Subject(s):

- Text files.
- Binary files.

Part 1

1. Considering that a student is characterized by the following information: Number, Name and Date of birth (day, month, year).
    a. Implement a program that allows you to manage the data of (maximum) 30 students. It should allow the insertion, consultation, updating and deletion of student data. It should also be possible to list data for all students.
    b. You should store the data in a binary file. Tip: The first value stored in the file can indicate how many students are stored.
    c. Using a text file, include logs of access to the features described above.

Part 2

1. Considering exercise 1 of part 2 of the worksheet 8. Implement the storage and loading of data from the book library using a binary file.

Part 3

2. 1. Change the provided **`pesquisa-ordenacao`** project to:
    a. Create a menu entry for a function that allows you to verify that student data is sorted by number.
    b. Create a menu entry for a function (**`int findsByDate(Student students[], int day, int month, int year, int start)`**) that returns the index of the first student with a given date of birth from a given index. Returns **`-1`**, if not found.
    c. Use the previous function to print ALL students with a given date of birth.
    d. Create a menu entry for a function that sorts students by date of birth. (can be based on any of the supplied algorithms).
    e. Create an entry in the menu for a function that sorts students by name (can be based on any of the algorithms provided excluding the algorithm selected in the previous point).

Part 4

2. In the library project that has been carried out since worksheet 7, include at least 3 entries in the

menu for ordered listings (e.g., ISBN, title, authors, etc.) and implement these features.