SECUREI

Day 1

- Python File Operation:

  - Program which gets input from the user and writes it in a file. The program needs to accept input text and file path.

  - Program to read all the files in a folder and append the contents in a single file. The program needs to accept the input path and output path as parameters.

Day 2

- Python Basics:

  - Program to read a CSV file, convert it to JSON, and save it in another file.

  - Program to demonstrate the logging functionality.

Day 3

- Python Pandas Framework:

  - Read and merge 2 CSV files and write them in a single file. For example, the first CSV can have employee details, and the second one can have their number of experiences (one-to-one relationship).

  - Program to read 2 CSV files, merge them, and aggregate the results using the Pandas Framework. For example, one CSV can have all employees' details, and another CSV can have monthly performance for each employee. The final result will be the employee and their average performance.

Day 4

- Python Pandas Framework (Continued):

  - Demonstrate aggregation functions (Count, Sum, Group by, Distinct, Filter Column & Rows, Checks like NULL, number range, string column with regex, e.g., email ID, SSN, State list).

- Python Advanced:

  - Comprehension List, Aggregation using Lambda.

  - Read a CSV file that has employee details, convert it to an Object (have a class for an employee), and keep the object in a list.

  - Program to read data from a CSV and convert it to a dictionary, then print the details on the console. The input content will be in a file, and the employee ID will be the key, while the employee details will be the value in the dictionary.