Reorganize String

Try to solve the Reorganize String problem.

We'll cover the following

Statement

Given a string, `str`, rearrange it so that any two adjacent characters are not the same. If such a reorganization of the characters is possible, output any possible valid arrangement. Otherwise, return an empty string.

Constraints:

- $1 \leq$ `str.length` ≤ 500
- Input string consists of lowercase English letters.

Examples

Sample Example 1

Input

Input string	"aaabc"

Output

The below output is just one valid reorganization of the string.

output	"abaca"

The other valid reorganization is "acaba".

Understand the problem

Let’s take a moment to make sure you’ve correctly understood the problem. The quiz below helps you check that if you’re solving the correct problem:

Reorganize String

1 What is the output if the following string is given as input?

“programming”

(Select all that apply.)

- [ ] A) “programing”
- [ ] B) “rgmrgmpiano”
- [ ] C) “rmpimrggano”

D) “programimng”

Submit Answer

Question 1 of 3
0 attempted

Reset Quiz

Figure it out!

We have a game for you to play. Rearrange the logical building blocks to develop a clearer understanding of how to solve this problem.

Drag and drop the cards to rearrange them in the correct sequence.

Store each character and its frequency in a hash map.

Construct a max-heap using the character frequency data, so that the most frequently occurring character is at the root of the heap.

Iterate over the heap and in each iteration, pop the most frequently occurring character and append it to the result string.

Decrement the frequency of the popped character (since we have consumed one occurrence of it).

Push the popped character back onto the heap in the next iteration if the updated frequency is greater than 0.

Return the result string when the heap becomes empty.

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Implement your solution in the following coding playground:

Java

usercode > main.java

```java
import java.util.*;
public class Main{
    public static String reorganizeString(String string1) {

        // Write your code here

        return "";
    }
}
```

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Submit

Test Cases | Results

Case 1 | Case 2 | Case 3

Input #1

"abb"

Reorganize String

Back

Solution: Kth Largest ...

Next

Solution: Reorganize S...

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