**Appendix**

**Sources:**

**Stack Overflow:** <https://stackoverflow.com/>

* <https://stackoverflow.com/questions/55209661/how-to-load-csv-file-in-jupyter-notebook>
  + Looked up how to import a csv of data, I have previous experience with csv’s being much easier to work with, so I looked up how to extract the data from them
* <https://stackoverflow.com/questions/2682745/how-do-i-create-a-constant-in-python>
  + This was one of the first steps in the assignment and I was wondering if there was special syntax like in other languages for protecting a constant
* <https://stackoverflow.com/questions/27964992/how-should-i-handle-this-indexerror>
  + An error was occurring when I was indexing through the pandas dataframe since they don’t operate like I thought, and the iloc function is used to iterate through rows and columns
* <https://stackoverflow.com/questions/55091244/iterate-through-csv-rows-with-pandas-perform-selenium-action>
  + This is where I learned about the iloc operator on dataframes, which solved my problem for converting the csv dataframe into a dictionary
* <https://stackoverflow.com/questions/21011777/how-can-i-remove-nan-from-list-python-numpy>
  + NaNs where appearing in the dataframe because all the columns were not the same size, the dropna function can remove those.
* <https://stackoverflow.com/questions/77283803/how-to-force-stat-poly-line-to-use-a-specific-non-zero-y-intercept>
  + I used this to investigate if people had solutions to linregress in stats, not having a forced y-intercept.
* <https://stackoverflow.com/questions/18169965/how-to-delete-last-item-in-list>
  + I wondered if there was a function to remove a piece of data in an array for the Q-Test, to clean the array
* <https://stackoverflow.com/questions/11367902/negative-list-index>
  + The post above used negative indexing and I was curious how it worked, basically just regular indexes but starting at the end of a list
* <https://stackoverflow.com/questions/75244108/why-is-the-commit-operation-taking-forever-in-visual-studio-code>
  + This was for sharing my work with the rest of my group, the commits were taking ages, and I didn’t understand why. It was because I didn’t include a commit message.

**Chat GPT:** <https://chatgpt.com/share/674e3f13-3718-800a-956f-623a78d67bda>

* I used this to explain some fundamentals of the functions we were using, explain errors, look for different solutions and for the fitting and error calculations.
* It was also used to edit the output of functions that I used, as well as the formatting of decimals for print statements.
* I also asked it to try to fix some logical and syntax errors in my code.

**Pandas Documentation:** <https://pandas.pydata.org/docs/>

* <https://pandas.pydata.org/docs/user_guide/indexing.html>
  + I used the indexing and selecting data section to make my csv\_to\_dict function work, giving me key details on how the iloc function work.

**Numpy Documentation:** <https://numpy.org/doc/2.1/>

* <https://numpy.org/doc/2.1/user/absolute_beginners.html#importing-and-exporting-a-csv>
  + I used this page to explain some basic array operation allowed by the numpy function like np.sum() and indexing and slicing arrays

**Matplotlib Documentation:** <https://matplotlib.org/stable/index.html>

* <https://matplotlib.org/stable/tutorials/pyplot.html#sphx-glr-tutorials-pyplot-py>
  + I used this to understand the plot that Chat GPT made for me, and for understanding some of the customization that is available