Jutge.org

The Virtual Learning Environment for Computer Programming

Filesystem P38763_en

Disetè Concurs de Programació de la UPC - Semifinal (2019-06-19)

Your computer filesystem is a tree with several directories. Initially, you only have the root directory "/". A filepath describes a path from "/" to a directory, using slashes to separate directories. For instance, "/": only the root; "/dev/": "dev" inside the root; "/pictures/travel/porto/": "porto" inside "travel" inside "pictures" inside the root.

You have three commands to change the filesystem:

- make *filepath*: Creates the minimum number of directories to make *filepath* valid.
- erase *filepath*: Removes the directory described by *filepath* and all its content. You can assume that *filepath* always exists.
- move *src dst*: Moves the directory *src* and all its content inside the directory *dst*. You can assume that *src* and *dst* exist, that *src* and *dst* are different, and that *dst* is not a subdirectory of *src*.

Additionally, assume that the root will never be moved nor removed. But you can make /.

Given a list of commands, print the whole filesystem with an indented tree as shown in the sample outputs. List the children of every directory in alphabetical order.

Input

Input consists of between 1 and a few thousand commands. The directory names consist of between 1 and 8 lowercase letters. Every command will create a small number of new directories, if any. At every moment, the tree will not be "too large" nor "too high".

Output

After every command, print a line with 20 dashes followed by the filesystem tree.

Sample input 1

```
make /dev/null/
make /dev/
make /dev/null/
move /dev/null/ /dev/
```

Sample output 1

Sample input 2

```
make /photos/travel/
make /test/a/b/z/
make /test/a/z/z/
move /photos/travel/ /test/a/b/
make /test/d/h/
erase /test/d/h/
erase /test/
move /photos/ /
```

Sample output 2

```
photos
travel
photos
travel
test
 b
z
photos
 travel
test
  Z
Z
photos
test
  b
    travel
    Z
photos
test
  b
  travel
z
  Z
  h
photos
test
  b
   travel
z
 d
photos
photos
```

Problem information

Author: Albert Martínez

Generation: 2024-04-30 20:52:22

© *Jutge.org*, 2006–2024. https://jutge.org