C++ Advanced – Exam 1 (29 Feb 2020)

Write C++ code for solving the tasks on the following pages.

Code should compile under the C++11 standard.

Submit your solutions here: https://judge.softuni.bg/Contests/1805/

Any code files that are part of the task are provided under the folder **Skeleton**.

Please follow the exact instructions on uploading the solutions for each task.

Task 1 – Statistics

Your task is to write a program that prints statistics set of data for different people.
You are given the **main()** function, which reads an integer value that represent **N** command lines.

- On each command line you receive info for one male and one female.
- The data about a person (male or female) consist of first name, last name, age and height.

You should implement a class **Statistics** (for example Statistics.h and Statistics.cpp files).

The **Statistics** should be able to read from the provided input from the **main()** method and store the data.

The data about all people should be stored in 3 different groups:

- Minors (below 18 years old (**18 years inclusive**)
- Adults (from 19 to 62 years old (**19 and 62 inclusive**)))
- Elders (above 63 years old (**63 years inclusive**))

The **Statistics** class should implement a **printStatistics()** method that **prints** to the standard output data following the provided rules:

- First print **Elders** data (starting from the **Oldest** person in the Elders group)
- Second print **Adults** data (starting from the **Youngest** person in the Adults group)
- Third print **Minors** data (starting from the **Youngest** person in the Minors group)
- When printing data for a person follow the syntax: **"firstName lastName height"** followed by a newline. The **age** for a person should **Not** be printed.
- If two(or more) people for the same group have the same **age** – print them in the same order as their data have been populated into the **Statistics** class.
- The print for each group should start with a "header" for that group. Example:
  o Elders data:
  o manol nikolov 188
  o Adults data:
  o ibrahim manolov 173
  o Minors data:
  o penka vurbanova 107

Your task is to study the code and implement the function so that the code accomplishes the task described.

You should submit a single **.zip** file for this task, containing **ONLY** the files you created.

The Judge system has a copy of the other files and will compile them, along with your file, in the same directory.

Restrictions

You should only submit files with **.h** and **.cpp** extensions (in a **.zip** archive).

You should **Not** have folders in your **.zip** submission archieve.

Examples

Input	Output
2 ibrahim manolov 29 173 penka vurbanova 27 175 todor ivanchev 11 118 monika petrova 77 159	Elders data: monika petrova 159 Adults data: penka vurbanova 175 ibrahim manolov 173 Minors data: todor ivanchev 118
4 ibrahim manolov 29 173 penka vurbanova 27 175 todor ivanchev 11 118 monika petrova 77 159 manol nikolov 29 188 dimitrina dobreva 11 105 petar angelov 69 179 ivanka ivanova 79 164	Elders data: ivanka ivanova 164 monika petrova 159 petar angelov 179 Adults data: penka vurbanova 175 ibrahim manolov 173 manol nikolov 188 Minors data: todor ivanchev 118 dimitrina dobreva 105
4 ibrahim manolov 29 173 penka vurbanova 29 175 todor ivanchev 28 118 monika petrova 28 159 manol nikolov 88 188 dimitrina dobreva 88 105 petar angelov 69 179 ivanka ivanova 69 164	Elders data: manol nikolov 188 dimitrina dobreva 105 petar angelov 179 ivanka ivanova 164 Adults data: todor ivanchev 118 monika petrova 159 ibrahim manolov 173 penka vurbanova 175 Minors data:

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