


744. Find Smallest Letter Greater Than Target

Solved 

Easy

Topics

Companies

Hint

You are given an array of characters `letters` that is sorted in **non-decreasing order**, and a character `target`. There are **at least two different** characters in `letters`.

Return the *smallest character in `letters` that is lexicographically greater than `target`*. If such a character does not exist, return the first character in `letters`.

Example 1:

Input: `letters = ["c","f","j"], target = "a"`

Output: `"c"`

Explanation: The smallest character that is lexicographically greater than 'a' in letters is 'c'.

Example 2:

Input: `letters = ["c","f","j"], target = "c"`

Output: `"f"`

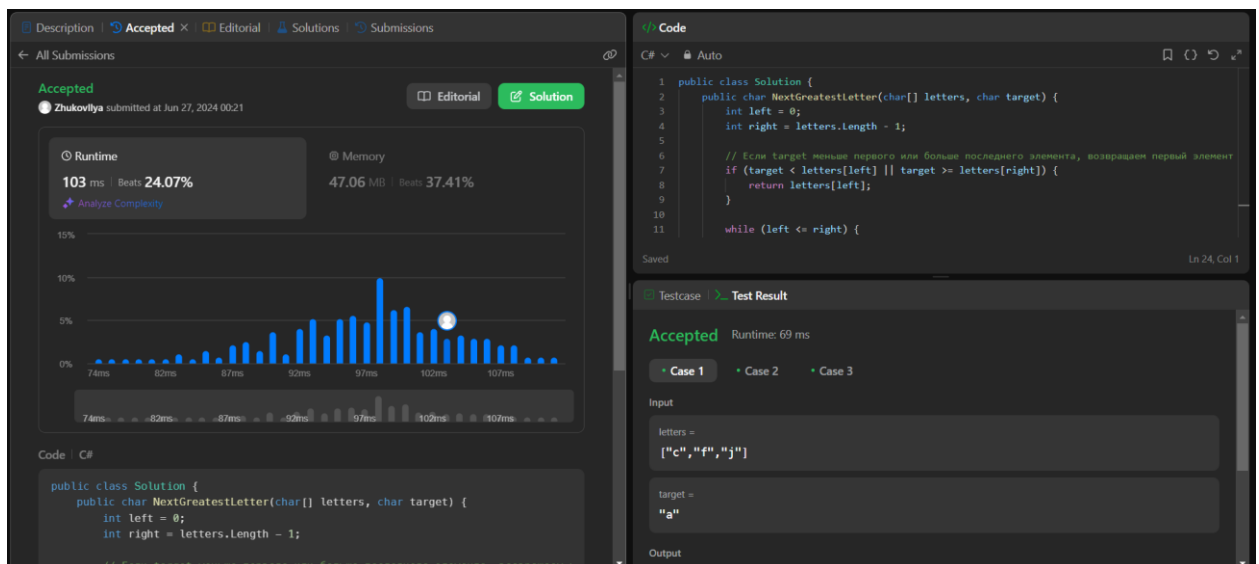
Explanation: The smallest character that is lexicographically greater than 'c' in letters is 'f'.

Example 3:

Input: `letters = ["x","x","y","y"], target = "z"`

Output: `"x"`

Explanation: There are no characters in letters that is lexicographically greater



The screenshot displays a code editor interface for a C# solution. The left sidebar shows the submission status as 'Accepted' with a runtime of 103 ms (Beats 24.07%) and memory usage of 47.06 MB (Beats 37.41%). The main editor shows the following C# code:

```
public class Solution {
    public char NextGreatestLetter(char[] letters, char target) {
        int left = 0;
        int right = letters.Length - 1;

        // Если target меньше первого или больше последнего элемента, возвращаем первый элемент
        if (target < letters[left] || target >= letters[right]) {
            return letters[left];
        }

        while (left <= right) {

```

The right sidebar shows the test results, indicating that the solution is 'Accepted' with a runtime of 69 ms. The test case input is `letters = ["c","f","j"], target = "a"` and the output is `"c"`.

Код:

```
public class Solution
{
    public char NextGreatestLetter(char[] letters, char target)
    {
        int left = 0;
        int right = letters.Length - 1;
```

```

        // Если target меньше первого или больше последнего элемента, возвращаем
        первый элемент
        if (target < letters[left] || target >= letters[right])
        {
            return letters[left];
        }

        while (left <= right)
        {
            int mid = left + (right - left) / 2;
            if (letters[mid] > target)
            {
                right = mid - 1;
            }
            else
            {
                left = mid + 1;
            }
        }

        // left будет указывать на наименьший элемент, который больше target
        return letters[left];
    }
}

```