Exercise 1.4: File Handling in Python

Learning Goals

- Use files to store and retrieve data in Python

Reflection Questions

1. Why is file storage important when you're using Python? What would happen if you didn't store local files?
    - File storage is important and necessary when using Python because when a script is no longer running, any variables or data created will no longer exist. When creating local files, you will be able to access and update any previously created data and keep your work existing after a script has ended.

2. 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?
    - A pickle is a packaged stream of bytes, which has been converted from complex data and written into a binary file. Pickles are commonly used in lieu of text files for storing data. Text files are generally useful in storing basic data involving simple text, but for more complex data, such as the recipe dictionaries used throughout the exercises, pickles are a much more useful and capable of retaining the data structure.

3. In Python, what function do you use to find out which directory you're currently in? What if you wanted to change your current working directory?
    - To find out the current working directory using Python, you would use os.getcwd(). To change the current working directory, os.chdir(path) would be used, where "path" is the target directory.

4. 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?
    - If I were worried there may be an error in a block of code, I would use try-except blocks. This method would run the script and "try" to execute a block of code to then "catch" any exceptions or errors in the "except" block that may occur. By doing this, the script can continue to run, even if an error occurred, log an error, or exit the function so it doesn't continue to run.

5. 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.
    - So far, I think the course is going pretty well. The foundational knowledge I built during the JavaScript full-stack immersion program has helped to understand the concepts of Python a bit quicker and conversely with some of the overall concepts being similar, I'm understanding some prior JavaScript concepts more clearly.

      That being said, I do find myself having a bit of trouble getting started on some of the tasks, as each lesson doesn't always sink in right away and I find myself needing to go back and review material from current and prior lessons. This isn't necessarily a bad thing, as it forces me to try and conceptualize the learning points in different ways if needed.