

INTRODUCTION

- String is collection of characters like alphabets and some special characters.
- It is always enclosed with " ".
- Simply we can say that it is,
 - ↳ Array of characters ended with Null character (' \0').
 - ↳ Null character indicates end of the string.

ex: • 's' - Considered as character

• "s" - Considered as string.

SYNTAX:

- Datatype StringVariableName [size/No. of characters];

EX: char name[10];

- Here, User can store 9 characters, 10th one is reserved for Null character.

- The String can also be initialized at the time of declaration.

EX. `char city[7] = "Raikot";`

- It can be also done as

`char city[7] = {'R', 'a', 'i', 'k', 'o', 't', '\0'};`

↳ Here, the size is not compulsory & if not given, Compiler automatically computes & puts it.

READING & PRINTING OF STRING:

- In string we will use `gets()` & `puts()` function for reading & printing it.

(1) GETS() : This function is used to read the string.

↳ It returns the string entered by user.

ex: `main()`

{

`char a[20];`

`printf("Enter string");`

`gets(a);`

`printf("Entered string is : %s", a);`

}

OUTPUT : Enter String : Computer
Entered String is : computer

(2) PUTS () : It is "Some where" similar to printf ().

- PUTS () function is used to print the string on the screen.

EX: void main ()

```
char name[20];
printf("Enter String:");
```

```
gets(name);
printf("You entered:");
```

```
puts(name);
}
```

OUTPUT : Enter String : Computer
You entered : Computer

STRING FUNCTIONS:

- 1 strlen ()
- 2 strcpy ()
- 3 strncpy ()
- 4 strcmp ()
- 5 strchr ()
- 6 strncat ()
- 7 strcat ()
- 8 strstr ()
- 9 strchr ()

(1) strlen () : The strlen () function calculates the length of a given string.

- It does not count null character '\0'.

EX: int main ()
{

char str [] = "programming";
printf ("Length of string is : %d", strlen (str));

return 0;
}

OUTPUT: Length of string is : 11

SYNTAX: strlen (variable);

(2) STRUPR() /strupr()

- The `strupr()` function is used to convert a given string to uppercase.

i.e.: Program

PROGRAM

SYNTAX: `strupr(variable);`EX:

#include <stdio.h>

#include <conio.h>

#include <string.h>

void main()

{

char a[50];

clrscr();

printf("Enter letters in lower:");

gets(a);

printf("%s",strupr(a));

getch();

}

OUTPUT: Enter letters in lower: computers.

COMPUTER

(3) strtolower() :

- The strtolower() Function is used to convert given string in ~~up~~ lowercase.

i.e: QA
→ qa

SYNTAX : strtolower(variable);

EX :

```
void main()
{
    char str[50];
    clrscr();
    printf("Enter letters in UPPER lower :");
    gets(str);
    printf("%s", strtolower(str));
    getch();
}
```

OUTPUT : Enter letters in upper : COMPUTER QA
computer qa