C++ Advanced - Exam (12 September 2020)

Write C++ code for solving the task on the following page.

Submit your solution here: https://judge.softuni.bg/Contests/2556/CPlusPlus-Advanced-Exam-12-September-2020

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 2 – Scientists

You are given 2 files: **Scientist.h**, **Discovery.h**

Get accustomed to the provided Skeleton and implement the missing functionalities for **Scientist.cpp**, **Discovery.cpp** and **Main.cpp** files.

In the main(), on the **first line**, you are given an integer – **N**

On the **next N lines**, you are given N Scientists followed by a number of discoveries (a discovery has a name, a year and a field of study). There are **four categories** – ***Chemistry, Physics, Linguistics and Philosophy***.

In the output, you should print the information in the following way – **`"{name of discovery} - {scientist} - {field of study category}",`** sorted by year.

The fields of study categories are **numbered**:

- Chemistry -> 0
- Physics -> 1
- Linguistics -> 2
- Philosophy -> 3

The fields of study will always be one of the four fields, shown above.

In the output, print the number of category.

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.

Examples

Input	Output
2 Chomsky 1 ChomskyHierarchy 1956 Linguistics Einstein 3 GeneralRrelativity 1915 Physics PhotoelectricEffort 1905 Physics MassEnergyEquivalence 1923 Physics	PhotoelectricEffort - Einstein - 1 GeneralRrelativity - Einstein - 1 MassEnergyEquivalence - Einstein - 1 ChomskyHierarchy - Chomsky - 2
1	Polonium - Curie - 0

Curie 2 Polonium 1898 Chemistry Radium 1899 Chemistry	Radium - Curie - 0