

C++ Advanced Exam – 5 September 2020

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

Submit your solutions here: <https://judge.softuni.bg/Contests/2555/CPlusPlus-Advanced-Exam-5-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 – Discovery

Your task is to write a program which categorises scientific discoveries into certain field. You are given the **main()** function, which reads an integer value that represents a number of command lines. On each command line you receive information for a discovery.

You should implement a class which contains information about the four **Scientific Fields** and should be able to read from the provided input from the **main()** method and store the data.

The data should be stored in 4 different groups:

- **Philosophy** – type 1
- **Linguistics** – type 2
- **Physics** – type 3
- **Chemistry** – type 4

The class should implement a **print ()** method that **prints** the information, sorted by **year** (ascending order).

Your task is to study the code and write the functionality 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 archive.

Examples

Input	Output
6 DiscoveryA 1965 scientist1 1 DiscoveryB 1999 scientist2 2 DiscoveryC 1899 scientist3 3 DiscoveryD 1965 scientist8 3 DiscoveryE 2000 scientist9 2 DiscoveryF 2019 scientist0 2	Physics: DiscoveryC 1899 - scientist3 DiscoveryD 1965 - scientist8 Linguistics: DiscoveryB 1999 - scientist2 DiscoveryE 2000 - scientist9 DiscoveryF 2019 - scientist0 Philosophy: DiscoveryA 1965 - scientist1 Chemistry:
5 TheoryOfRelativity 1934 Einstein 3 TheoryOfAutomata 1967 Chomsky 2 MolecularMass 1899 Kleid 4	Physics: TheoryOfRelativity 1934 - Einstein Linguistics: TheoryOfAutomata 1967 -

TheoryOfEgoAndSuperEgo 1923 Freud 1 TheoryOf TuringMachines 1975 Chomsky 2	Chomsky Philosophy: TheoryOf 0 - Freud TheoryOfEgoAndSuperEgo 1923 - Freud Chemistry: MolecularMass 1899 - Kleid
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