

5682. Sum of Beauty of All Substrings

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The **beauty** of a string is the difference in frequencies between the most frequent and least frequent characters.

- For example, the beauty of "abaacc" is $3 - 1 = 2$.
- Given a string s , return the sum of **beauty** of all of its substrings.

Example 1:

Input: $s = \text{"aabcb"}$
Output: 5
Explanation: The substrings with non-zero beauty are ["aab","abc","aabcb","abcb","bcb"], each with beauty 2.

Example 2:

Input: $s = \text{"aabcbaa"}$
Output: 17

Constraints:

- $1 \leq s.length \leq 500$
- s consists of only lowercase English letters.

JavaScript

kb

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```
1 /**
2  * @param {string} s
3  * @return {number}
4  */
5 const AASCII = 'a'.charCodeAt();
6 const beautySum = (s) => {
7     let n = s.length;
8     let res = 0;
9     for (let i = 0; i < n; i++) {
10         let f = Array(26).fill(0);
11         for (let j = i; j < n; j++) {
12             f[s[j].charCodeAt() - AASCII]++;
13             let max = 0;
14             let min = Number.MAX_SAFE_INTEGER;
15             for (const occ of f) {
16                 if (occ == 0) continue;
17                 max = Math.max(max, occ);
18                 min = Math.min(min, occ);
19             }
20             let diff = max - min;
21             if (diff == 0) continue;
22             res += diff;
23         }
24     }
25     return res;
26 };
```

☐ Custom Testcase

Use Example Testcases

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