ASSIGNMENT 4:

Module 5: Files, Exceptions, and Errors in Python

Task 1: Read a File and Handle Errors

Problem Statement: Write a Python program that:

1. Opens and reads a text file named sample.txt.
2. Prints its content line by line.
3. Handles errors gracefully if the file does not exist.

Expected Output:

If the file exists:

```
Reading file content:
Line 1: This is a sample text file.
Line 2: It contains multiple lines.
```

If the file does not exist:

```
Error: The file 'sample.txt' was not found.
```

Task 2: Write and Append Data to a File

Problem Statement: Write a Python program that:

1. Takes user input and writes it to a file named **output.txt**.
2. Appends additional data to the same file.
3. Reads and displays the final content of the file.

Expected Output:

For example, if the user enters 25, the output should be:

```
Enter text to write to the file: Hello, Python!
Data successfully written to output.txt.

Enter additional text to append: Learning file handling in Python.
Data successfully appended.

Final content of output.txt:
Hello, Python!
Learning file handling in Python.
```

Submission Instructions:

- Create a **GitHub repository** and upload your Python scripts (.py files).
- Ensure the repository includes a **README.md** file that describes the functionality of your programs.
- Add both **Task 1 and Task 2** scripts in the same repository.
- Submit the **link to your GitHub repository** once uploaded.

Reference:

Follow the **Python course - Module 4: Functions & Modules in Python** for additional guidelines and examples.

Note:

Please test your project thoroughly and check all the validations and error handling prior to ensure it works as expected before submission.

You can always connect to the mentor using the chat support option for any doubts or queries!