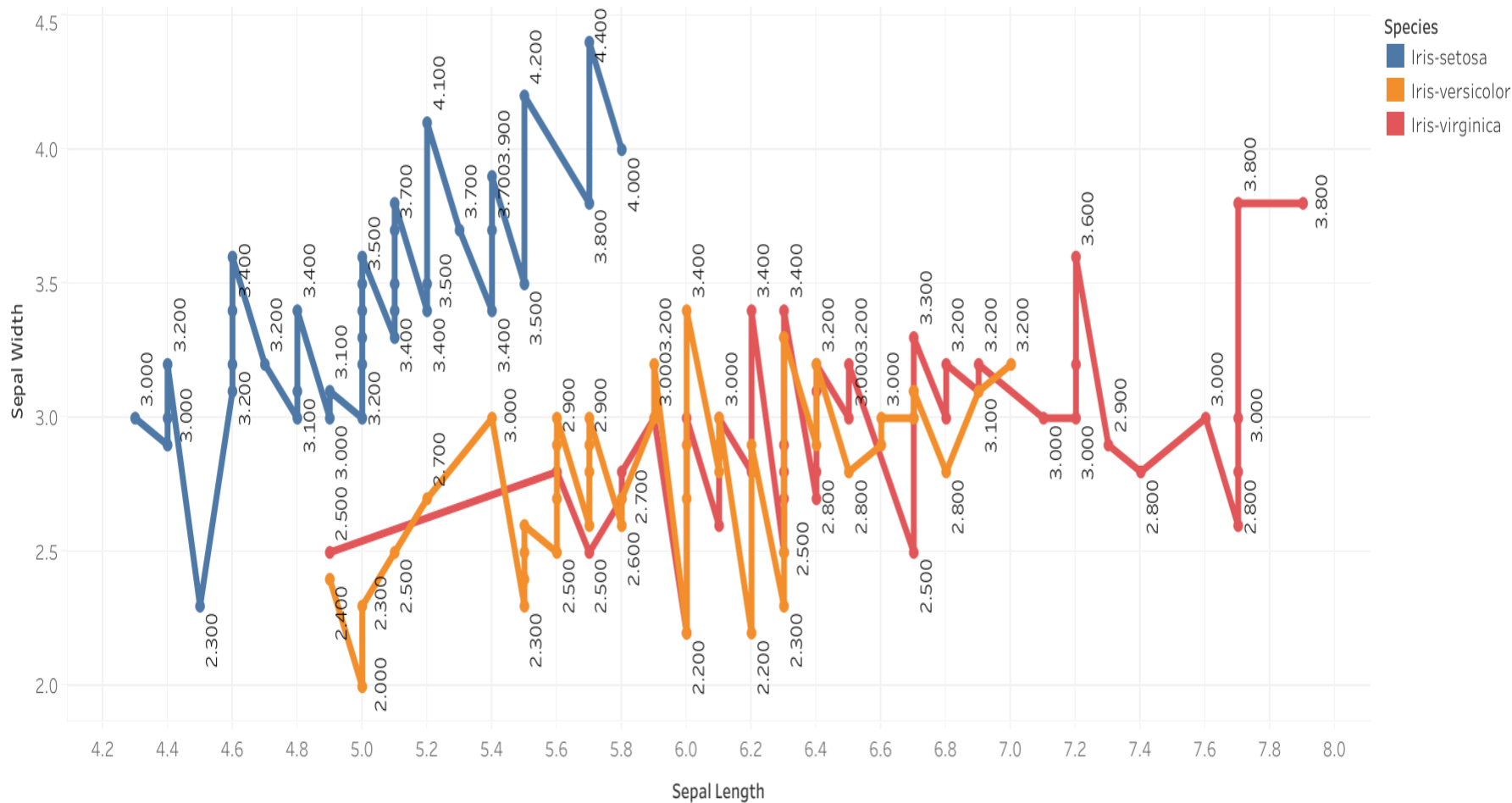
Sepal Width Vs. Sepal Length



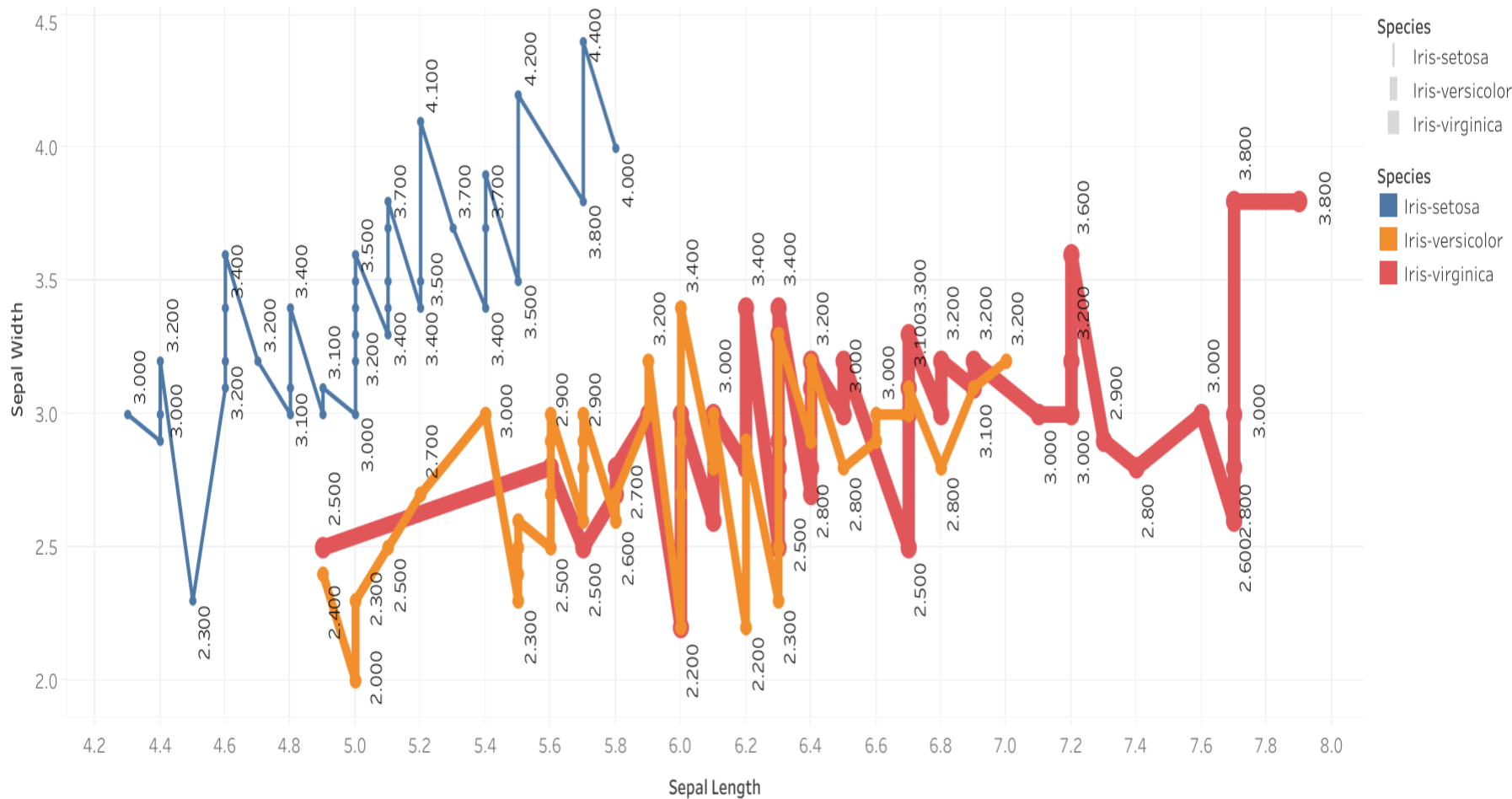
