Academic Reflective Journal

1. Introduction

The main topic for this assignment was to get familiar with running cells within VS Code and analyzing data outputs and graphs along with implementing essential libraries that will be seeing often use. The purpose of this reflection is to understand what I learned, and how I will continue to use this knowledge for the future.

2. Description of Experience or Topic

In this lab, I used scatterplots to compare the three species given. The scatterplot showed sepal length and sepal width. Setosa was primarily distinct compared to the others, but versicolor and virginica overlapped. At first, the graphs seemed simple, but, when looking closer, it says otherwise. While versicolor and virginica had similar averages, their extreme values were different; versicolor could be much smaller, and virginica could be much larger.

3. Personal Reflection

I first thought the dataset was easy, but I soon saw it had more depth. The overlap between species showed that real world data will not always be clear-cut. I felt proud connecting the patterns I saw and making observations. Visualization became not just a technical skill but a way to analyze data.

4. Discussion of Improvements and Learning

This lab assisted me in learning to read beyond the meaning that graphs represent. The outliers made me recognize their effect on the way we make sense of groups. To get better, I should examine more than a pair of variables at a time, because adding the petal length and petal width may help to more clearly define the differences. Next time, I should ask myself more questions about why data takes the shape that it takes, instead of explaining patterns.

5. Conclusion

Overall, this lab improved my observational skills and analysis. I learnt how to execute cells and analyze data plots more effectively.