

PROGRAMMING IN C

STRING HANDLING FUNCTIONS

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BCA FIRST YEAR

ROLL NO.32

WHAT IS A STRING?

In C programming a string is a sequence of characters terminated with a null character. In other words, a string is a data type used in programming. it is used to represent text rather than just numbers.

It consists of a set of characters that can also contain spaces and numbers. Typically programmers must enclose strings in quotation for the data to be recognized as a string and not a number or variable.

STRING HANDLING FUNCTIONS

String handling functions are those which can be used to carry out many of the string manipulations. These functions are packed in the **string.h** library.

1.strcat():

It is used to combine 2 strings

Syntax:

`strcat(string1,string2)`

Example:

Code:

```
C strcat.c  X
C Program > C strcat.c > main()
1  #include<stdio.h>
2  #include<string.h>
3  void main()
4  {
5      char str1[]="hello";
6      char str2[]="world";
7      printf("%s\n",strcat(str1,str2));
8  }
```

Output:

```
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PS D:\C Program> cd "d:\C Program\" ; if ($?) { gcc strlen.c -o strlen } ; if ($?) { .\strlen }
helloworld
PS D:\C Program> 
```

2.strlen():

This function will return the length of the string passed to it Syntax:

strlen(string1)

Example:

Code:

```
strlen.c
C Program > C strlen.c > main()
1  #include<stdio.h>
2  #include<string.h>
3  void main()
4  {
5      char str1[]="hello";
6      char str2[]="world";
7      int len=strlen(str1);
8      printf("Length of str1 is %d\n",len);
9  }
```

Output:

```
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PS D:\C Program> cd "d:\C Program\" ; if ($?) { gcc strlen.c -o strlen } ; if ($?) { .\strlen }
Length of str1 is 5
PS D:\C Program>
```

3.strcmp():

This function will return an ASCII difference between the first unmatched character of two strings.

Syntax:

`strcmp(string1,string2)`

Example:

Code:

```
C strcmp.c X
C Program > C strcmp.c > main()
1  #include<stdio.h>
2  #include<string.h>
3  void main()
4  {
5      char str1[]="hello",str2[]="world";
6      printf("%d",strcmp(str1,str2));
7  }
```

Output:

```
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PS D:\C Program> cd "d:\C Program\" ; if ($?) { gcc strcmp.c -o strcmp } ; if ($?) { .\strcmp }
-1
PS D:\C Program> 
```

4.strcpy():

This function will copy second string argument to the first string argument

Syntax:

strcpy(string1,string2)

Example:

Code:

```
C strcpy.c x
C Program > C strcpy.c > main()
1  #include<stdio.h>
2  #include<string.h>
3  void main()
4  {
5      char str1[]="hello",str2[100];
6      strcpy(str2,str1);
7      printf("%s",str2);
8  }
```

Output:

```
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PS D:\C Program> cd "d:\C Program\" ; if ($?) { gcc strcpy.c -o strcpy } ; if ($?) { .\strcpy }
hello
PS D:\C Program>
```

5.strrev():

This function will reverse the given string.

Syntax:

strrev(string1)

Example:

Code:

```
C strrev.c
C Program > C strrev.c > main()
1  #include<stdio.h>
2  #include<string.h>
3  void main()
4  {
5      char str1[]="Hello";
6      printf("%s",strrev(str1));
7  }
```

Output:

```
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PS D:\C Program> cd "d:\C Program\" ; if ($?) { gcc strrev.c -o strrev } ; if ($?) { .\strrev }
olleH
PS D:\C Program>
```

6.strupr():

This function will change all lowercase letters of the given string to uppercase

Syntax:

strupr(string1)

Example:

Code:

```
C strupr.c  X
C Program > C strupr.c > main()
1  #include<stdio.h>
2  #include<string.h>
3  void main()
4  {
5      char str1[]="Hello";
6      printf("%s",strupr(str1));
7  }
```

Output:

```
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PS D:\C Program> cd "d:\C Program\" ; if ($?) { gcc strupr.c -o strupr } ; if ($?) { .\strupr }
HELLO
PS D:\C Program>
```

7.strlwr():

This function will change all uppercase letters of the given string to lowercase

Syntax:

strlwr(string1)

Example:

Code:

```
strlwr.c  X
C Program > C strlwr.c > main()
1  #include<stdio.h>
2  #include<string.h>
3  void main()
4  {
5      char str1[]="HEllo";
6      printf("%s",strlwr(str1));
7  }
```

Output:

```
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PS D:\C Program> cd "d:\C Program\" ; if ($?) { gcc strlwr.c -o strlwr } ; if ($?) { .\strlwr }
hello
PS D:\C Program>
```