

Exercise 1.4

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 because it allows for:

- Data Persistence: Storing data beyond program execution.
- Data Sharing: Facilitating data exchange between programs or instances.
- Backup: Providing a means to recover lost data.
- Data Analysis: Enabling manipulation of large datasets.
- Configuration Management: Saving program settings.

Without file storage, data would be lost after program termination, hindering persistence, sharing, and backup. Configuration settings would also need to be re-entered each time the program runs.

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?

In Python, "pickles" refer to the ``pickle`` module, which allows serialization and deserialization of Python objects. Pickling enables storing and transferring Python objects between processes or machines, preserving their state. However, caution is needed with unpickling untrusted data due to security risks, and compatibility issues may arise between different Python versions. Some situations to use pickles include:

- Data Persistence: Saving Python objects to disk.
- Inter-Process Communication: Passing objects between processes.
- Model Persistence: Storing machine learning models.

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 use the ``os.getcwd()`` function from the ``os`` module to find out the current working directory. It returns a string representing the current working directory. To change the current working directory in Python, you can use the ``os.chdir()`` function.

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?

Use a try-except-else-finally block.

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.

The course is going well, I feel good about the material.