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?

It is important because when you use variables in your script to assign and keep track of values, that data no longer exists when the script stops running, and can't be retrieved for later use. Python lets you store data in files, just like other files in your computer, where it'll be stored even after the program's finished executing.

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?

Pickles convert complex data into a packaged stream of bytes and then write this into a binary file. Pickles would work best in situations using complex data structures like dictionaries since it is difficult to retain the structure of data in the form of regular text.

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?

os.getcwd() = to find which directory you are in.

os.chdir() = to change the current directory you are working in.

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?

I would approach situation by using "try-except" blocks. With the "try-except" blocks you can first 'try' a block of code where you'd expect an error to occur. If no errors are found, the rest of your code is executed as normal. If there's an error, an 'except' block appears to notify the user of the error.

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 things are going better than expected. The one thing I am proud of is how I have handled any issues I have come across in the exercises and practice tasks. Typically I would spend hours trying to find the error and even longer trying to fix it. I've gotten much better in using the resources available to me along with my own knowledge of how coding works. I'm still struggling with retaining details on how things work with new information received but I feel the more I put into practice what I have learned the better I get at it.