

## 5840. Minimum Number of Swaps to Make the String Balanced

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You are given a **0-indexed** string  $s$  of **even** length  $n$ . The string consists of **exactly**  $n / 2$  opening brackets '[' and  $n / 2$  closing brackets ']'.

A string is called **balanced** if and only if:

- It is the empty string, or
- It can be written as  $AB$ , where both  $A$  and  $B$  are **balanced** strings, or
- It can be written as  $[C]$ , where  $C$  is a **balanced** string.

You may swap the brackets at **any** two indices **any** number of times.

Return the **minimum** number of swaps to make  $s$  **balanced**.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

## Example 1:

**Input:**  $s = "]][["$

**Output:** 1

**Explanation:** You can make the string balanced by swapping index 0 with index 3. The resulting string is "[[]]".

## Example 2:

**Input:**  $s = "]]][[["$

**Output:** 2

**Explanation:** You can do the following to make the string balanced:

- Swap index 0 with index 4.  $s = "[[]][["$ .
- Swap index 1 with index 5.  $s = "[[]][]"$ .

The resulting string is "[[]][]".

## Example 3:

**Input:**  $s = "[[]]"$

**Output:** 0

**Explanation:** The string is already balanced.

## Constraints:

- $n == s.length$
- $2 \leq n \leq 10^6$
- $n$  is even.
- $s[i]$  is either '[' or ']'.
- The number of opening brackets '[' equals  $n / 2$ , and the number of closing brackets ']' equals  $n / 2$ .

JavaScript



```
1 const minSwaps = (s) => {
2   let n = s.length;
3   let inversions = open = 0;
4   for (let i = 0; i < n; i++) {
5     if (s[i] == '[') {
```

```
6         open++;
7     } else {
8         if (open) {
9             open--;
10        } else {
11            inversions++;
12            open = 1;
13        }
14    }
15 }
16 return (inversions + (open >> 1)) >> 1;
17 };
```

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