

## \* STRINGS :-

Most programming languages have a data type called a string, which is used for data values that are made up of ordered sequences of characters, such as "hello world".

A string can contain any sequence of characters, visible / invisible and characters may be repeated. The number of characters in the string is called its length and "hello world" has length 11 - made up of 10 letters and 1 space.

There is also one string called empty string which contains no characters - length 0. A string can be a constant / variable. If it is a constant, it is usually written as a sequence of characters enclosed in single / double quotation mark (i.e) 'hello' or "hello".

All keyboard input and text output is in the form of character strings.



## \* Some useful string handling functions in C programming :-

### 1) strlen() :-

In C programming, we use `strlen()` to find the length of the string.

String handling function `strlen()` returns the number of characters in string.

Syntax :-

variable\_name = `strlen(string or string-variable)`;

eg :-

```
int main () {  
    char lang[] = "program" ;  
    printf("Ln Length : %zu", strlen(lang));  
    return 0 ;  
}
```

Output :-

Length : 7



## 2) strcpy() :-

String handling function `strcpy()` is used to copy content of one string variable to another string variable. (i.e)

Syntax :-

```
strcpy(string2, string1);
```

copies content of string1 to string2

eg :-

```
int main() {
```

```
    char a[20] = "Tasty";
```

```
    char b[30] = ;
```

```
    strcpy(b, a);
```

```
    printf("copied string in b is %s",  
           b);
```

```
    return 0;
```

```
}
```

Output :-

copied string in b is Tasty.



### 3) strcmp() :-

In C programming, string handling function `strcmp()` is used to compare 2 strings. This function returns 0 if 2 strings are same otherwise it returns some integer value other than 0.

Syntax :-

variable\_name = `strcmp(string1, string2)`;

eg :-

```
int main() {  
    char a[20] = "acd";  
    char b[30] = "acdy";  
    printf("%d", strcmp(a, b));  
    return 0;  
}
```

Output :-

-121.



#### 4) strcat() :-

String handling function, `strcat()` is used to concatenate 2 strings. Concatenation is the process of merging content of 1 string to another string.

Syntax :-

`strcat (String1, String2);`  
Concatenates content of String 2 after content of String 1.

eg :-

```
int main() {  
    char a[20] = "Tasty";  
    char b[20] = "food";  
    printf("Result is %s",  
           strcat(a,b));  
    return 0;  
}
```

Output :-

Result is Tasty food.

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

```
#include <string.h>
```

```
int main() {
```

```
    char a[100];
```

```
    int length;
```

```
    printf("Enter a string: ");
```

```
    gets(a);
```

```
    length = strlen(a);
```

```
    printf("Length of the string = %d",  
           length);
```

```
    return 0;
```

```
}
```

Output :-

Enter a string : Ak programz

length of the string = 11