Content 25

String Functions In C & string.h Library

Here we will learn to manipulate strings in C using different library functions.  C provides us the useful string handling library functions. The string.h library is used to perform string operations. It provides several functions for manipulating character strings. We need to often manipulate or change the strings according to the need of a problem, the string.h library makes handling string in programming simple and easy to understand.

Following are some commonly used string handling functions

#### strcat( ):-

This function is used to concatenates the source string at the end of the target string. For example, “C programming or” and “C Coding” on concatenation would result into a string “C Programming or C Coding”. ***Here is an example of strcat( ):***

// It generally Combines the strings

#include <stdio.h>

#include <string.h>

int main()

{

    char stra[] = "C Prgramming or ";

    char strb[] = "C Coding";

    strcat(stra, strb);

    printf("New string is: %s", stra); //Here if you write strb in place of stra then it would write strb's

string first

    gets(stra);

    return 0;

}

**Output**:

New string is: C Prgramming orC Coding

#### strlen( ):-

This function is used to counts the number of characters present in a string. ***Its example is given below:***

//for finding the length of string

#include <stdio.h>

#include <string.h>

int main()

{

    char a[] = "Programming";

    int length\_a;

    length\_a = strlen(a);

    printf("The length of a is: %d", length\_a);

    return 0;

}

**Output:**

The length of a is: 11

#### strcpy( ):-

This function is used to copies the contents of one string into another. The base addresses of the source and target strings should be given to this function***. Here is an example of strcpy( ):***

#include<stdio.h>

#include<string.h>

int main()

{

    char s1[]="Programming";

    char s2[10];

    strcpy(s2,s1);

//s2 is written first bcoz we want to copy s1(it is written next)

in s2.

    printf("After Copy, s2 is like: %s",s2); //printing s2 not s1

    // here it get copied in s2

}

**Output:**

After Copy, s2 is like: Programming

#### strcmp( ):-

This function is used to compares two strings to find out whether they are same or different. The strcmp() will compare two strings character by character until there is a mismatch or end of one of the strings is reached. If both of the strings are identical, strcmp( ) returns a value zero. If they are not identical, it will return the numeric difference between the ASCII values of the first non-matching pairs of characters. ***Here is a example of strcmp( ).***

#include <stdio.h>

#include <string.h>

int main(int argc, char const \*argv[])

{

    char s1[] = "Hello";

    char s2[]= "Univese";

    int compare;

    compare = strcmp(s1, s2);

    printf("After %d",compare);

    return 0;

}

**Output:**

After -1

#### strrev():-

This function is used to show the reverse of the string. ***Following are the example of strrev():***

#include<stdio.h>

#include<string.h>

int main(int argc, char const \*argv[])

{

     char string[]="12345";

    printf("Reversed String: %s",strrev(string));

    return 0;

}

**Output:**

Reversed String: 54321

There are many other built-in string funtions like **strlwr , strupr ,strcat , strdup and strset,** these functions are also very useful in manipulating the strings. In today’s tutorial we have discussed only few of the string functions. You can explore more about string functions by searching it on the internet.