

Problem 4. Files

You are given number of files with their **full file paths** and **file sizes**. You need to **print all file names with a given extension** that are present in a **given root directory sorted by their file size in descending order**. If two files have **same size**, order them **by alphabetical order**.

If a **file name (file name + extension)** appears more than once in a given root, save only its latest value. If a file name appears in more than one root, they are treated as different files.

If there **aren't any files** that correspond to the query, print **"No"**.

Input / Constrains

- On the **first line** of input you will get **N** the **number of files to be read from the console**.
- On the next N lines, you receive **the actual files in the format** **"root\folder\filename.extension;filesize"**.
- There may be more than one folder, e.g. **folders can be deeply nested**.
- On the last line you receive a query string in format **"{extension} in {root}"**. You need to print all files with the given extension that are in present in the given root.

Output

- You need to print all files sorted by their size in descending order.
- If two files have the same size, order them by alphabetical order.
- Files should be printed in the given format **"filename.extension - filesize KB"**.
- If there **aren't any movies** that correspond to the query, print **"No"**.

Examples

Input	Output
4 Windows\Temp\win.exe;5423 Games\Wow\wow.exe;1024 Games\Wow\patcher.cs;65212 Games\Pirates\Start\keygen.exe;1024 exe in Games	keygen.exe - 1024 KB wow.exe - 1024 KB
3 C:\Documents\01. problems.docx;6521 D:\Documents\02. Documents\ presentation.pptx;44234 E:\Movies\Classics\someclassicmovie.avi;6221235212 docx in E:	No