Problem 3170: Lexicographically Minimum String After Removing Stars

Problem Information

Difficulty: Medium
Acceptance Rate: 50.94%
Paid Only: No
Tags: Hash Table, String, Stack, Greedy, Heap (Priority Queue)

Problem Description

You are given a string `s`. It may contain any number of `'*'` characters. Your task is to remove all `'*'` characters.

While there is a `'*'`, do the following operation:

* Delete the leftmost `'*'` and the **smallest** non-`'*'` character to its _left_. If there are several smallest characters, you can delete any of them.

Return the lexicographically smallest resulting string after removing all `'*'` characters.

Example 1:

Input: s = "aaba*"

Output: "aab"

Explanation:

We should delete one of the `'a'` characters with `'*'`. If we choose `s[3]`, `s` becomes the lexicographically smallest.

Example 2:

Input: s = "abc"

Output: "abc"

Explanation:

There is no `'*'` in the string.

Constraints:

* `1 <= s.length <= 105` * `s` consists only of lowercase English letters and `'*'`. * The input is generated such that it is possible to delete all `'*'` characters.

Code Snippets

C++:

```
class Solution {
public:
string clearStars(string s) {

}
};
```

Java:

```
class Solution {
public String clearStars(String s) {

}
}
```

Python3:

```
class Solution:
def clearStars(self, s: str) -> str:
```