Seminar 06 Complex problems

Development of abstract data types in Python



Objectives

Using Python to solve complex problems

- Implement simple programs using Python
- Implement functions
- Use object-oriented programming



Requirements

Solve the following problems using a class Book. Create a console interface for the problem. Cover all possible testing cases for the application.

Class *Book* – information about year, title, number of authors, authors

- A. Create an application to manage books:
 - 1. read books
 - 2. print books older than a specified year
 - 3. identify books with at least 2 authors and one author is Smith
- B. Features CRUD on book list (Operations.py):
 - a. Add a new book to the library
 - b. Insert a book to the library
 - c. Delete a book from the library
 - d. Delete all books written by an author
 - e. Delete all books in given period (two years are specified)
 - f. Print all books from a certain year
 - g. Print all books with title containing a given word
 - h. Determine the oldest book
 - i. Filter books with author starting with specified letter