D. Find and Sort

Problem Description

After just your first day on the job, you've managed to screw up royally! All you had to do was find a single client file in one of the cabinets (which have been painstakingly kept in sorted order), but you managed to knock them all over.

Your boss has given you a second chance to keep your job. You must not only find the client file in the mess you've created, but you must put back all the files in their correct order.

Client files are sorted first by last name, then by first name, and finally by client ID.

Input

Input will consist of a single test case. The first line of input will hold the first and last name and client ID of the client file you are searching for. The remaining lines will contain the complete set of client files in this format:
`LastName FirstName ClientID`
Each field will be separated by one space. You must read until EOF (End of File). Client names will only contain letters, with no other special characters. The names may contain any mixture of upper and lower case letters. The client ID fits into a standard integer type and will not contain any leading zeroes.

Output

You must output a list of client files from the input in sorted order according to the company's strict ordering policy. On the line containing the client your were searching for, you must output the line as follows:
`LastName FirstName ClientID <-- FOUND IT!`

Sample Input

```
Smith John 9823
Smith John 9823
Chaplin Charlie 1234
```

```
Smith Joseph 4456
Doe Jane 98
Doe John 99
Ritchie Dennis 1941
```

Sample Output

```
Chaplin Charlie 1234
Doe Jane 98
Doe John 99
Ritchie Dennis 1941
Smith John 9823 <-- FOUND IT!
Smith Joseph 4456
```