

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

- $1 \leq N \leq 100$

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

abd

Sample Input 1

baab

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** → **abccddd**
2. **abccddd** → **abddd**
3. **abddd** → **abd**

Thus, we print **abd**.

Sample Case 1:

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

1. **baab** → **bb**
2. **bb** → **Empty String**