

HW_First Unique Character in a String

You are given a **string s**, find the **first non-repeating character** in it and return its **index**. If it does not exist, return **-1**.

NOTE :- After answering the question, attempt the related question in the linked resource to improve your understanding of the question . Question Link -> <https://leetcode.com/problems/first-unique-character-in-a-string>

Input Format

- A String

Constraints

- 1 <= s.length <= 10^5
- s consists of only lowercase English letters.

Output Format

- An Integer Value

Sample Input 0

geekugeek

Sample Output 0

4

geek u g e e k
4

Sample Input 1

geekuhgfdртеugeek

Sample Output 1

5

Sample Input 2

> geekuhgfdртеugeekgeekuhgfdртеugeekja

Sample Output 2

34
SSAABDDCC
-1

Submitted Code

```
Language: Java 8
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner sc = new Scanner(System.in);
8         String str = sc.nextLine();
9         Map<Character ,Integer> hm = new HashMap<>();
10        for(int i=0;i<str.length();i++){
11            char ch = str.charAt(i);
12            hm.put(ch,hm.getOrDefault(ch,0)+1);
13        }
14
15        for(int i=0;i<str.length();i++){
16            char ch = str.charAt(i);
17            if(hm.get(ch)==1){
18                System.out.print(i);
19                return;
20            }
21        }
22        System.out.print(-1);
23    }
24 }
```

HW_Union of two arrays 5

Given two arrays a[] and b[] of size n and m respectively. The task is to find the number of elements union between these two arrays.

Union of the two arrays can be defined as the set containing distinct elements from both the arrays. are repetitions, then only one occurrence of element should be printed in the union.

Input Format

The first Line will integer N representing the Size of Array 1.
The second Line will N integer representing the Element of Array 1.
The first Line will integer M representing the Size of Array 2.
The second Line will M integer representing the Element of Array 2.

Constraints

$1 \leq n \leq 10^5$
 $0 \leq a[i] < 10^5$
 $1 \leq m \leq 10^5$
 $0 \leq b[i] < 10^5$

Output Format

returns the count of union elements of the two arrays.

Output Format

returns the count of union elements of the two arrays.

Sample Input 0

5
1 2 3 4 5
3
1 2 3

Solved: 2
Attempted: 2

ans1
1 2 3 4 5
ans2
1 2 3
1 1 1 1 1
5

Sample Output 0

5

ans1 = 1 2 3 4 5 6 7 8

ans2 = 1 4 6 5 8

[2, 1, 2, 3, 4, 4, 5, 5, 6, 6, 7, 8]
1 1 1 1 1 1 1 1
8

Submitted Code

```
Language: Java 8
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner sc = new Scanner(System.in);
8         int n = sc.nextInt();
9         int [] arr1 = new int[n];
10
11         for(int i=0;i<n;i++)arr1[i]=sc.nextInt();
12
13         int m = sc.nextInt();
14         int [] arr2 = new int[m];
15
16         for(int i=0;i<m;i++)arr2[i]=sc.nextInt();
17         Map<Integer,Integer>hm = new HashMap<>();
18         for(int i=0;i<n;i++)hm.put(arr1[i],hm.getOrDefault(arr1[i],0)+1);
19         for(int i=0;i<m;i++)hm.put(arr2[i],hm.getOrDefault(arr2[i],0)+1);
20
21         System.out.print(hm.size());
22     }
23 }
```

Prefix Calculation