**744. Find Smallest Letter Greater Than Target :-**

Easy Accepted: 322.3K Submissions: 677.1K Acceptance Rate: 47.6%

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 :-**

class Solution {

public:

    char nextGreatestLetter(vector<char>& arr, char target) {

        int ind = upper\_bound(arr.begin(), arr.end(), target) - arr.begin();

        if(ind==arr.size())

            return arr[0];

        return arr[ind];

    }

};

**T.C :- O(n)**

**S.C :- O(1)**