

# Problem 1297: Maximum Number of Occurrences of a Substring

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 54.02%

**Paid Only:** No

**Tags:** Hash Table, String, Sliding Window

## Problem Description

Given a string `s`, return the maximum number of occurrences of **any** substring under the following rules:

- \* The number of unique characters in the substring must be less than or equal to `maxLetters`.
- \* The substring size must be between `minSize` and `maxSize` inclusive.

**Example 1:**

**Input:** s = "aababcaab", maxLetters = 2, minSize = 3, maxSize = 4 **Output:** 2

**Explanation:** Substring "aab" has 2 occurrences in the original string. It satisfies the conditions, 2 unique letters and size 3 (between minSize and maxSize).

**Example 2:**

**Input:** s = "aaaa", maxLetters = 1, minSize = 3, maxSize = 3 **Output:** 2 **Explanation:**

Substring "aaa" occur 2 times in the string. It can overlap.

**Constraints:**

\* `1 <= s.length <= 105` \* `1 <= maxLetters <= 26` \* `1 <= minSize <= maxSize <= min(26, s.length)` \* `s` consists of only lowercase English letters.

## Code Snippets

**C++:**

```
class Solution {  
public:  
    int maxFreq(string s, int maxLetters, int minSize, int maxSize) {  
        }  
    };
```

**Java:**

```
class Solution {  
public int maxFreq(String s, int maxLetters, int minSize, int maxSize) {  
    }  
}
```

**Python3:**

```
class Solution:  
    def maxFreq(self, s: str, maxLetters: int, minSize: int, maxSize: int) ->  
        int:
```