Write a program **simulating** a "cd" Unix command that changes a current directory in an abstract file system. The simulated command takes two path strings from the command line and prints either a new path or an error.

The first path is a current directory. The second path is a new directory. To make it simple let's assume that a directory name can only contain alphanumeric characters. A single dot (".") indicates a current directory, and the two dots ("..") indicate a step to a previous directory, up from the current one. A single forward slash "/" indicates a root directory. Multiple consecutive slashes are treated as equivalent to a single one.

The program needs to check that the new directory path is valid without relying on any OS system call such as chdir() for verification, to construct a new path, and print it out. Since it is a simulator, it should be OS-independent.

Use C/C++/C#/Python/Java/Javascript or any other language you feel comfortable with. Automated unit tests are a plus.

Examples ('#' is a shell prompt in Unix):

```
# mycd  /   abc
/abc


# mycd /abc/def    ghi
/abc/def/ghi


# mycd /abc/def   ..
/abc


# mycd /abc/def   /abc
/abc
```

```
# mycd /abc/def   /abc/klm
/abc/klm


# mycd /abc/def    ../..
/


# mycd /abc/def    ../../..
/


# mycd /abc/def  .
/abc/def


# mycd /abc/def   ..klm
..klm: No such file or directory


# mycd /abc/def    //////
/


# mycd /abc/def   ......
......: No such file or directory


# mycd /abc/def    ../gh///../klm/.
/abc/klm
```