**Link for GItHub Repository:** https://github.com/AlishaR01/jupyter-exploration

### **Lab Reflection: Setting Up and Exploring GitHub and Jupyter Notebooks**

#### **What I Did:**

In this lab session, I was tasked with setting up a GitHub account, creating a new repository, installing Jupyter Notebook, and running my first notebook. First, I navigated to GitHub’s website, where I signed up for an account and explored the interface. The GitHub dashboard introduced me to key features such as repositories, issues, and pull requests. I created a new repository called "jupyter-exploration" and initialized it with a README file. Following that, I edited the README to include a description of the lab session and committed the changes to the main branch.

The second part of the lab involved working with Jupyter Notebook. I followed instructions to install both Jupyter Notebook and JupyterLab using pip. Once installed, I explored the interface, learning to navigate the dashboard and understanding how notebooks and kernels operate. I created my first notebook, added a Markdown cell to write some text, and then added a code cell to run a simple Python command (print("Hello, World!")). Lastly, I saved my notebook and uploaded it to my GitHub repository for submission.

#### **What I Learned:**

This lab introduced me to GitHub and Jupyter Notebooks, two powerful tools for coding and version control. Although the GitHub setup was relatively simple, I initially struggled to understand the interface, especially when navigating repositories and commits. Over time, I learned the importance of version control and how GitHub serves as a platform to manage code projects efficiently.

The Jupyter Notebook installation was more challenging. While the steps seemed clear, the technical details were tricky. I found myself relying on visual aids beyond the provided instructions to complete the setup. Running the Jupyter Notebook commands in the terminal and creating my first notebook was initially confusing, but as I repeated the process, it became easier to navigate. Now, I feel more confident using JupyterLab for interactive computing, where I can quickly write and execute Python code.

#### **Challenges Faced:**

One of the main challenges I encountered was with the installation and initial setup of Jupyter Notebook. The instructions provided became too technical at points, and I had to use additional resources to figure out the exact steps. Running the prompt to create the notebook was also a bit confusing at first, but once I figured it out, it became easier to work through the system. Now that I have successfully installed and used Jupyter Notebook, I feel more comfortable navigating the system and look forward to using these tools in future projects.