

STRING OPERATIONS –Copy, Compare, Concatenation

String Copy

It copies the source string to the destination string or used to copy the contents of one string to another string variable

Syntax

```
strcpy(destination,source);
```

Example

```
s1="hai";  
s2= "welcome";  
strcpy(s1,s2); // s2 is copied to s1. i.e. s1=welcome.
```

Program:

```
#include<stdio.h>  
#include<conio.h>  
#include<string.h>  
void main()  
{  
    char source[10];  
    printf("Enter string:");  
    scanf("%s",source);  
    char target[10];  
    strcpy(target, source);  
    printf("\n Source string is %s", source);  
    printf("Target string is %s, target);  
    getch();  
}
```

Output:

```
Enter string : COMPUTER  
Source string is COMPUTER  
Target string is COMPUTER
```

String concatenation

strcat() is used to concatenate or combine two strings together.

Syntax:

```
strcat (string1, string2);
```

String2 is concatenated at the end of string1 and the result is stored in string1.

Example

```
s1="hai ";  
s2= "welcome";  
strcat(s1,s2); // s2 is joined with s1. Now s1 is hai welcome.
```

Program:

```
#include<stdio.h>  
#include<conio.h>  
#include<string.h>  
void main()  
{  
    char source[10];  
    printf("Enter string1:");  
    scanf("%s",source);  
    char target[10];  
    printf("Enter string 2:");  
    scanf("%s",target);  
    strcat(source, target);  
    printf("After concatenation source string is : %s", source);  
    getch();  
}
```

Output:

Enter string1 : Computer

Enter string2 : Programming

After concatenation source string is: Computer Programming

String Compare

strcmp() function compares two strings to check whether they are same or different. The two strings are compared character by character until end of one string is reached or a mismatch character found.

- If two strings are identical, strcmp() returns a value zero
- If they are not equal it returns the numeric difference between the first non-matching characters.
- if the strcmp() returns positive then string1 is greater and negative means string2 is greater.

Syntax:

```
strcmp(string1, string2);
```

Program:

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{
    char source[10];
    printf("Enter string1:");
    scanf("%s",source);
    char target[10];
    printf("Enter string 2:");
    scanf("%s",target);
    int diff;
    diff = strcmp (source, target);
```

```
if (diff == 0 )  
    printf("Both strings are identical");  
else  
    printf("Both strings are not identical");  
getch();  
}
```

Output:

Enter String 1: Computer

Enter String 2: Programming

Both strings are not identical

