# 1003. Check If Word Is Valid After Substitutions

# Description

Given a string s, determine if it is valid.

A string s is valid if, starting with an empty string t = "", you can transform t into s after performing the following operation any number of times:

• Insert string "abc" into any position in t. More formally, t becomes  $t_{left} + t_{left}$ , where  $t_{left} + t_{left}$ . Note that  $t_{left}$  and  $t_{right}$  may be **empty**.

Return true if s is a valid string, otherwise, return false.

#### **Example 1:**

```
Input: s = "aabcbc"
Output: true
Explanation:
"" -> " abc" -> "a abc bc"
Thus, "aabcbc" is valid.
```

#### Example 2:

```
Input: s = "abcabcababcc"
Output: true
Explanation:
"" -> "abc" -> "abc abc" -> "abcabc abc" -> "abcabcab abc c"
Thus, "abcabcababcc" is valid.
```

## Example 3:

```
Input: s = "abccba"
Output: false
Explanation: It is impossible to get "abccba" using the operation.
```

## **Constraints:**

- 1 <= s.length <= 2 \* 10 4
- s consists of letters 'a', 'b', and 'c'