Course: Introduction to Programming Using Python

Module 12. Design Patterns. Part 1

Task 1

Create a classic implementation of the Singleton pattern. Test the work of the created class.

Task 2

Implement the Abstract Factory pattern. Test the work of the created class.

Task 3

The user inputs from the keyboard a set of numbers and a path to the file to save the received data. Do the following:

- Save all the received numbers;
- Find maximum and minimum. Save these values in the same file;
- Display numbers;
- Display maximum and minimum;
- Create a class to log operations. When a class object is created, specify where the logging will occur: screen or file. You can create only one class object in the program. Log all actions in the program using the object of this class.