



# **SNS COLLEGE OF TECHNOLOGY**

**Coimbatore-35.**

**An Autonomous Institution**

**COURSE NAME : 23CST101 PROBLEM SOLVING AND C PROGRAMMING**

**I YEAR/ I SEMESTER**

**UNIT-III ARRAYS AND STRINGS**

**Topic: Strings**

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# Operations of string

Function	Purpose	Example	Output
<b>Strcpy();</b>	Makes a copy of a string	strcpy(s1, "Hi");	Copies "Hi" to 's1' variable
<b>Strcat();</b>	Appends a string to the end of another string	strcat("Work", "Hard");	Prints "WorkHard"
<b>Strcmp();</b>	Compare two strings alphabetically	strcmp("hi", "bye");	Returns -1.
<b>Strlen();</b>	Returns the number of characters in a string	strlen("Hi");	Returns 2.
<b>Strrev();</b>	reverses a given string	Strrev("Hello");	olleH
<b>Strlwr();</b>	Converts string to lowercase	Strlwr("HELLO");	hello
<b>Strupr();</b>	Converts string to uppercase	Strupr("hello");	HELLO



# Stringcopy

```
#include <stdio.h>
#include <string.h>
int main() {
    char str1[20] = "C programming";
    char str2[20];
    // copying str1 to str2
    strcpy(str2, str1);
    puts(str2); // C programming
    return 0;
}
```

## **OUTPUT:**

C programming



# Stringconcatination

```
#include <stdio.h>
#include <string.h>
int main() {
    char str1[100] = "This is ", str2[] = "programiz.com";
    // concatenates str1 and str2
    // the resultant string is stored in str1.
    strcat(str1, str2);
    puts(str1);
    puts(str2);
    return 0;
}
```

OUTPUT:

This is programiz.com



# String compare

```
#include <stdio.h>
#include <string.h>
int main() {
    char str1[] = "abcd", str2[] = "abCd", str3[] = "abcd";
    int result;
    // comparing strings str1 and str2
    result = strcmp(str1, str2);
    printf("strcmp(str1, str2) = %d\n", result);
    // comparing strings str1 and str3
    result = strcmp(str1, str3);
    printf("strcmp(str1, str3) = %d\n", result);
    return 0;
}
```

OUTPUT:

```
strcmp(str1, str2) = 1
strcmp(str1, str3) = 0
```



# String length

```
#include <stdio.h>
int main() {
    char s[] = "Programming is fun";
    int i;
    for (i = 0; s[i] != '\0'; ++i)
        printf("Length of the string: %d", i);
    return 0;
}
```

**OUTPUT:**

Length of the string: 18



# String reverse

```
#include <stdio.h>
#include <string.h>
int main()
{
    char str[40]; // declare the size of character string
    printf (" \n Enter a string to be reversed: ");
    scanf ("%s", str);

    // use strrev() function to reverse a string
    printf (" \n After the reverse of a string: %s ", strrev(str));
    return 0;
}
```

## OUTPUT:

```
Enter a string to be reversed: AMBULANCE
After the reverse of a string: ECNALUBMA
```



# String lower case

```
#include<stdio.h>
#include<string.h>
int main()
{
    char str[ ] = "GEEKSFORGEEKS IS THE BEST";
    // converting the given string into lowercase.
    printf("%s\n",strlwr (str));
    return 0;
}
```

OUTPUT:

geeksforgeeks is the best





# String Uppercase

```
include<stdio.h>
#include<string.h>
int main()
{
    char str[ ] = "geeksforgeeks is the best";
    // converting the given string into Uppercase.
    printf("%s\n",strupr (str));
    return 0;
}
```

OUTPUT:

GEEKSFORGEEEKS IS THE BEST



**Thank You!**