Exercise 1.4: File Handling in Python

Learning Goals

- Use files to store and retrieve data in Python

Reflection Questions

- Why is file storage important when you're using Python? What would happen if you didn't store local files?
    - File storage is important in Python, because it will save file information data. If it is not saved in a file, the data will no longer be accessible.
- In this Exercise you learned about the pickling process with the **pickle.dump()** method. What are pickles? In which situations would you choose to use pickles and why?
    - Pickles and the picking process are used to turn objects into binary data files. The pickle.dump() is used to save objects to a file and the pickle.load() is used to get the files.
    - Pickles are good for storing things like lists and dictionaries in files and retrieving items that users added input to.
    - I would not want to use pickles if I wanted to create a file that could be read human.
- In Python, what function do you use to find out which directory you're currently in?
    - To navigate through directories, you would use the os module
        - Import os
        - print(os.getcwd()) command is used to find out which directory you're currently working on in python
    - What if you wanted to change your current working directory?
        - Then you would use the os.chdir() directory to change the directory
            - os.chdir("<path to folder>")
            - os.chdir('/Users/amysikora/Projects/cf-python-base-project/Task 1.4')
            - In [16]: os.getcwd()
            - Out[16]: '/Users/amysikora/Projects/cf-python-base-project/Task 1.4'
            - In [17]: file = open('veggies.txt', 'r')
- Imagine you're working on a Python script and are worried there may be an error in a block of code. How would you approach the situation to prevent the entire script from terminating due to an error?
    - I would use exception handling and use a try (tries to execute code), except (catches and handles errors), else (fallback if none if the two did work), and finally (closes the file) to make sure that it doesn't crash when there are input errors.
- You're now more than halfway through Achievement 1! Take a moment to reflect on your learning in the course so far. How is it going? What's something you're proud of

so far? Is there something you're struggling with? What do you need more practice with? Feel free to use these notes to guide your next mentor call.

- I'm proud of myself for learning these new concepts and seeing them work in the terminal. It's really rewarding to see my code function correctly.
- I'm struggling with the volume of information in each task. I want to make sure I fully understand everything, so I take extra time reviewing concepts. To help myself, I've created a study guide that I use to reinforce my learning.
- I need more practice to solidify my understanding of Python. Going over concepts multiple times might help. I also want to ensure I'm balancing my learning speed so I don't spend too long on each task.