Exercise 1.4: File Handling in Python

1. Why is file storage important when you're using Python? What would happen if you didn't store local files?

If you didn't store local files, any data that is generated or modified by a program would be lost once the program exits. This could lead to a loss of important information and make it difficult or impossible to continue working on a project.

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 are a way to serialize Python objects, which means they can be converted to a format that can be saved to disk or transmitted over a network.
Pickling is useful in a variety of situations, including:

- Saving the state of a program so that it can be resumed later
- Storing complex data structures such as machine learning models
- Sending data over a network
- Saving data in a database

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?

In Python, you can use the os.getcwd() function to find out which directory you're currently in. This function returns a string that represents the current working directory. If you want to change your current working directory, you can use the os.chdir(path) function, where the path is the directory you want to change to.

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?

Using try-except blocks: You can use try-except blocks to catch specific exceptions that might be raised in a block of code and handle them gracefully.