

WEEK 10

Question 1

Correct

Marked out of

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

```
1 #include<stdio.h>
2 int main(){
3     char str[1000];
4     char num[10]="0123456789";
5     scanf("%s",str);
6
7     for(int i=0;i<=9;i++){
8         int count=0;
9         for(int j=0;str[j]!='\0';j++){
10             if(str[j]==num[i]){
11                 count++;
12             }
13         }
14         printf("%d ",count);
15     }
16 }
17
18
19 }
```

| | 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 | ✓ |

Question 2

Correct

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1.00

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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'.

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 #include<string.h>
3 int main(){
4     int t;
5     scanf("%d",&t);
6     while(t-->0){
7         char str[1000];
8
9         scanf("%s",str);
10        int count=0;
11        for(int i=0;i<=strlen(str);i++){
12            if(str[i]=='A' || str[i]=='E' || str[i]=='I' || str[i]=='O' || str[i]=='U' || str[i]=='a' || str[i]=='e' || str[i]=='i' || str[i]=='o' || str[i]=='u'){
13                count++;
14            }
15        }
16        printf("%d\n",count);
17    }
18 }
```

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

Question 3
Correct

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

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 #include<string.h>
3 int main(){
4     char str[1000];
5     scanf("%[^\n]s",str);
6     for(int i=0;str[i]!='\0';i++){
7         if(str[i]!=' '){
8             printf("%c",str[i]);
9         }
10        if(str[i]==' '){
11            printf("\n");
12        }
13    }
14 }
```

| | Input | Expected | Got | |
|---|-----------|-----------------|-----------------|---|
| ✓ | This is C | This is C | This is C | ✓ |

Question 4

Correct

Marked out of
1.00

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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.

```

1  #include<stdio.h>
2  #include<string.h>
3  int main(){
4      char a[1000],b[1000];
5      scanf("%s\n",a);
6      scanf("%s",b);
7      char temp[1000];
8      strcpy(temp,a);
9      int c=strlen(a);
10     int d=strlen(b);
11     printf("%d %d\n",c,d);
12
13     printf("%s\n",strcat(a,b));
14     char t=temp[0];
15     temp[0]=b[0];
16     b[0]=t;
17     printf("%s %s",temp,b);
18
19 }

```

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

Passed all tests! ✓