Find regular bracket subsequences

Cost: 5 | Solved: 48

Memory limit: 256 MBs

Time limit: 1 s

Input: input.txt

Output: output.txt

Task:

You are given a set of strings separated with line feed characters.

Find all their regular bracket subsequences.

A regular bracket sequence is a bracket sequence defined by the following rules:

   1) *ε (an empty string) is a regular bracket sequence;*

   2) *Let **S** be a regular bracket sequence, then **(S)** and **{S}** are also regular bracket sequences;*

   3) *Let **S1** and **S2** be regular bracket sequences, then **S1S2** is also a regular bracket sequence;*

Input:

A set of strings separated with line feed characters.

Output:

All the longest correct substrings in the order in which they appear in the text, separating each with a line feed character.

Example:

Input	Output

(()())	(()())
(()}())	()