## **Exercise 1.4: File Handling 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 in Python as I can save data persistently. If it didn't store the local files, my data and progress will be lost every time I run the script. Storing files ensures that my data is securely saved for future use and after I quit the program.
- 2. In this Exercise you learned about the pickling process with the <a href="pickle.dump()">pickle.dump()</a> method. What are pickles? In which situations would you choose to use pickles and why?
  - Pickles can be stored in a file or transmitted over a network. So, I would use pickles when I need to save complex data structures like lists or dictionaries, and retrieve them in the same format for later use. It is useful in machine learning that I want to save a trained model or load it without retraining.
- 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?
  - I would use 'os.getcwd()' when I want to find out which directory I am currently in. I will use 'os.chdir('path\_to\_directory')' when I want to change my 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 will use the 'try-except' block to handle potential errors without stopping the script. It allows me to catch exceptions and think how to respond like taking corrective actions. It can avoid crashes and make my code more user-friendly.
- 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.
  - I am proud of handling the challenging concept and not giving up on some complicated steps. I was struggling with pickle structure or how to execute it at first, but after reviewing the steps again, I am able to figure it out.