

Problem 125: Valid Palindrome

Problem Information

Difficulty: Easy

Acceptance Rate: 52.14%

Paid Only: No

Tags: Two Pointers, String

Problem Description

A phrase is a **palindrome** if, after converting all uppercase letters into lowercase letters and removing all non-alphanumeric characters, it reads the same forward and backward. Alphanumeric characters include letters and numbers.

Given a string `s`, return `true` if it is a **palindrome**, or `false` otherwise.

Example 1:

Input: `s = "A man, a plan, a canal: Panama"` **Output:** `true` **Explanation:** `"amanaplanacanalpanama"` is a palindrome.

Example 2:

Input: `s = "race a car"` **Output:** `false` **Explanation:** `"raceacar"` is not a palindrome.

Example 3:

Input: `s = ""` **Output:** `true` **Explanation:** `s` is an empty string `""` after removing non-alphanumeric characters. Since an empty string reads the same forward and backward, it is a palindrome.

Constraints:

`1 <= s.length <= 2 * 105` `s` consists only of printable ASCII characters.

Code Snippets

C++:

```
class Solution {  
public:  
    bool isPalindrome(string s) {  
  
    }  
};
```

Java:

```
class Solution {  
    public boolean isPalindrome(String s) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def isPalindrome(self, s: str) -> bool:
```