LINEPLOT3B



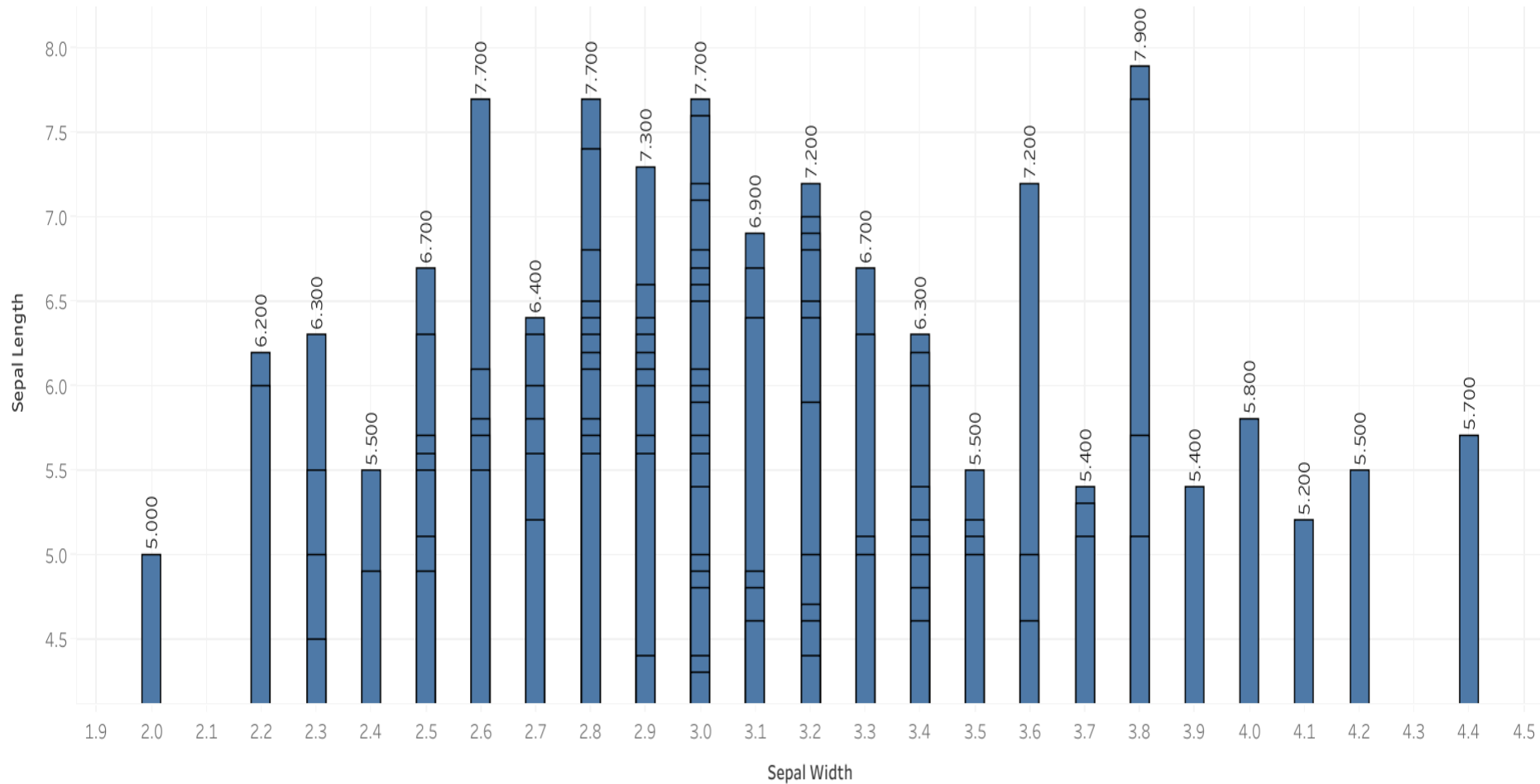
Sepal Width Vs. Sepal Length



