Given a string s, a *k* *duplicate removal* consists of choosing k adjacent and equal letters from s and removing them causing the left and the right side of the deleted substring to concatenate together.

We repeatedly make k duplicate removals on s until we no longer can.

Return the final string after all such duplicate removals have been made.

It is guaranteed that the answer is unique.

**Example 1:**

**Input:** s = "abcd", k = 2

**Output:** "abcd"

**Explanation:** There's nothing to delete.

**Example 2:**

**Input:** s = "deeedbbcccbdaa", k = 3

**Output:** "aa"

**Explanation:**

First delete "eee" and "ccc", get "ddbbbdaa"

Then delete "bbb", get "dddaa"

Finally delete "ddd", get "aa"

**Example 3:**

**Input:** s = "pbbcggttciiippooaais", k = 2

**Output:** "ps"