F: Find Secrets.txt

Your organization, the Hacker Service Protection Coalition (HSPC), has recently hacked into a server from a rival foreign intelligence agency. You know that the server contains a critical file named secrets.txt with info on the agency's next big operation. Given a directory tree of all of the files on the enemy server, your task is to write a program that will find the path to the file secrets.txt.

Input

The first line in the test data file contains the number of lines n in the input. Each of the following n lines will consist of either:

- 1. A string of length l consisting of alphanumeric characters and ending with a l character, representing a directory in the server.
- 2. A string of length l consisting of an alphanumeric file name, a . character, and an alphanumeric file extension, representing a file in the server.

Each line will be indented using a number of - (dash) characters d to represent the depth of the file or directory in the server.

The input will follow 0 < n < 200,000, 0 < l < 100, and 0 < d < 100. Within a directory, you may assume there will be no duplicate names for files or subdirectories. However, there may be multiple directories or files with the same name but in different parent directories.

Output

Output the path to the file secrets.txt in the server. Start from the root directory /, followed a number of directories separated by a / character, and ending with the file name secrets.txt.

You may assume that there is only one file named secrets.txt in the server, and that it will always be found in the input.

Sample Input

```
7
home/
- dir1/
-- file1.txt
-- document.pdf
- dir2/
-- secrets.txt
- file2.png
```

Sample Output

/home/dir2/secrets.txt