



# **SNS COLLEGE OF ENGINEERING**

Kurumbapalayam (Po), Coimbatore – 641 107

**An Autonomous Institution**

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A' Grade

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai



**DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE**

**COURSE NAME : 23ITT101- PROBLEM SOLVING & C PROGRAMMING**

**I YEAR /I SEMESTER**

**Unit 3- C-ARRAYS AND STRINGS**

**Topic : String- String Operations**



# Strings



A special kind of array is an array of characters ending in the null character `\0` called string arrays

A string is declared as an array of characters

```
char s[10]  
char p[30]
```

When declaring a string don't forget to leave a space for the null character which is also known as the string terminator character



# C offers four main operations on strings



strcpy - copy one string into another

strcat - append one string onto the right side of the other

strcmp - compare alphabetic order of two strings

strlen - return the length of a string



# strcpy



strcpy(destinationstring, sourcestring)

Copies sourcestring into destinationstring

For example

strcpy(str, "hello world"); assigns "hello world" to the string str



# Example with strcpy



```
#include <stdio.h>
#include <string.h>
main()
{
    char x[] = "Example with strcpy";
    char y[25];
    printf("The string in array x is %s \n ", x);
    strcpy(y,x);
    printf("The string in array y is %s \n ", y);
}
```



# strcat



`strcat(destinationstring, sourcestring)`

appends sourcestring to right hand side of destinationstring

For example if str had value “a big ”

`strcat(str, “hello world”);` appends “hello world” to the string

“a big ” to get

“ a big hello world”



# Example with strcat



```
#include <stdio.h>
#include <string.h>
main()
{
    char x[] = "Example with strcat";
    char y[] = "which stands for string concatenation";
    printf("The string in array x is %s \n ", x);
    strcat(x,y);
    printf("The string in array x is %s \n ", x);
}
```



# Thank You