

Hash Agile

Problem Statement

Find the First Non-Repeating Character Write a program to find the first non-repeating character in a string. For input "swiss", the output should be "w". You cannot use any built-in string or character frequency counting functions. Instructions: Implement manual string traversal and counting logic to solve the problem.

Program

Java code:

```
import java.util.*;
class Main {
    public static void main(String args[]) {
        Scanner sc=new Scanner(System.in);
        String str=sc.next();
        char ans=func(str);
        System.out.print(ans);
    }
    public static char func(String str) {
        HashMap<Character,Integer>hm=new HashMap<>();
        for(int i=0; i<str.length(); i++) {
            char a=str.charAt(i);
            hm.putIfAbsent(a,0);
            hm.put(a,hm.get(a)+1);
        }
        for(char i :hm.keySet()) {
            if(hm.get(i)==1) {
                return i;
            }
        }
        return '\0';
    }
}
```

Python code:

```
def func(s):
    sets={}
    for c in s:
        if c not in sets:
```

```
        sets[c]=0
        sets[c]+=1

    for c in s:
        if sets[c]==1:
            return c

    return '\0'
```

```
s=input()
ans=func(s);
print(ans);
```

Testcases:

TestCase 1:

Input: swiss
Output: w

TestCase 2:

Input: aabbvvc
Output: c

TestCase 3:

Input: hashagile
Output: s