Data Science Society

Data Vis SANDBOX

Before we start..

Consent Form

Accessibility Form

Search For

> Sheffield University Data Science Society > 2024-2025

> Sandbox Sessions > DataVis > DataVis SandBox.ipynb

1. Download the file 

2. Do one of the following:

    Save it on the same folder you use for VSCode

    OR

    Upload to your Google Drive for Colab

Open DataVis Guide And VSCode Guide from our website

DataVis Guide

VS Code Guide

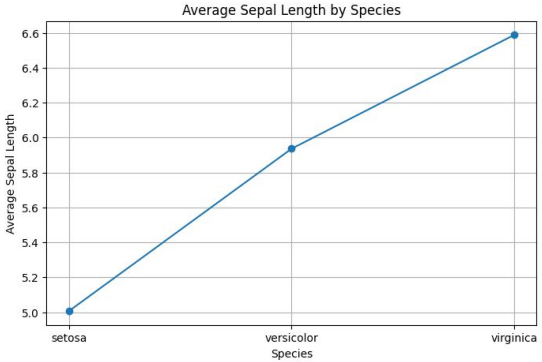
https://uosdss.wordpress.com

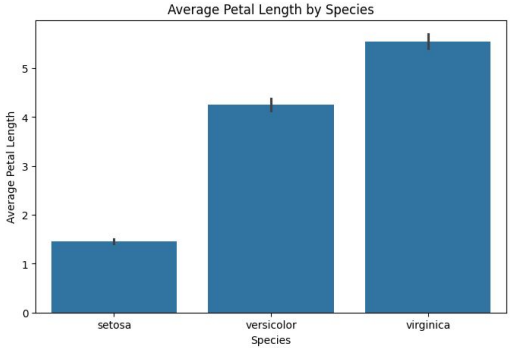
Setup

Install / Import Library,
Import Iris Dataset

challenge 1

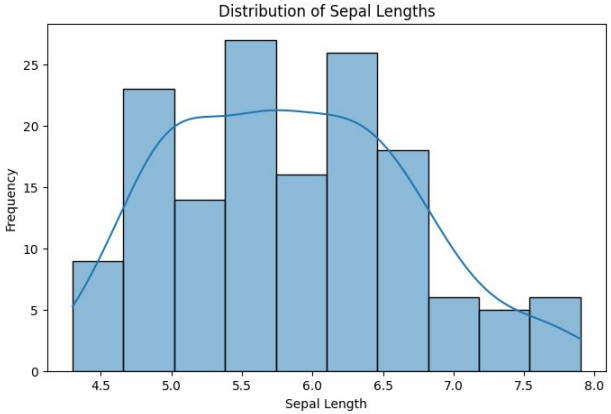
- Create a basic Line Plot
- Create a basic Bar Chart
- Add Labels, Title and Grid





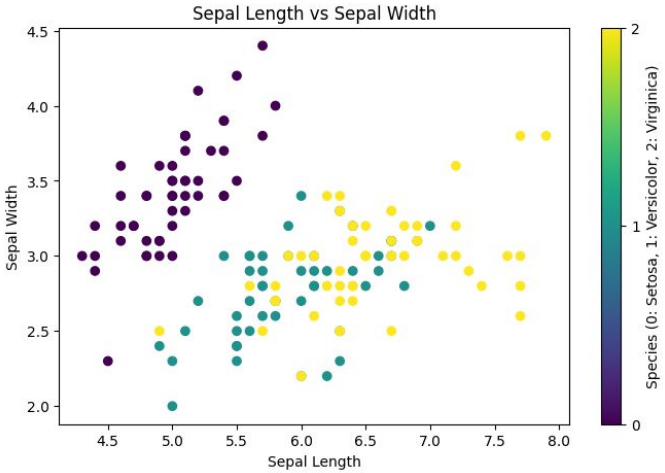
challenge 2:

- Create a Histogram
- Is it skewed? What Statistics can you draw from it?



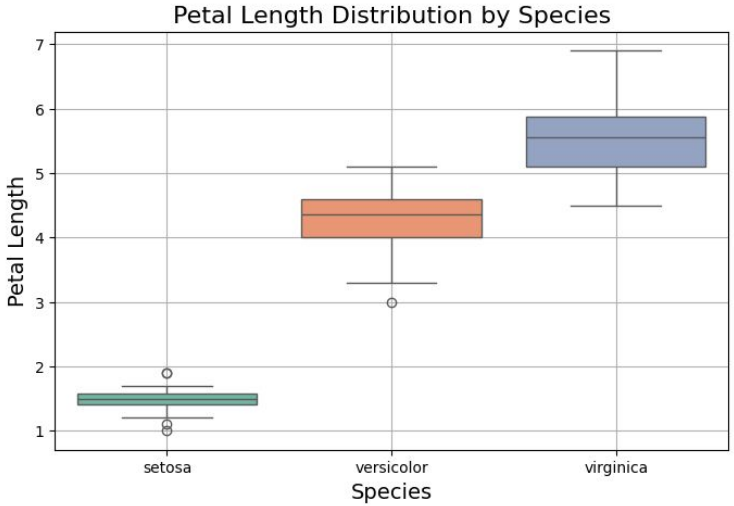
challenge 3:

- Create a Scatter Plot
- Add some colour, how can we know what class the data points belong to?



