Discuss(/discuss/) (/) Explore Problems(/problemset/all/) Mock(/interview/) Contest



Difficulty:





0

0

0

0

(Medium)

## 5674. Largest Merge Of Two Strings

My Submissions (/contest/weekly-contest-227/problems/largest-merge-of-two-strings/submissions/) Back to Contest (/contest/weekly-contest-227/) You are given two strings word1 and word2. You want to construct a string merge in the following way: while either User Accepted: word1 or word2 are non-empty, choose one of the following options: User Tried: • If word1 is non-empty, append the first character in word1 to merge and delete it from word1. o For example, if word1 = "abc" and merge = "dv", then after choosing this operation, word1 = "bc" and Total Accepted: merge = "dva". • If word2 is non-empty, append the first character in word2 to merge and delete it from word2. **Total Submissions:** ∘ For example, if word2 = "abc" and merge = "", then after choosing this operation, word2 = "bc" and

Return the lexicographically largest merge you can construct.

A string a is lexicographically larger than a string b (of the same length) if in the first position where a and b differ, a has a character strictly larger than the corresponding character in b . For example, "abcd" is lexicographically larger than "abcc" because the first position they differ is at the fourth character, and d is greater than c.

## Example 1:

```
Input: word1 = "cabaa", word2 = "bcaaa"
Output: "cbcabaaaaa"
Explanation: One way to get the lexicographically largest merge is:
- Take from word1: merge = "c", word1 = "abaa", word2 = "bcaaa"
- Take from word2: merge = "cb", word1 = "abaa", word2 = "caaa"
- Take from word2: merge = "cbc", word1 = "abaa", word2 = "aaa"
- Take from word1: merge = "cbca", word1 = "baa", word2 = "aaa"
- Take from word1: merge = "cbcab", word1 = "aa", word2 = "aaa"
- Append the remaining 5 a's from word1 and word2 at the end of merge.
```

## Example 2:

```
Input: word1 = "abcabc", word2 = "abdcaba"
Output: "abdcabcabcaba"
```

## Constraints:

- 1 <= word1.length, word2.length <= 3000
- word1 and word2 consist only of lowercase English letters.

```
JavaScript
                                                                                                                                     \mathfrak{C}
1 • /**
 2
     * @param {string} word1
     * @param {string} word2
 3
     * @return {string}
 4
 5
 6 var largestMerge = function(word1, word2) {
 8
   };
```