**String**

* String is a collection of characters.
* There are two types of strings commonly used in C++.
  1. Strings that are objects of string class
  2. C-strings
* **C-strings**
* The collection of characters is stored in the form of arrays.
* C-strings are arrays of type char terminated with null (‘\0’) character.

### **How to define a C-string?**

**Syntax :** char-datatype array-name [];

**Ex:**

char str[] = ‘c++’;

char str[4] = "C++";

char str[] = {'C','+','+','\0'};

char str[4] = {'C','+','+','\0'};

**Getting input from User in char Array:**

1. Cin>> str;

Read only one word.

1. Cin.get(str,50);

Read line of Text

1. gets(str);

Read the line of a text.

## string Object

## string object for holding strings.

## string objects has no fixed length, and can be extended as per your requirement.

## Getting input from User in string object:

## getline(cin,str);

## Read the line

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| **Sr. No** | **Function & Purpose** |
| 1 | **strcpy(s1, s2);**  Copies string s2 into string s1. |
| 2 | **strcat(s1, s2);**  Concatenates string s2 onto the end of string s1. |
| 3 | **strlen(s1);**  Returns the length of string s1. |
| 4 | **strcmp(s1, s2);**  Returns 0 if s1 and s2 are the same; less than 0 if s1<s2; greater than 0 if s1>s2. |
| 5 | **strchr(s1, ch);**  Returns a pointer to the first occurrence of character ch in string s1. |
| 6 | [**strrev(string)**](https://www.javatpoint.com/c-strrev)  returns reverse string. |
| 7 | [**strlwr(string)**](https://www.javatpoint.com/c-strlwr)  returns string characters in lowercase. |
| 8 | [**strupr(string)**](https://www.javatpoint.com/c-strupr)  returns string characters in uppercase. |

String functions defined in "string.h" library.

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| **Sr. No** | **Function & Purpose** |
| 1 | [**length ()**](https://www.javatpoint.com/cpp-string-length-function)  It is used to find the length of the string. |
| 2 | [**getline (cin, str)**](https://www.geeksforgeeks.org/getline-string-c/)  It is Used to store string Stream of characters in object memory. |
| 3 | **Append ();**  Appends a string to another string. |
| 4 | **Empty ();**  Returns true if the string is empty. |
| 5 | **push\_back(ch)**  it is used to add characters at the back of a string. |
| 6 | **pop\_back()**  it is used to remove 1 character from the back of a string. |

String class supported functions: