

Day 37 coding Statement : Write a Program to calculate the Frequency of characters in a string

Description : Get a string as the input from the user and find the frequency of characters in the string.

Input : program

Output :

The frequency of a is 1

The frequency of g is 1

The frequency of m is 1

The frequency of o is 1

The frequency of p is 1

The frequency of r is 2

Program :

```
package com.talentbattle.codingchallenge;

import java.util.Scanner;

public class Frequency_string {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter a String : ");
        String s = scan.nextLine();
        int[] freq = new int[s.length()];
        int i,j;

        char string[] = s.toCharArray();
        for(i=0;i<s.length();i++)
        {
            freq[i] = 1;
            for(j=i+1;j<s.length();j++)
            {
                if(string[i]==string[j])
                {
                    freq[i]++;
                    string[j] = '0';
                }
            }
        }
        for(i=0;i<freq.length;i++)
        {
```

The screenshot displays an IDE with the following components:

- Project Explorer:** Shows a project structure with a package named `com.talentbattle.codingchallenge`. The file `Frequency_string.java` is selected.
- Editor:** Displays the source code of `Frequency_string.java`. The code is as follows:

```
1 package com.talentbattle.codingchallenge;
2
3 import java.util.Scanner;
4
5 public class Frequency_string {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Scanner scan = new Scanner(System.in);
10        System.out.println("Enter a String : ");
11        String s = scan.nextLine();
12        int[] freq = new int[s.length()];
13        int i,j;
14
15        char string[] = s.toCharArray();
16        for(i=0;i<s.length();i++)
17        {
18            freq[i] = 1;
19            for(j=i+1;j<s.length();j++)
20            {
21                if(string[i]==string[j])
22                {
23                    freq[i]++;
24                    string[j] = '\0';
25                }
26            }
27        }
28        for(i=0;i<freq.length;i++)
29        {
30            if(string[i] != ' ' && string[i] != '\0')
31            {
32                System.out.println("The frequency of " + string[i] + " is " + freq[i]);
33            }
34        }
35    }
36 }
37
38
```
- Console:** Shows the output of the program after execution:

```
<terminated> Frequency_string [Java Application] C
Program
Enter a String :
The frequency of P is 1
The frequency of r is 2
The frequency of o is 1
The frequency of g is 1
The frequency of a is 1
The frequency of m is 1
```