Given a string s, remove duplicate letters so that every letter appears once and only once. You must make sure your result is **the smallest in lexicographical order** among all possible results.

**Note:** This question is the same as 1081: <https://leetcode.com/problems/smallest-subsequence-of-distinct-characters/>

**Example 1:**

**Input:** s = "bcabc"

**Output:** "abc"

**Example 2:**

**Input:** s = "cbacdcbc"

**Output:** "acdb"

**Constraints:**

* 1 <= s.length <= 104
* s consists of lowercase English letters.