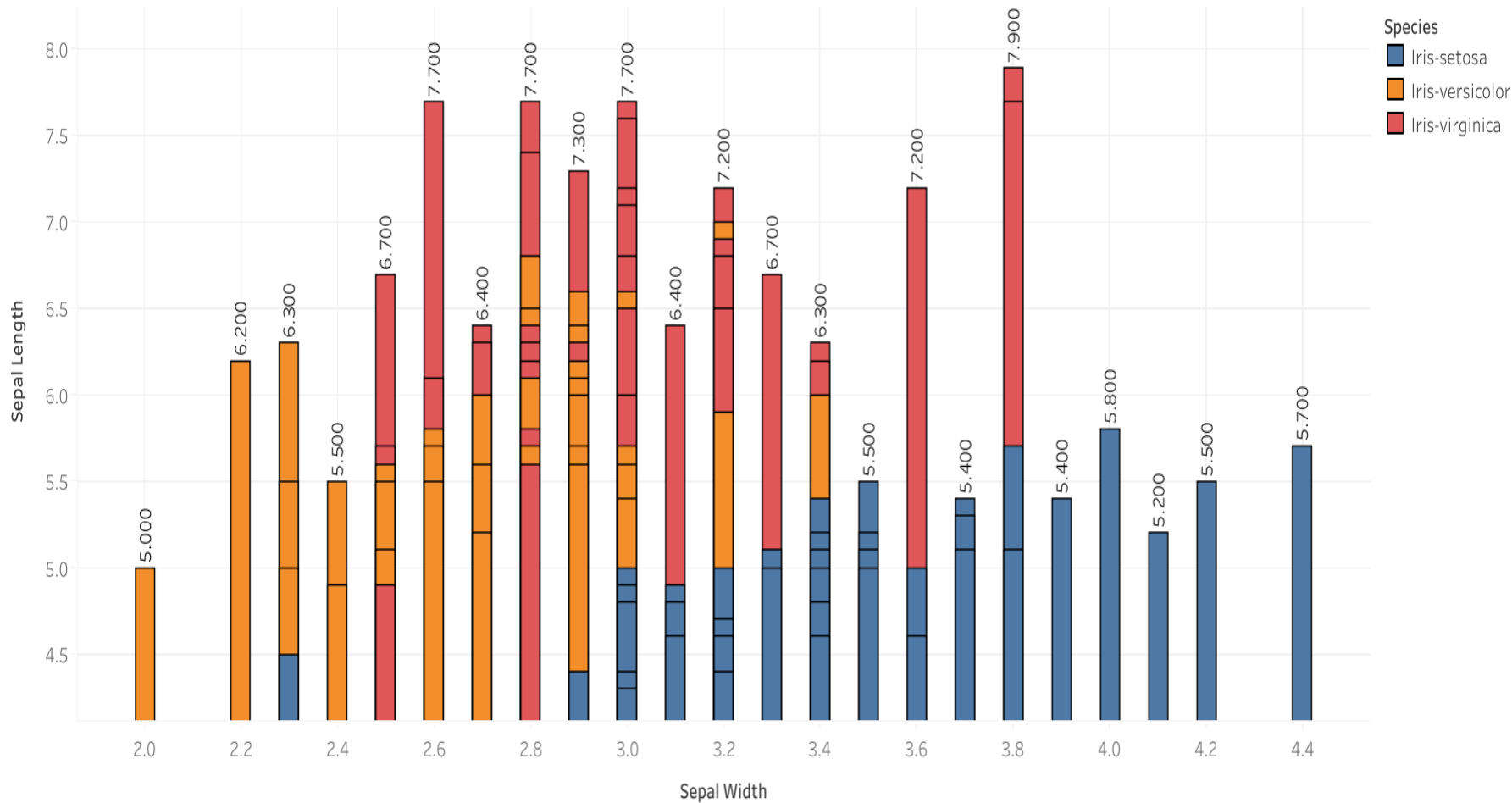
Sepal Width Vs. Sepal Length



