**String** is a sequence of characters that is treated as a single data item and terminated by null character '\0'.

Remember that C language does not support strings as a data type.

**For example:** The string "hello world" contains 12 characters including '\0' character which is automatically added by the compiler at the end of the string.

**Declaring and Initializing a string variables**

There are different ways to initialize a character array variable.

char name[13] = "StudyTonight"; // valid character array initialization  
  
char name[10] = {'L' ,'e', 's', 's', 'o', 'n', 's' , '\0' }; // valid initialization

Remember that when you initialize a character array by listing all of its characters separately then you must **supply the '\0' character explicitly.**

char ch[3] = "hell"; // error, no space for ‘/0’ element

**String handling functions**

|  |  |
| --- | --- |
| **Method** | **Description** |
| strcat() | It is used to concatenate(combine) two strings |
| strlen() | It is used to show length of a string |
| strrev() | It is used to show reverse of a string |
| strcpy() | Copies one string into another |
| strcmp() | It is used to compare two string |

#### **strcat() function**

#include<stdio.h>

void main( )

{

char word[100] = "hello";

strcat(word, " world");

strcat(word, " program");

printf(word);

}

//output : hello world program

**strlength() function**

strlen() function will return the length of the string passed to it.

**Ex :**

#include<stdio.h>

void main( )

{

int j;

j = strlen("rooman tech");

printf("%d",j);

}

**//output : 11**

#### **strcpy() function**

Copy the content of one string to another

Ex :

#include<stdio.h>

#include<string.h>

int main()

{

char s1[50];

char s2[50];

strcpy(s1, "Rooman Tech"); //copies "studytonight" to string s1

strcpy(s2, s1); //copies string s1 to string s2

printf("%s\n", s2);

return(0);

}

//output : s2 : “Rooman Tech”

#### **strrev() function**

Reverse the given string

In GCC compiler, strrev function not available

**Strcmp**

Compare two strings, if both are equal it returns 0 else -1.

Ex :

#include <stdio.h>

#include <string.h>

int main()

{

int j;

j = strcmp("rooman", "technologies");

printf("%d",j); //-1

printf("\n");

int k;

k = strcmp("bengaluru", "bengaluru");

printf("%d",k); //0

}

**//output**

**-1**

**0**