

Strings(7-8-2025)

1. Write a program to find the length of a string without using `strlen()`.

Input: Get a string as input

Process: if char is not equal to null then count the length

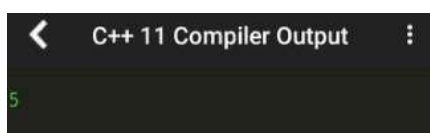
Output: Print the length

Code:

```
#include<stdio.h>
int
main()
{
    int i;
    char str1[6]="World",count=0;
    for(i=0;i<6;i++)
    {
        if(str1[i]!='\0')
            count++;
    }
    printf("%d",count);

    return 0;
}
```

Output:



2. Write a program to copy one string to another.

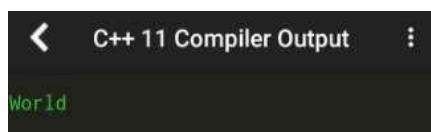
Input: Get a string as
input Process: Equate
two strings **Output:**
Copied string

Code:

```
#include<stdio.h>
int
main()
{
    int i;
    char str1[6]="World";
    char str2[6];
    for(i=0;i<6;i++)
    {
        str2[i]=str1[i];
    }
    printf("%s",str2);

    return 0;
}
```

Output:

A screenshot of a terminal window titled "C++ 11 Compiler Output". The output shows the word "World" in green text on a black background.

3. Write a program to concatenate two strings.

Input: Get two strings as input

Process: Copy both the strings to string3

Output: Display the string3

Code:

```
#include<stdio.h>
int
main()
{
    int i;
    char str1[6]="World";
    char str2[6]="Earth";
    char str3[12];
    for(i=0;i<6;i++)
    {
        str3[i]=str1[i];
    }
    printf("%s",str1);
    for(i=0;i<6;i++);
    {
        str3[i]=str2[i];
    }
    printf("%s",str2);

    return 0;
}
```

Output:

<

C++ 11 Compiler Output

:

WorldEarth

4. Write a program to compare two strings.

Input: Get two

strings Process:

Compare the length

Output: Print which

is greater

Code:

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

```
int main ()
```

```
{
```

```
    int count1= 0, count2= 0,
```

```
    flag= 0, i;
```

```
    char string1[30], string2[30];
```

```
    while(string1[count1]
```

```
        != '\0')
```

```
        count1++;
```

```
    while(string2[count2] != '\0')
```

```
        count2++;
```

```
    i = 0;
```

```
    while(string1[i] == string2[i] && string1[i] != '\0')
```

```
    {
```

```
        i ++;
```

```
    }
```

```
    if (string1[i] > string2[i])
```

```
        printf("First string is greater than
```

```
Second string\n");
```

```
    else if (string1[i] <
```

```
        string2[i])
```

```
        printf("Second string is greater than First string\n");
```

```
    else
```

```
        printf("Both strings are EQUAL\n");  
  
    return 0;  
}
```

Output:

< C++ 11 Compiler Output :

```
First string is greater than Second  
string
```

5. Write a program to count vowels and consonants in a string.

Input: Get a string as input

Process: Count the no of vowels and consonants

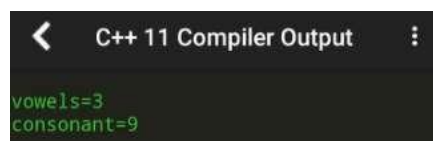
Output: Print the

count Code:

```
#include<stdio.h>
int main()
{
    int i;
    char str1[12]="World earth",vcount=0,ccount=0;
    for(i=0;i<12;i++)
    {
        if(str1[i]=='a'|str1[i]=='e'|str1[i]=='i'|str1[i]=='o'|str1[i]=='u')
            vcount++;
        else
            ccount++;
    }
    printf("vowels=%d\nconsonant=%d",vcount,ccount);

    return 0;
}
```

Output:

A screenshot of a terminal window titled "C++ 11 Compiler Output". It shows the output of the program: "vowels=3" and "consonant=9" on two separate lines.

```
< C++ 11 Compiler Output :
vowels=3
consonant=9
```


6. Write a program to convert lowercase to uppercase and vice versa.
7. Write a program to check if a string is a palindrome.

Input: Get a string as input

Process: Reverse the string to

check if it's a palindrome Code:

```
#include<stdio.h>
int
main()
{
    int i;
    char str1[6]='World', str2[6];

    for(i=0;i<6;i++)
    {
        str2[i]=str1[5-i];
    }
    for(i=0;i<6;i++)
    {
        printf("%c",str2[i]);
    }
    if(str1[i]!=str2[i])
    flag=1;
    if(flag==0)
        printf("palindrome\n");
    else
        printf("not palindrome\n");
}
```

Output:

< C++ 11 Compiler Output :

```
dlroW not palindrome
```

8. Write a program to reverse a string.

Input: Get a string as

input Process:

Reverse the string

Output:

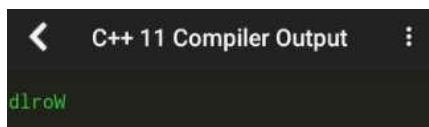
Display the reversed string

Code:

```
#include<stdio.h>
int
main()
{
    int i;
    char str1[6]="World";
    char str2[6];

    for(i=0;i<6;i++)
    {
        str2[i]=str1[4-i];
    }
    for(i=0;i<6;i++)
    {
        printf("%c",str2[i]);
    }
}
```

Output:

A screenshot of a terminal window titled "C++ 11 Compiler Output". The output shows the string "dlroW" in green text, which is the reverse of the input string "World".

```
< C++ 11 Compiler Output :
dlroW
```

9. Write a program to count words in a string.

Input: Get a string as input

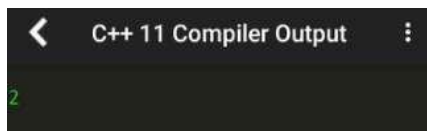
Process: If string not equal to

space count **Output:** Print the no of words

Code:

```
#include<stdio.h>
int
main()
{
    int i;
    char str1[12]="World earth", count
    =0; for(i=0;i<12;i++)
    {
        if(str1[i]==' ')
            count++;
    }
    printf("%d",count+1);
}
```

Output:



10. Write a program to find the frequency of each character in a string.

Input: Get a string as input

Process: Find the occurrence of the

each character in a string **Output:** Print the repetition number

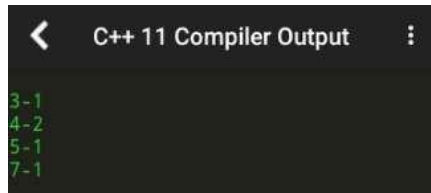
Code:

```
#include<stdio.h>
int main()
{
    int a[5]={3,4,5,4,7};
    int b[5];
    ;
    b[0]=a[0];
    int flag=0,i,j,k=1;
    for(i=0;i<5;i++)
    {
        flag=0;
        for(j=0;j<6;j++)
        {
            if(a[i]==b[j])
            {
                flag=1;break;
            }
        }
        if(flag==0)
        {
            b[k]=a[i];
            k++;
        }
    }
    int count=0;
    for(i=0;i<k;i
```

```
++)  
{  
    count=0;  
    for(j=0;j<5;j++)  
    )  
    {  
        if(b[j]==a[j])  
            count++;  
    }  
    printf("%d-%d\n",b[i],count);  
}
```

```
}
```

Output:



```
< C++ 11 Compiler Output :  
3-1  
4-2  
5-1  
7-1
```