Super Reduced String



Shil has a string, S, consisting of N lowercase English letters. In one operation, he can delete any *pair of adjacent letters* with same value. For example, string "aabcc" would become either "aab" or "bcc" after 1 operation.

Shil wants to reduce S as much as possible. To do this, he will repeat the above operation as many times as it can be performed. Help Shil out by finding and printing S's non-reducible form!

Note: If the final string is empty, print **Empty String**.

Input Format

A single string, S.

Constraints

• 1 < N < 100

Output Format

If the final string is empty, print **Empty String**; otherwise, print the final non-reducible string.

Sample Input 0

aaabccddd

Sample Output 0

Sample Input 1

baab

abd

Sample Output 1

Empty String

Sample Input 2

aa

Sample Output 2

Empty String

Explanation

Sample Case 0:

Shil can perform the following sequence of operations to get the final string:

- 1. $aaabccddd \rightarrow abccddd$
- 2. $abccddd \rightarrow abddd$
- 3. $\mathbf{abddd} \to \mathbf{abd}$

Thus, we print **abd**.

Sample Case 1:

Shil can perform the following sequence of operations to get the final string:

- 1. $baab \rightarrow bb$
- 2. $bb \rightarrow Empty String$