

Problem I. Inclination

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Input file: input.txt

Output file: output.txt

Time limit: 1 sec

Memory limit: 256 Mb

Statement

A professor of Fences, Entrances and Frames University has developed a new Fence Inclination theory. According to that theory, a fence is modeled as a sequence of planks. Every plank is either slanted right, represented by character / (ASCII 47), or left, represented by character \ (ASCII 92). For example, a fence of three right-slanted planks followed by two left-slanted planks would be represented by string ///\.

Fence Inclination theory predicts that plank slants change in steps.

On a single step, the fence is first subdivided into a minimal possible number of *plank groups*. Each group consists of $R \geq 0$ right-slanted planks followed by $L \geq 0$ left-slanted planks. In the sample 1 below an initial state is subdivided into 3 groups, while in the sample 2 — into 4 groups.

Next, for every group: if $R > L$, all planks in the group become right-slanted, if $R < L$, all planks in the group become left-slanted, if $R = L$, plank of the group remain unchanged. So after the first step the fence in sample 1 will change into the state /////\.

Steps are repeated until the fence state stops changing.

Your program must, given the the initial fence state, output its final state after the changes stop.

Input file format

Input file contains a single string of / and \ characters — representation of the initial fence state.

Output file format

Output file must contain a single string of / and \ characters — representation of the final fence state.

Constraints

The length of the input string is between 1 and 1001 characters.

Sample tests

No.	Input file (input.txt)	Output file (output.txt)
1	///\	/////
2	\	\\

0.029s 0.008s 9