You are given a string s that consists of lower case English letters and brackets.

Reverse the strings in each pair of matching parentheses, starting from the innermost one.

Your result should **not** contain any brackets.

**Example 1:**

Input: s = "(abcd)"  
Output: "dcba"

**Example 2:**

Input: s = "(u(love)i)"  
Output: "iloveu"  
Explanation: The substring "love" is reversed first, then the whole string is reversed.

**Example 3:**

Input: s = "(ed(et(oc))el)"  
Output: "leetcode"  
Explanation: First, we reverse the substring "oc", then "etco", and finally, the whole string.

**Constraints:**

* 1 <= s.length <= 2000
* s only contains lower case English characters and parentheses.
* It is guaranteed that all parentheses are balanced.