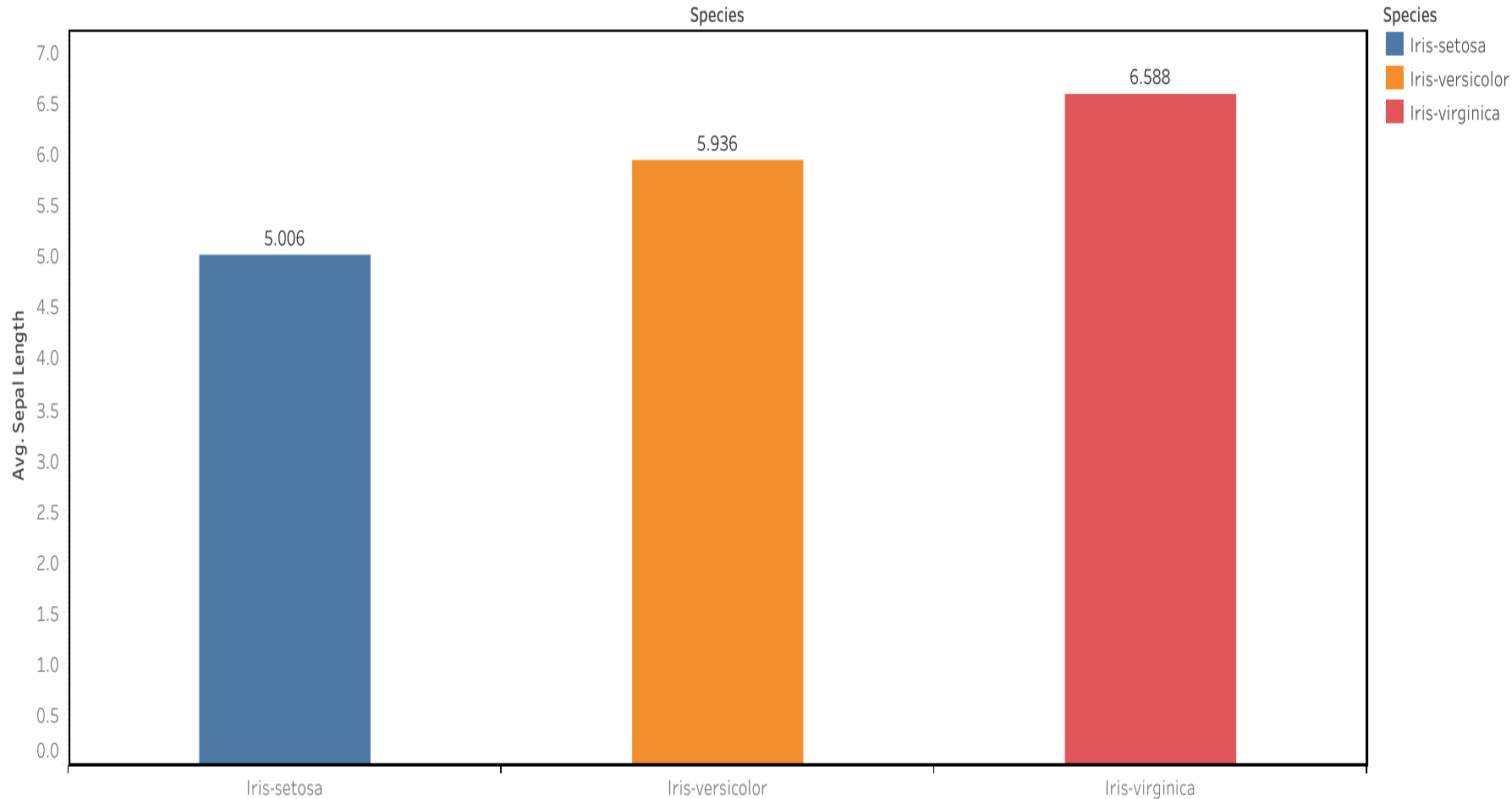
Sepal Width Vs. Sepal Length



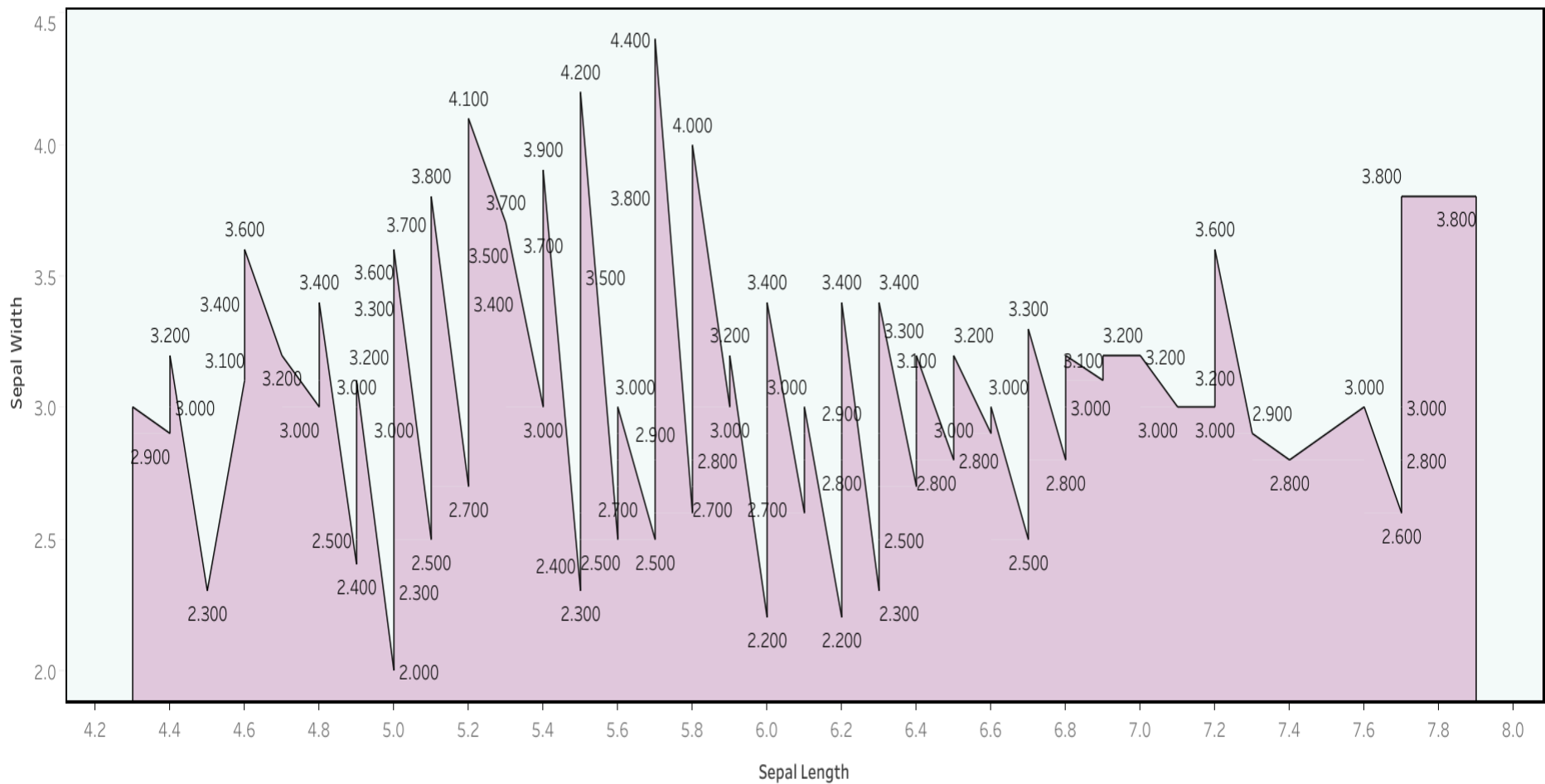
