

C++ Fundamentals – Retake Exam – 17 February 2024

Please submit your source code to all below-described problem in [Judge](#).

1. School Administrator

You're a school administrator, who's taking care for meeting and greeting kid participants for the local Programming Olympiad, and putting each one of them in their corresponding room.

You're getting a list of all kids with their designated rooms. There're four rooms, each one numbered with an integer number: **1**, **2**, **3**, and **4**. You will get the list of each kids's rooms as first part of your input in the format "**Daryl 4**", where "**Daryl**" is the name of the kid (there will be no spaces in the name, and one room will never have two kids with the same name), and **4** is the room number. You're supposed to distribute each kid in their corresponding room.

The list will end up with "**END**". After this "**END**" command, you must print the list all kids in each room. The names must be printed in the order they came from your input.

Then, you will start getting parent's questions about which kid is in which room. For example "**Daryl**". You must locate where all kids with name "**Daryl**" are, and print them out in the following format: "**Daryl: 1 4**" (e.g., in this case a kid with name **Daryl** is in rooms **1** and **4**). The list of the parent's questions will end with "**END**".

If a kid is not present anywhere (for example "**Stoyan**", you should print "**Stoyan: Not found!**").

Good luck, school admin!

Example 1

Input	Output	Explanation
Alice 1 Bob 2 Charlie 3 Daryl 4 Eva 1 Fred 2 Grace 3 Fred 1 Helen 4 END Alice Daryl Stoyan Bob Fred END	Alice: 1 Daryl: 4 Stoyan: Not found! Bob: 2 Fred: 1 2	Room assignment: Alice is assigned to room 1. Bob – to room 2. Charlie – to room 3. Daryl – to room 4. Eva – to room 1. Fred – to room 2. Grace – to room 3. Fred – to room 1. Pay attention – this is another Fred! Helen – to room 4. Querying rooms: based on the above data: Alice is found in room 1. Daryl is in room 4. Stoyan is not present. Bob is in room 2, and Fred is in rooms 1 and 2

Example 2

Input	Output
Ian 4 Mia 1 Judy 1 Kyle 3 Liam 2 Mia 3 Liam 3 Mia 4 Nolan 1 Olivia 1 Peter 4 END Olivia Ian Mia Koko Liam END	Olivia: 1 Ian: 4 Mia: 1 3 4 Koko: Not found! Liam: 2 3