Problem 3: The Great Dirtator

In a UNIX file system, directory *s* is a subdirectory of parent directory *p* if the all the characters of *p* (including an implicit terminating trailing slash), form a proper prefix of *s* (again, including an implicit terminating trailing slash). For example, `/home/user/Documents` and `/home/user/Documents/MUN` are both subdirectories of `/home/user`, but `/root`, `/home/user2`, `/home/use` and `/home/user` are not (note that a directory is not a subdirectory of itself and that valid subdirectories include all immediate and descendant subdirectories of the parent). Furthermore, case is significant, so `/home/USER/subdir` is not a subdirectory of `/home/user`.

Write a program which, given a list of (imaginary) directories in a Unix file system, determines which directories are subdirectories of a specified parent directory; if there are no subdirectories in the list, then display an appropriate message. The first line of the input contains the parent directory and the remaining lines contain the directory names to test against this parent directory. All of the directories in the input will be absolute (*i.e.*, start with /) and will not contain trailing whitespace; however, not all the directory names will necessarily end in slashes — you must add them manually, if necessary. You may assume that none of the directories contain any current (.), parent (..) or home directory (˜) components, or consecutive slashes. All directories displayed by your program may have the terminating /, if desired, even if they didn't have a terminating slash in the input.

Sample input #1 (available as file "test3a.dat"):

```
/home/user
/home/user/Documents
/home/user/Documents/MUN/
/root
/home/user2
/home/use
/home/user
```

Sample output #1:

```
Parent directory:
/home/user/
Subdirectories:
/home/user/Documents/
/home/user/Documents/MUN/
```

Sample input #2 (available as file "test3b.dat"):

```
/home/john
/home/john/homework/
/home/beth/homework/
/home/james/homework/
/home/allison/homework/
/home/john/comp/2742
/home/john/kde/AppStart/
/home/johndoe/homework/
```

Sample output #2:

```
Parent directory:
/home/john/
Subdirectories:
/home/john/homework/
/home/john/comp/2742/
/home/john/kde/AppStart/
```

Sample input #3 (available as file "test3c.dat"):

```
/users/cs/grad
/users/cs/faculty/
/users/cs/alumni/
/users/cs/misc/
```

Sample output #3:

```
Parent directory:
/users/cs/grad/
No subdirectories.
```