Sepal Width Vs. Sepal Length



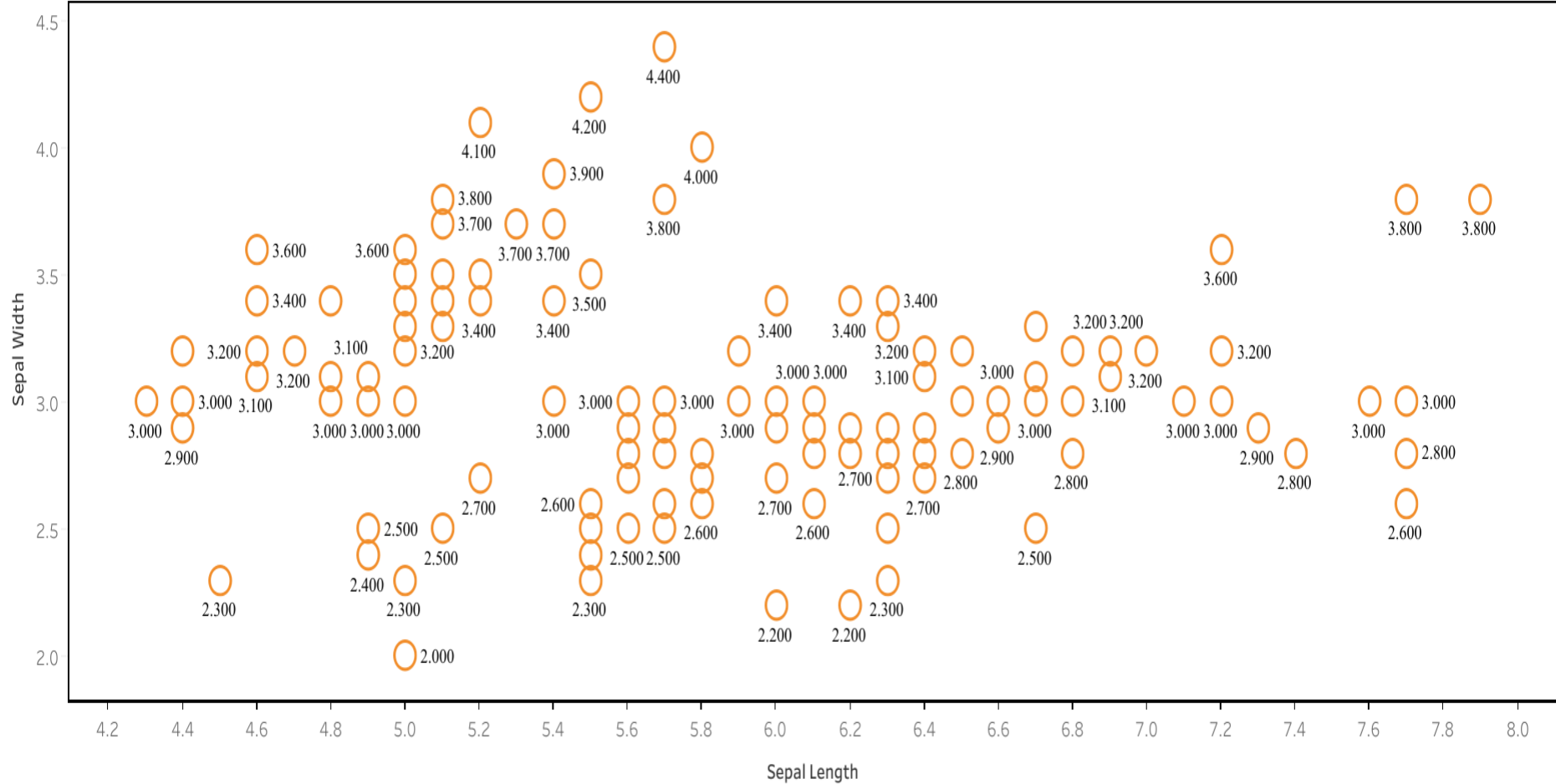
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