



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



Operations of string

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

GEEKSFORGEEKS IS THE BEST

