

# Problem 3442: Maximum Difference Between Even and Odd Frequency I

## Problem Information

**Difficulty:** Easy

**Acceptance Rate:** 60.82%

**Paid Only:** No

**Tags:** Hash Table, String, Counting

## Problem Description

You are given a string `s` consisting of lowercase English letters.

Your task is to find the **maximum** difference  $\text{diff} = \text{freq}(a_1) - \text{freq}(a_2)$  between the frequency of characters `a1` and `a2` in the string such that:

\* `a1` has an **odd frequency** in the string. \* `a2` has an **even frequency** in the string.

Return this **maximum** difference.

**Example 1:**

**Input:** s = "aaaaabbc"

**Output:** 3

**Explanation:**

\* The character `a` has an **odd frequency** of `5`, and `b` has an **even frequency** of `2`. \* The maximum difference is `5 - 2 = 3`.

**Example 2:**

**Input:** s = "abcabcaab"

**\*\*Output:\*\*** 1

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

- \* The character `'a` has an **odd frequency** of `3`, and `'c` has an **even frequency** of 2. \*
- The maximum difference is `3 - 2 = 1`.

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

- \*  $3 \leq s.length \leq 100$
- \* `s` consists only of lowercase English letters.
- \* `s` contains at least one character with an odd frequency and one with an even frequency.

## Code Snippets

**C++:**

```
class Solution {
public:
    int maxDifference(string s) {

    }
};
```

**Java:**

```
class Solution {
    public int maxDifference(String s) {

    }
}
```

**Python3:**

```
class Solution:
    def maxDifference(self, s: str) -> int:
```