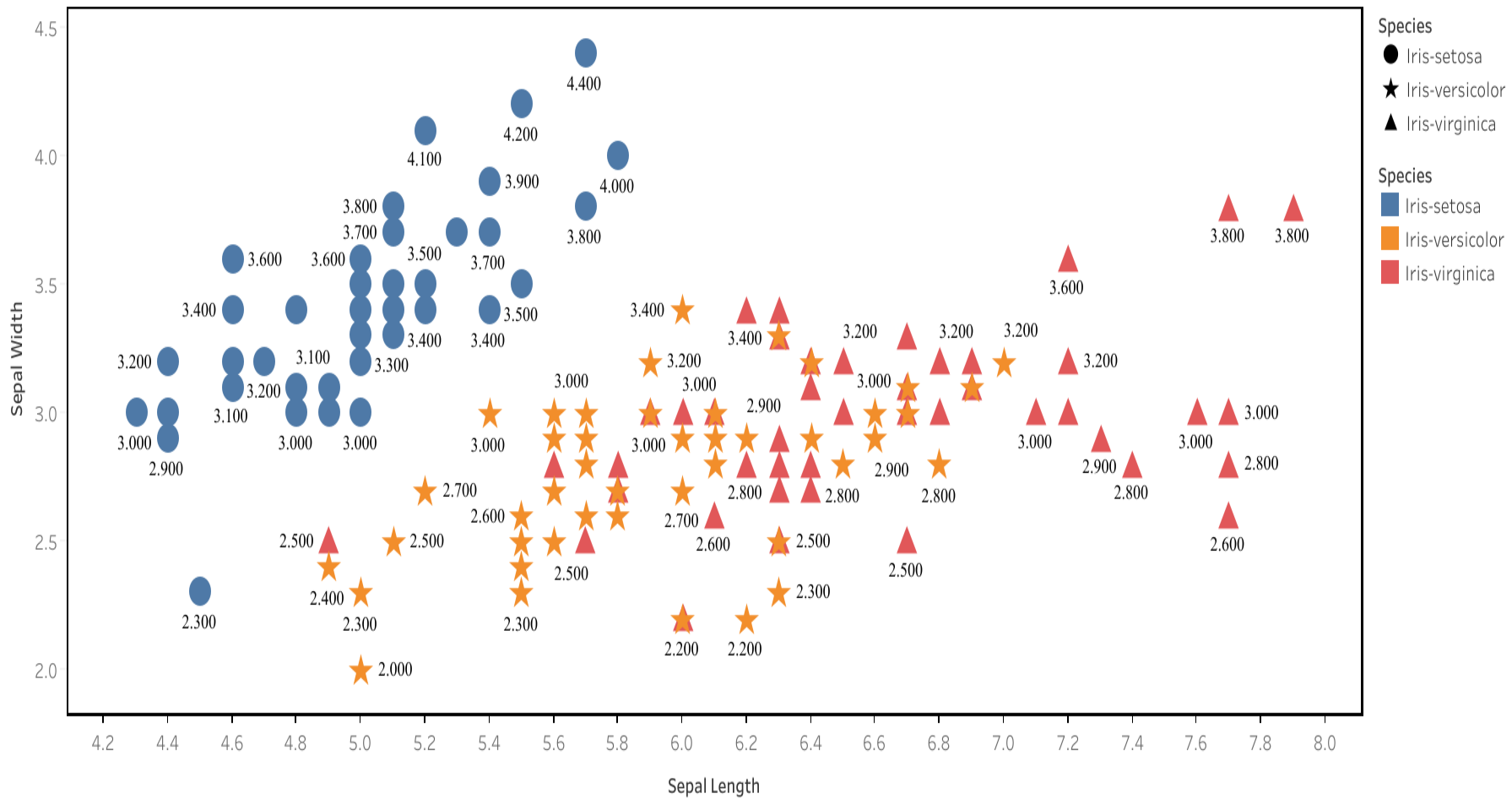
Sepal Width Vs. Sepal Length



