

## **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.
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**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!**