For this lab, I focused on exploring GitHub and using Jupyter Notebooks. Since I already had a GitHub account, I started by creating a new repository called jupyter-exploration. I added a README file to describe what the repository was for and then committed my first change to the main branch. This was my first time creating a repository specifically for a lab, and it helped me understand how projects are organized on GitHub and how commits track changes over time.

Next, I used Google Colab to create a new Jupyter Notebook. I first added a Markdown cell and wrote: “My first markdown cell in Jupyter” to practice writing notes and formatting text. Then, I added a code cell and wrote the Python command:

print(“Hello, World!”)

I ran the code, and the output appeared correctly below the cell, which showed that the notebook was working as expected. After completing the notebook, I downloaded it as a ipynb file and added it to my local GitHub repository folder. Finally, I uploaded the notebook to my GitHub repository so that both the README and the notebook were available online for review. By completing these steps, I practiced the full workflow of creating a repository, documenting work, using Jupyter Notebooks, and sharing files on GitHub.

This lab taught me a lot about GitHub and Jupyter Notebooks, even though I had used them a little before. With GitHub, I learned why keeping track of changes is important. Even small actions, like editing a README or committing a notebook, are part of good version control. They make it easier to manage projects, avoid losing work, and collaborate with others. This helped me understand how version control is a key skill in both school and professional settings.

Working with Jupyter Notebooks in Colab was very interactive and easy to follow. I liked that I could mix Markdown text for explanations with Python code in the same file. Running the

code and seeing the output immediately helped me understand how notebooks work. This experience also showed me how useful notebooks are for documenting work and sharing it with others, which will be helpful for future coding assignments and projects.

I faced a minor challenge when downloading the notebook because the ipynb extension was missing at first. I had to enable the option to show file extensions on my computer so I could confirm and rename the file correctly. Once I did that, GitHub was able to recognize the notebook without any issues. This experience reminded me how important it is to pay attention to file details when working across different platforms. Overall, this lab gave me a better understanding of version control, interactive computing, and the tools I will use for coding and project work.