

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, we can use files to store and retrieve data to use them later, because when we assign data to a variable in a script, this data is lost when the script stops running and can't be retrieved for further use.

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?

Pickling is the process of converting complex data into a packaged stream of bytes, known as a "pickle", then write it into a binary file. I would use pickles when storing complex data structures such as dictionaries, because it's difficult to retain the structure of data in the form of regular text files.

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?

With `os` modules:

The `os.getcwd()` command is used to find out which file directory you're currently working on in Python.

The `os.chdir()` command lets your Python interpreter change its current working 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?

I would handle the errors with a try-except block. In which I try a block of code where I would expect an error to occur. If no errors are found, the rest of the code is executed as normal. If there is an error, an except block will appear to notify the user of the error.

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.