1056. Find Smallest Letter Greater Than Target

Given a list of sorted characters letters containing only lowercase letters, and given a target letter target, find the smallest element in the list that is larger than the given target.

Letters also wrap around. For example, if the target is target = 'z' and letters = ['a', 'b'], the answer is 'a'.

Example

Input:

letters = ["c", "f", "j"]

target = "a"

Output: "c"

Input:

letters = ["c", "f", "j"]

target = "c"

Output: "f"

Input:

letters = ["c", "f", "j"]

target = "d"

Output: "f"

Input:

letters = ["c", "f", "j"]

target = "g"

Output: "j"

Input:

letters = ["c", "f", "j"]

target = "j"

Output: "c"

Input:

letters = ["c", "f", "j"]

target = "k"

Output: "c"

Notice

1.letters has a length in range [2, 10000].  
2.letters consists of lowercase letters, and contains at least 2 unique letters.  
3.target is a lowercase letter.

<https://www.lintcode.com/problem/find-smallest-letter-greater-than-target/description>

#include <iostream>

#include <stdio.h>

#include <map>

#include <vector>

#include <set>

using namespace std;

char nextGreatestLetter(string &letters, char target) {

// Write your code here

set<char> s;

for(int i = 0; i < letters.size(); i++) {

s.insert(letters[i]);

}

s.insert(target);

char arr\_sorted[s.size()]; //= hash.ToArray();

int ind = 0;

for(std::set<char>::iterator it = s.begin(); it != s.end(); it++) {

arr\_sorted[ind] = \*it;

ind++;

}

int ind\_target = -1; // Array.IndexOf(arr\_sorted, target);

for(int i =0; i<s.size(); i++) {

if(arr\_sorted[i] == target) {

ind\_target = i;

break;

}

}

return arr\_sorted[ind\_target + 1];

}

int main() {

return 0;

}