Week-10-Character Arrays and Strings

Week-10-01-Practice Session Coding

Question **1**	
Correct	Given a string, **s**, consisting of alphabets and digits, find the frequency of each digit in the given string.

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
#include<string.h>

int main()
{
    char str[1000];
    scanf("%s",str);

    char a[10]="0123456789";
    for(int i=0;i<10;i++)
    {
        int count =0;
        for(int j=0;str[j]!='\0';j++)
        {
            if(a[i] == str[j])
            {
                count++;
            }

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

	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! ✔

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.

Answer: (penalty regime: 0 %)

```c
#include <stdio.h>
#include <string.h>

int main()
{
    int t;
    scanf("%d",&t);
    char vow[11]="AEIOUaeiou";
    for(int i=0;i<t;i++)
    {
        char str[1000];
        scanf("%s",str);

        int count =0;

        for(int m=0;vow[m]!='\0';m++)
        {
            for(int n=0;str[n]!='\0';n++)
            {
                if(vow[m]==str[n])
                {
                    count++;
                }
            }
        }
        printf("%d\n",count);
    }
    return 0;
}
```

	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! ✓

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

Answer: (penalty regime: 0 %)

```c
#include <stdio.h>
#include <string.h>

int main()
{
    char s[1000];
    scanf("%[^\n]s",s);

    for(int i=0;s[i]!='\0';i++)
    {
        if(s[i] == ' ')
        {
            printf("\n");
        }
        else
        {
            printf("%c",s[i]);
        }
    }
    return 0;
}
```

	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! ✓

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').

Answer: (penalty regime: 0 %)

```c
#include <stdio.h>
#include <string.h>

int main()
{
    char s1[1000];
    char s2[1000];
    scanf("%s",s1);
    scanf("%s",s2);

    printf("%ld %ld\n",strlen(s1),strlen(s2));
    char s1s2[1000];
    strcpy(s1s2,s1);
    strcat(s1,s2);
    printf("%s\n",s1);

    char temp;

    temp=s1s2[0];
    s1s2[0]=s2[0];
    s2[0]=temp;
    printf("%s %s\n",s1s2,s2);
    return 0;

}
```

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

Passed all tests! ✓