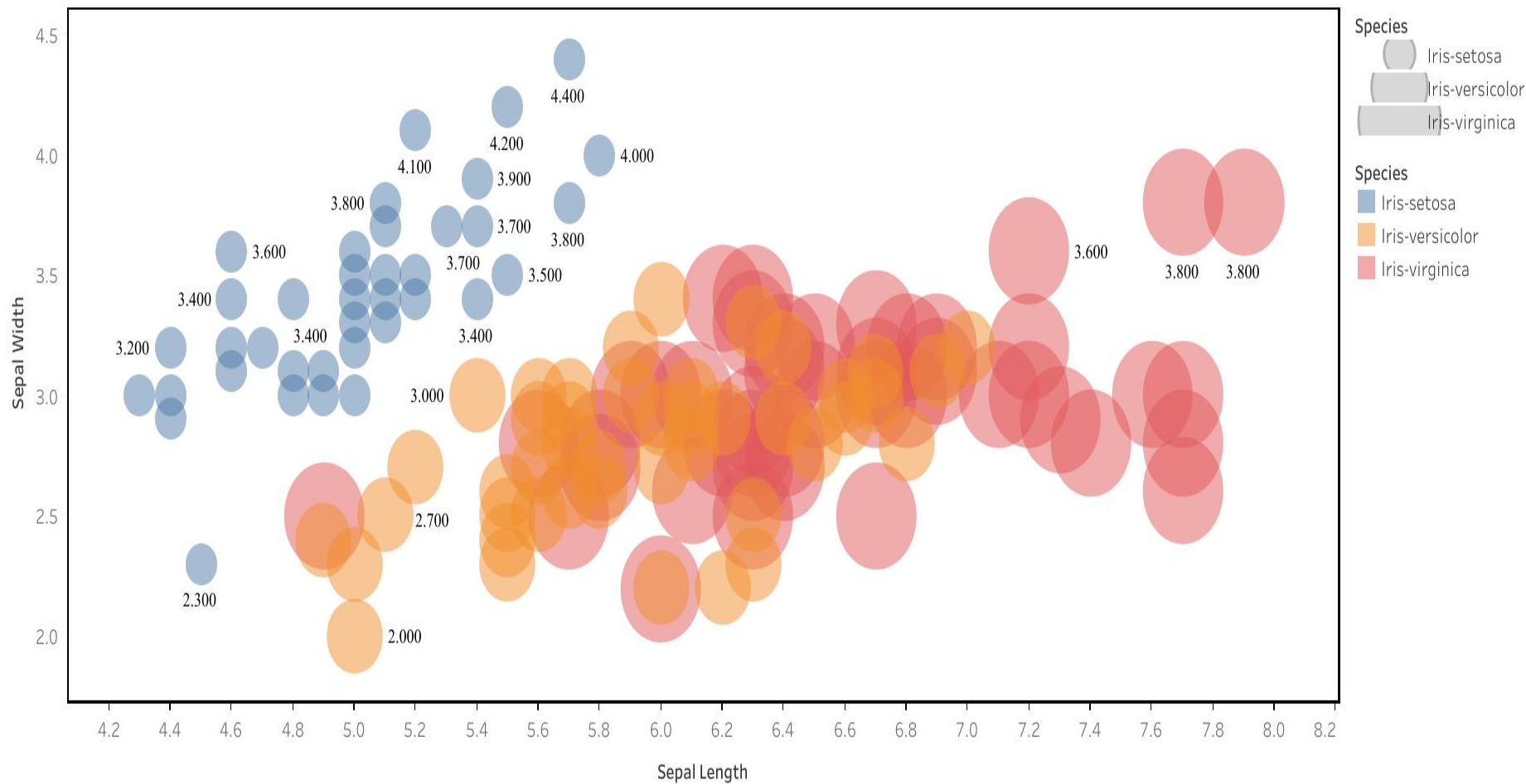
Sepal Width Vs. Sepal Length



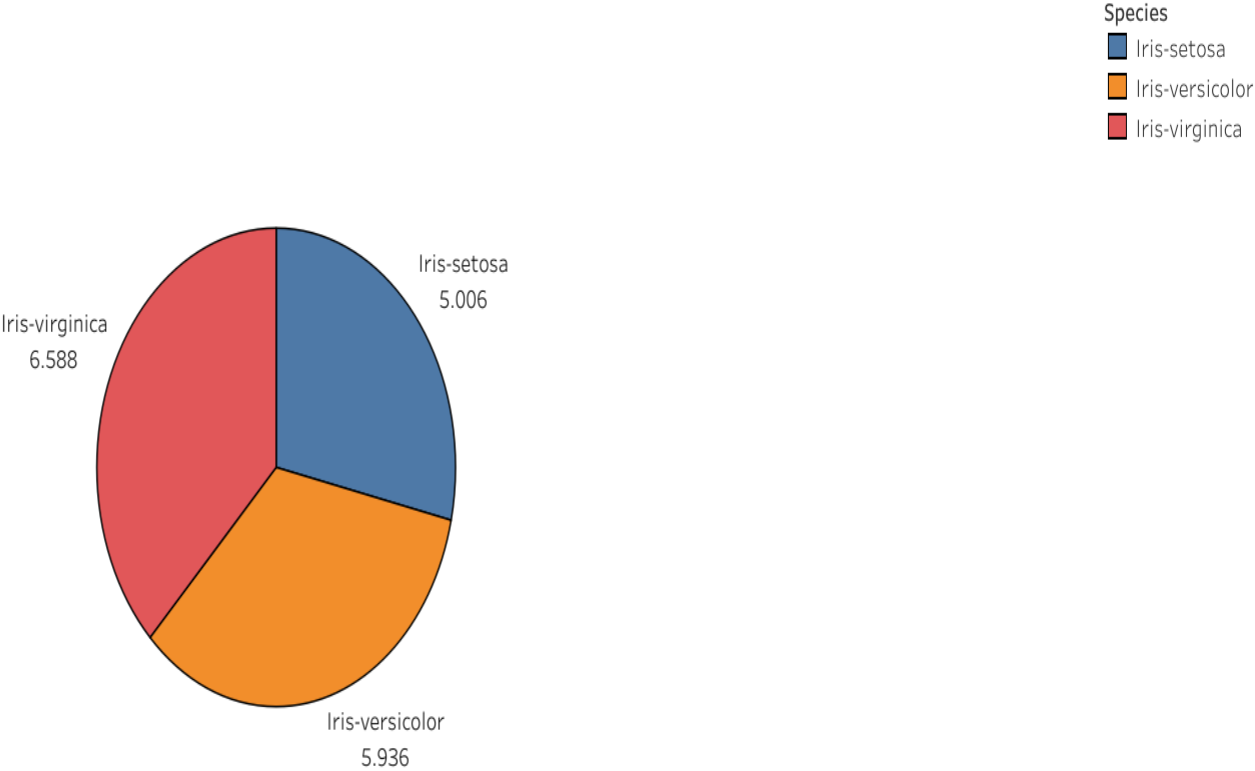
Sepal Width Vs. Sepal Length



Sepal Width Vs. Sepal Length

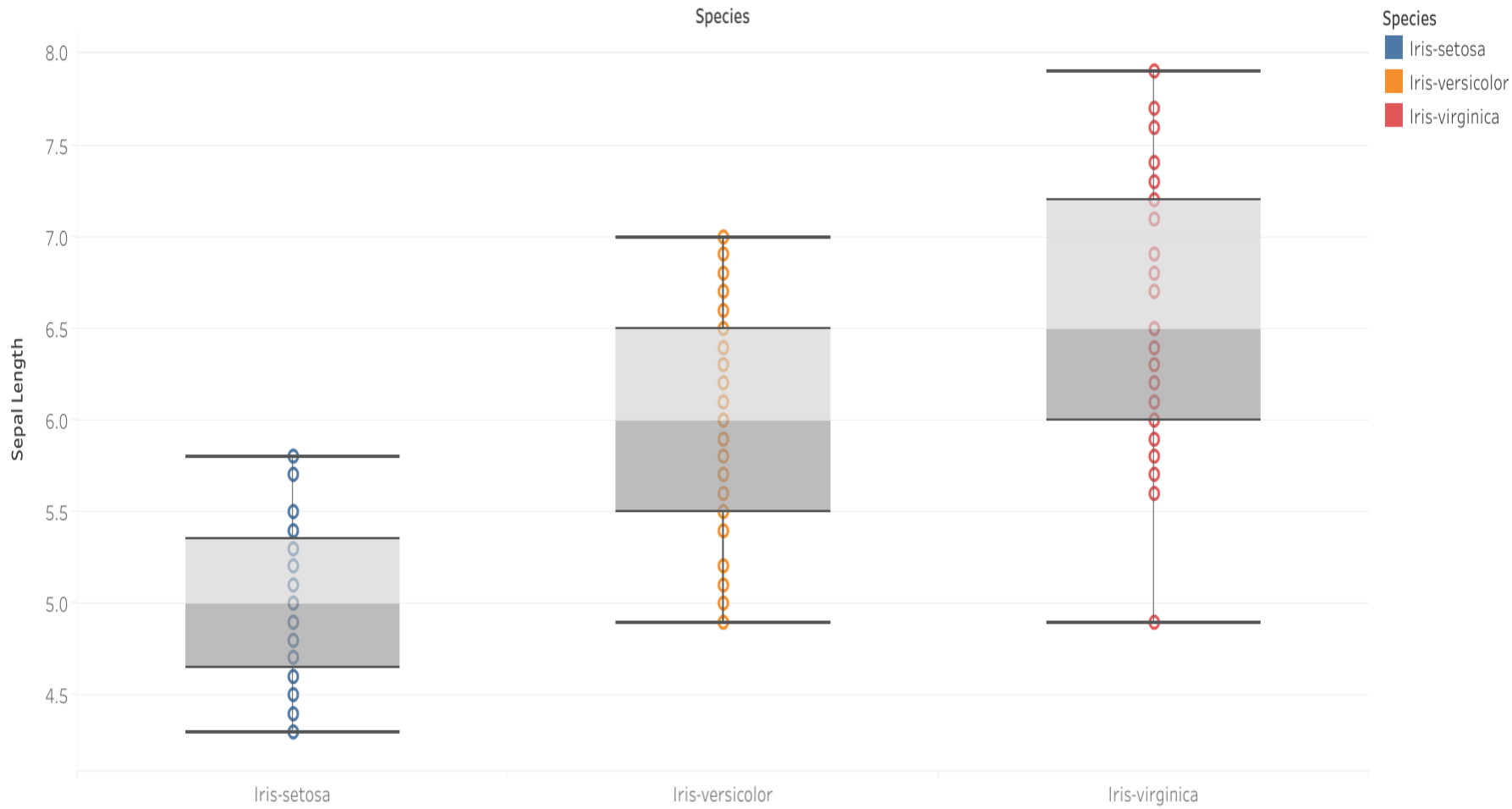


PIE CHART



Species and average of Sepal Length. Color shows details about Species. The marks are labeled by Species and average of Sepal Length.

BOX PLOT



Sheet 4

Species	Avg. Sepal Length	Avg. Sepal Width	Avg. Petal Length	Avg. Petal Width
Iris-setosa	5.006	3.418	1.464	0.244
Iris-versicolor	5.936	2.770	4.260	1.326
Iris-virginica	6.588	2.974	5.552	2.026