
Files

Exercise 1

In this exercise, we want to create and manage a file representing a library. Each record in the file relates to a book. A book is characterized by the following information :

- BookCode (unique for each book)
 - Title
 - Author
 - Year of edition
 - Number of pages
 - Specialty (computer science, mathematics, electronics, etc.)
1. Propose the declarations of the necessary structures for the management of the library.
 2. Write a sub-program allowing the initialization of the file (creation, verification of existence, opening, etc.).
 3. Write a sub-program allowing the addition of a new book.
 4. Write a sub-program allowing you to search for a book by title.
 5. Write a sub-program to display the list of books whose title contains a given keyword.
 6. Write a sub-program to delete a given book.
 7. Write a sub-program for modifying information in a given book.
 8. Write a sub-program to sort the file alphabetically by book titles.

Exercise 2

Consider "F.dat" a file containing integers.

1. Write a sub-program to calculate the average of the values of the elements in the file.
2. Write a sub-program to create two new files : the first "F1.dat" containing the odd values of "F" and the second "F2.dat" containing the even values of "F".
3. Write a sub-program to remove zero values from F.
4. Write a sub-program to create an FTri file containing the values of F sorted in descending order.