Day 1

In general, I thought that this day was quite easy. I have previously worked in python and although it was nice to get a structured walkthrough of the basic concepts, I felt that I had a good understanding of them. However, I appreciated that the course “forced” me to look at notebooks (Jupiter in this case) to lower the threshold of starting to use them more actively in my other work. NumPy I have a good understanding of before the course. Pandas was better and more interesting for me, I typically work with smaller data structures that suit better use of JSON or dictionaries and have thus not used pandas much. The introduction to pandas is nice and good to know a bit about the tools that are available if I feel limited with JSON in the future. I feel that the course setup/layout worked well, and we advanced at a decent speed through the examples. I followed along easily and personally, it could have gone a little faster, we will see if I feel the for the next session.

Day 2

The continuation of pandas was kind of nice. I feel like a got a better grasp of the idea of pandas during this session and saw the “logic” in its structure and how to work with it. It will be nice to have in store if a come into a position where a need to work with bigger data. The matplotlib session I felt was going too slow. I have plotted using matplotlib prior, however, even without that I feel like as long as you have done any type of plotting prior you should not have any trouble following along. I appreciated the walkthrough of different data formats and what formatting tools are available. It is always good to explore the options around you, even though the current setup is working. This session was a reasonable way of getting that walkthrough and presentation of the tools. Overall, this day also felt a little slow and the exercises could have been more challenging.

Day 3

This day had a few mixed impressions. Starting, I feel like the script part was redundant. Maybe I am just more experienced with scripts from other programming environments, but I feel like scripts are one of the first things you learn in any programming language and are something most people should know. Anyways, for me, this didn’t introduce anything new to me. The API session was more interesting and something that I could see coming in handy one day. I knew of the concept already and have done it briefly in a genomics project, but the refresher was nice. The parallelization session felt a bit conflicting. It was nice to hear about it, but I had problems getting it to work in the interactive environment of the notebook. The struggles took away a bit from the overall experience and I feel that maybe the exercises could have skipped the “multiprocess/multiprocessing” tool since they caused issues for multiple participants it felt. Potentially more time could have been spent on MPI instead. Anyways, the introduction was appreciated, and parallelization is something I could be using in my computational projects. I haven’t set it up in a python environment yet (but have been doing it in MATLAB) so the concept is not too foreign and something I will manage when I decide it is time to dive into Python more actively.

Day 4

This was a great ending to this course with interesting and useful topics. I have recently picked up virtual environments and started to use them actively. Therefore, I had a head start going into the dependency session. However, I felt like it was useful to get an order run down of the topic again as there surely are things a can do better. One specific tip and take with me from this session is the importance to state the minimum dependencies in a project, making it possible for the code to be used in the future as new releases will otherwise make it hard to run a project with old dependencies in its requirements. The Binder session was highly appreciated. I have heard about Zenodo before, but not used it myself. I truly agree with the importance of reproducibility to make your research available for others in the future (and the present as well). The ability to link a GitHub project to Zenodo was news to be and a useful tip as a previously thought that you needed to maintain a second respiratory by using Zenodo. The packing session was also informative. I am currently not actively using \_\_init\_\_.py files as I have not fully understood their usage and how I should use them. Moving forward I will look further into making us of them to simplify the distribution of my work and not only rely on README files and installation dependencies.