

Lab 14 Tasks

Q1. The file `players.txt` in the ftp contains information about 15 football players in the following manner:

Information about each player consists of 3 lines. The first line is the name of the player. The second line is the name of the club the player plays for. The third line has two integers separated by a space. The first integer is the number of goals scored by the player and second is the number of assists made by the player. The 15 players' information is written sequentially within the file.

Create a structure **player** which contains the **Name**, **Club Name**, **Goals** and **Assists** of a single player. Read the file `players.txt` and store the information of the 15 players in **player** type structure variables. (You can use an array of **player**).

Now sort and print the information of the players **in the console** in the following manner:

The players of the same club will be printed together. The club name that comes first alphabetically will be printed first. For example, the players of Chelsea will be printed before the players of Everton because Chelsea come before Everton alphabetically. If there are more than 1 player with the same club then the player who has the most goals for that club will be printed first. For example, the players Romelu Lukaku and Ross Barkley both play for Everton. But since Lukaku has more goals he will be printed first.

Information for each player should be printed in the format: Club name Player name Goals Assits.

Q2. Create a structure **student** to specify data on students given below: **Roll number**, **Name**, **Department**, **Course** and **Year of joining**. Read the file `students.txt` in the ftp for your input. Now

- Write a function to print names of all students who joined in a particular year.
- Write a function to print names of all students who are in a particular department.
- Write a function to print names of all students who are taking a particular course.
- Write a function to print the data of a student whose roll number is given. Print the same data in a file too.
- Use a switch statement so that the user can select any of the above functions.

Q3. Write a program that will take 3 strings from the user and write in a file. Now using `fseek()` function print the content of the file in reverse.

Q4. Write a program to identify the youngest person and the oldest person in a class.

Input

The number n ($1 \leq n \leq 100$) in the first line determines the number of people in a class. The following n lines contain person's name and his/her birthdate. The information in each line is of this format: **personName dd mm yyyy** where **personName** is a single word less than 15 letters, **dd mm yyyy** are date, month and year of the birthdate. Suppose that no one has the same name or the same birthdate.

Output

Print out 2 lines containing the name of youngest person and oldest person, respectively.

Input	Output
5 Mickey 1 10 1991 Alice 30 12 1990 Tom 15 8 1993 Jerry 18 9 1990 Garfield 20 9 1990	Tom Jerry