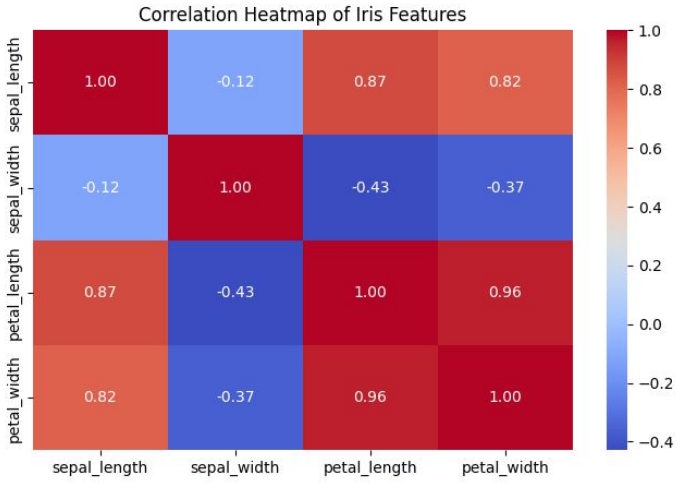
challenge 4

- Create a Box Plot
- Add a palette, a grid, detail
- Can you tell what the outliers are from this?



challenge 5

- Create a Heatmap
- Can you now tell which features are creating noise?
- Make sure all number has 2 decimal places

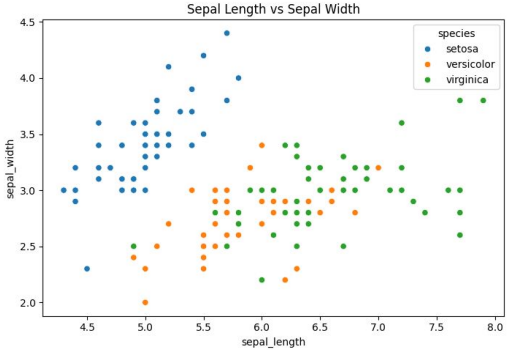


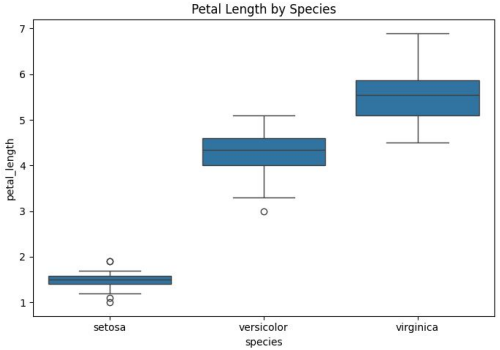

```
# Hint to calculate the correlation for only numeric features

correlation =
iris.select_dtypes(include=['float64', 'int64']).corr()
```

Challenge 6

- Use subplots
- Show both the scatter plot and boxplot side by side
- Use a tight layout

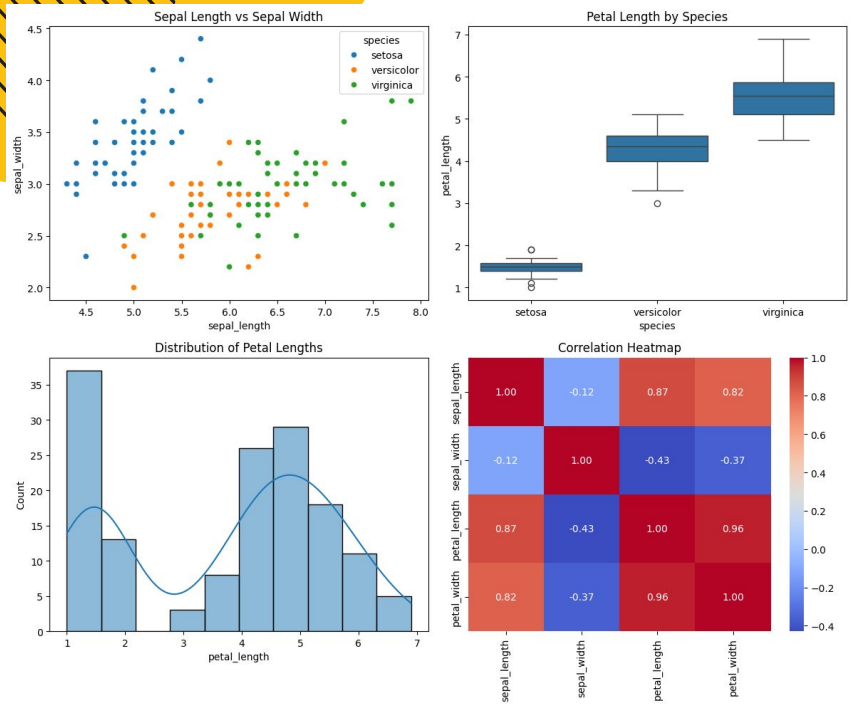





```
# Hint

Use AXS
```

Finale



- Present all the plots we've made today together
-Save the figure as jpg/png

THANK YOU !

We hope to see you next week :)