Problem 744: Find Smallest Letter Greater Than Target

Problem Information

Difficulty: Easy
Acceptance Rate: 54.89%
Paid Only: No
Tags: Array, Binary Search

Problem Description

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 than 'z' so we return letters[0].

Constraints:

* `2 <= letters.length <= 104` * `letters[i]` is a lowercase English letter. * `letters` is sorted in **non-decreasing** order. * `letters` contains at least two different characters. * `target` is a lowercase English letter.

Code Snippets

C++:

```
class Solution {
public:
char nextGreatestLetter(vector<char>& letters, char target) {

}
};
```

Java:

```
class Solution {
public char nextGreatestLetter(char[] letters, char target) {

}
}
```

Python3:

```
class Solution:
def nextGreatestLetter(self, letters: List[str], target: str) -> str:
```