

# Problem 3403: Find the Lexicographically Largest String From the Box I

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 40.94%

**Paid Only:** No

**Tags:** Two Pointers, String, Enumeration

## Problem Description

You are given a string `word`, and an integer `numFriends`.

Alice is organizing a game for her `numFriends` friends. There are multiple rounds in the game, where in each round:

- \* `word` is split into `numFriends` **non-empty** strings, such that no previous round has had the **exact** same split.
- \* All the split words are put into a box.

Find the lexicographically largest string from the box after all the rounds are finished.

**Example 1:**

**Input:** `word = "dbca", numFriends = 2`

**Output:** `"dbc"`

**Explanation:**

All possible splits are:

- \* `"d"` and `"bca"`.
- \* `"db"` and `"ca"`.
- \* `"dbc"` and `"a"`.

**Example 2:**

**\*\*Input:\*\*** word = "gggg", numFriends = 4

**\*\*Output:\*\*** "g"

**\*\*Explanation:\*\***

The only possible split is: "g", "g", "g", and "g".

**\*\*Constraints:\*\***

\* `1 <= word.length <= 5 \* 103` \* `word` consists only of lowercase English letters. \* `1 <= numFriends <= word.length`

## Code Snippets

### C++:

```
class Solution {
public:
    string answerString(string word, int numFriends) {

    }
};
```

### Java:

```
class Solution {
    public String answerString(String word, int numFriends) {

    }
}
```

### Python3:

```
class Solution:
    def answerString(self, word: str, numFriends: int) -> str:
```