

## STRINGS

A string is an array of characters ending in the NULL character ('\0'). Strings must have a 0 or NULL character after the last character to show where the string ends. The NULL character is not included in the string.

**NB. Library:** string.h

### Character Array

**A character array is declared in the same way as a normal array. The array should be declared large enough to hold the number of characters in the string and the terminating NULL character.**

**Example 1:**

```
char name[10]; // creating a string array of nine characters, the location holds the NULL character.
```

**Example 2:**

```
char name[] = "John"; //a string literal (series of characters) assigned to character array
```

### Reading and Printing Strings

**Format to Read Strings using scanf():**

```
scanf("% size of string s",&name of string);
```

**Format to Print Strings:**

```
Printf("%s", name of string);
```

### String handling functions in the string library (string.h)

**strlen()**

Returns the number of characters in a string. **Format:** strlen(string)

**strcpy(string1,string2)**

Copies the contents of one string2 into string1.

**strcat(string1,string2)**

Joins the string2 to the end of string1 and puts the joined string into string1.

**strcmp(string1,string2)**

Compares string1 with string2. If string1 is greater than string2 then a number higher than 0 is returned. If string1 is less than string2 then a number lower than 0 is returned. If the strings are equal then 0 is returned.

**strstr(string1,string2)**

Takes two strings as arguments and searches string1 for an occurrence of sting2. If the searched string is not found NULL is returned.