383 Ransom Note

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Question:

Given an arbitrary ransom note string and another string containing letters from all the magazines, write a function that will return true if the ransom note can be constructed from the magazines ; otherwise, it will return false.

Each letter in the magazine string can only be used once in your ransom note.

Note:

You may assume that both strings contain only lowercase letters.

canConstruct("a", "b") -> false

canConstruct("aa", "ab") -> false

canConstruct("aa", "aab") -> true

来自 <https://leetcode.com/problems/ransom-note/description/>

给定一个赎金信 (ransom) 字符串和一个杂志(magazine)字符串，判断第一个字符串ransom能不能由第二个字符串magazines里面的字符构成。如果可以构成，返回 true ； 否则返回 false。

(题目说明：为了不暴露赎金信字迹，要从杂志上搜索各个需要的字母，组成单词来表达意思。)

注意:

你可以假设两个字符串均只含有小写字母。

canConstruct("a", "b") -> false

canConstruct("aa", "ab") -> false

canConstruct("aa", "aab") -> true

Solution for Python3:

```python
class Solution1(object):
    def canConstruct(self, ransomNote, magazine):
        """
        :type ransomNote: str
        :type magazine: str
        :rtype: bool
        """
        from collections import Counter
        return Counter(ransomNote) == (Counter(ransomNote) & Counter(magazine))

class Solution2(object):
    def canConstruct(self, ransomNote, magazine):
        """
        :type ransomNote: str
        :type magazine: str
        :rtype: bool
        """
        from collections import Counter
        return not Counter(ransomNote) - Counter(magazine)
```

Solution for C++:

```cpp
class Solution {
public:
    bool canConstruct(string ransomNote, string magazine) {
        int array[26] = {0};
```

```
        for (char i : magazine) {
            array[i - 'a']++;
        }
        for (char i : ransomNote) {
            if (--array[i - 'a'] < 0)
                return false
        }
        return true;
    }
};
```