Title:
Iris Dataset Visualization (Learning Summary)

Project Overview

In this project, I explored and visualized the famous **Iris dataset** using Python libraries such as **pandas**, **matplotlib**, and **seaborn**. The dataset contains measurements of 150 iris flowers, divided into 3 species: *Setosa*, *Versicolor*, and *Virginica*.

Tools and Libraries Used

- **Google Colab**: for writing and running Python code online
- **Pandas**: to load, inspect, and describe the dataset
- **Matplotlib & Seaborn**: for creating plots and visualizations
- **GitHub**: to upload and share my project

What I Did (Step-by-Step)

1. **Loaded the dataset** using seaborn's built-in function.
2. **Inspected** the dataset using:
    - .head() to preview
    - .info() to understand data types
    - .describe() to get summary statistics
3. **Created visualizations** including:
    - **Scatter plots** to show relationships between petal and sepal sizes
    - **Histograms** to see feature distributions
    - **Box plots** to identify outliers
4. **Analyzed patterns** between different species using plots
5. **Uploaded my notebook to GitHub**
6. **Prepared this summary** for submission

Key Learnings

- I learned **how to explore datasets** using pandas.
- I understood how to **visualize data trends and distributions**.
- I practiced using **scatter plots, histograms, and box plots**.
- I learned how to **detect outliers** and patterns between classes (species).
- I gained experience in **using GitHub** for sharing and version control.
- I learned how to **work with Colab and .ipynb notebooks**.
- I improved my **data storytelling** using visual insights.

Conclusion

This project helped me build a solid foundation in **data analysis and visualization**. I now feel more confident in handling datasets, exploring patterns, and sharing my findings in a professional way using tools like GitHub.