240701495

Week-10- Character Arrays and Strings

Week-10-01-Practice session -Coding

Question **1**
Correct
Marked out of 1.00
Flag question

Given a string, ***s***, consisting of alphabets and digits, find the frequency of each digit in the given string.

Input Format

The first line contains a string, ***num*** which is the given number.

Source Code

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    char str[1000];
    char num[10]= "0123456789"  ;
    scanf("%s",str);
    for(int i=0;i<=9;i++)
    {
       int count =0;
       for(int j=0;str[j]!='\0';j++)
       {
           if(str[j]==num[i])
           {
               count++;
           }

       }
       printf("%d ",count);
    }
    return 0;
}
```

Result

	Input	Expected	Got	
✓	a11472o5t6	0 2 1 0 1 1 1 1 0 0	0 2 1 0 1 1 1 1 0 0	✓
✓	lw4n88j12n1	0 2 1 0 1 0 0 0 2 0	0 2 1 0 1 0 0 0 2 0	✓
✓	1v888861256338ar0ekk	1 1 1 2 0 1 2 0 5 0	1 1 1 2 0 1 2 0 5 0	✓

Passed all tests! ✓

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Question **2**
Correct
Marked out of 1.00
Flag question

Today, Monk went for a walk in a garden. There are many trees in the garden and each tree has an English alphabet on it. While Monk was walking, he noticed that all trees with vowels on it are not in good state. He decided to take care of them. So, he asked you to tell him the count of such trees in the garden.

Note: The following letters are vowels: 'A', 'E', 'I', 'O', 'U', 'a', 'e', 'i', 'o' and 'u'.

Source Code

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
#include<string.h>
int main()
{
    int t;
    scanf("%d",&t);
    while(t--)
    {
        char s[1000];
        int count=0;
        scanf("%s",s);
        for(int i=0;s[i]!='\0';i++)
        {

            if(s[i]=='A'||s[i]=='E'||s[i]=='I'||s[i]=='O'||s[i]=='U'||s[i]=='a'||s[i]=='e'
             s[i]=='u')
             {
                 count++;

             }
        }
        printf("%d\n",count);
    }
    return 0;
}
```

Result

	Input	Expected	Got	
✓	2 nBBZLaosnm JHkIsnZtTL	2 1	2 1	✓
✓	2 nBBZLaosnm JHkIsnZtTL	2 1	2 1	✓

Passed all tests! ✓

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Question 3
Correct
Marked out of 1.00
Flag question

Given a sentence, ***s***, print each word of the sentence in a new line.

Input Format

The first and only line contains a sentence, ***s***.

Source Code

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    char str[1000];
    scanf("%[^\n]%*c",str);
    for(int i=0;str[i]!='\0';i++)
    {
        if(str[i]==' ')
        printf("\n");
        else
        {
            printf("%c",str[i]);
        }
    }
    return 0;
}
```

Result

	Input	Expected	Got	
✓	This is C	This is C	This is C	✓
✓	Learning C is fun	Learning C is fun	Learning C is fun	✓

Passed all tests! ✓

Question 4
Correct
Marked out of 1.00
Flag question

Input Format

You are given two strings, ***a*** and ***b***, separated by a new line. Each string will consist of lower case Latin characters ('a'-'z').

Output Format

In the first line print two space-separated integers, representing the length of ***a*** and ***b*** respectively.

In the second line print the string produced by concatenating ***a*** and ***b*** (***a*** + ***b***).

In the third line print two strings separated by a space, ***a***' and ***b***'. ***a***' and ***b***' are the same as ***a*** and ***b***, respectively, except that their first characters are swapped.

Source Code

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
#include<string.h>
int main()
{
    char str1[1000],str2[1000];
    char temp[100];
    scanf("%s\n %s\n",str1,str2);
    printf("%ld %ld\n",strlen(str1),strlen(str2));
    printf("%s%s\n",str1,str2);
    temp[0]=str1[0];
    str1[0]=str2[0];
    str2[0]=temp[0];
    printf("%s %s",str1,str2);
    return 0;
}
```

Result

	Input	Expected	Got	
✓	abcd ef	4 2 abcdef ebcd af	4 2 abcdef ebcd af	✓

Passed all tests! ✓