Super Reduced String



Steve has a string, s, consisting of n lowercase English alphabetic letters. In one operation, he can delete any *pair of adjacent letters* with same value. For example, string " <code>aabcc</code> " would become either " <code>aab</code> " or " <code>bcc</code>" after 1 operation.

Steve 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 Steve 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

• $1 \le n \le 100$

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 Case 0

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

- aaabccddd → abccddd
- 2. abccddd → abddd
- 3. $abddd \rightarrow abd$

Thus, we print abd.

Sample Input 1

baab

Sample Output 1

Empty String

Explanation 1

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

1. baab → bb

2. bb → Empty String

Thus, we print **Empty String**.

Sample Input 2

aa

Sample Output 2

Empty String

Explanation 2

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

1. aa → Empty String

Thus, we print **Empty String**.