C Library - <string.h>

The **string.h** header defines one variable type, one macro, and various functions for manipulating arrays of characters.

Library Variables

Following is the variable type defined in the header string.h −

Sr.No.	Variable & Description
1	**size_t** This is the unsigned integral type and is the result of the **sizeof** keyword.

Library Macros

Following is the macro defined in the header string.h −

Sr.No.	Macro & Description
1	**NULL** This macro is the value of a null pointer constant.

Library Functions

Following are the functions defined in the header string.h −

Sr.No.	Function & Description
1	void *memchr(const void *str, int c, size_t n) Searches for the first occurrence of the character c (an unsigned char) in the first n bytes of the string pointed to, by the argument *str*.
2	int memcmp(const void *str1, const void *str2, size_t n) Compares the first n bytes of *str1* and *str2*.
3	void *memcpy(void *dest, const void *src, size_t n) Copies n characters from src to *dest*.
4	void *memmove(void *dest, const void *src, size_t n) Another function to copy n characters from *str2* to *str1*.
5	void *memset(void *str, int c, size_t n) Copies the character c (an unsigned char) to the first n characters of the string pointed to, by the argument *str*.
6	char *strcat(char *dest, const char *src) Appends the string pointed to, by *src* to the end of the string pointed to by *dest*.
7	char *strncat(char *dest, const char *src, size_t n) Appends the string pointed to, by *src* to the end of the string pointed to, by *dest* up to n characters long.
8	char *strchr(const char *str, int c) Searches for the first occurrence of the character c (an unsigned char) in the string pointed to, by the argument *str*.
9	int strcmp(const char *str1, const char *str2) Compares the string pointed to, by *str1* to the string pointed to by *str2*.
10	int strncmp(const char *str1, const char *str2, size_t n) Compares at most the first n bytes of *str1* and *str2*.
11	int strcoll(const char *str1, const char *str2) Compares string *str1* to *str2*. The result is dependent on the LC_COLLATE setting of the location.

12	char *strcpy(char *dest, const char *src) Copies the string pointed to, by *src* to *dest*.
13	char *strncpy(char *dest, const char *src, size_t n) Copies up to n characters from the string pointed to, by *src* to *dest*.
14	size_t strcspn(const char *str1, const char *str2) Calculates the length of the initial segment of str1 which consists entirely of characters not in str2.
15	char *strerror(int errnum) Searches an internal array for the error number errnum and returns a pointer to an error message string.
16	size_t strlen(const char *str) Computes the length of the string str up to but not including the terminating null character.
17	char *strpbrk(const char *str1, const char *str2) Finds the first character in the string *str1* that matches any character specified in *str2*.
18	char *strrchr(const char *str, int c) Searches for the last occurrence of the character c (an unsigned char) in the string pointed to by the argument *str*.
19	size_t strspn(const char *str1, const char *str2) Calculates the length of the initial segment of *str1* which consists entirely of characters in *str2*.
20	char *strstr(const char *haystack, const char *needle) Finds the first occurrence of the entire string *needle* (not including the terminating null character) which appears in the string *haystack*.
21	char *strtok(char *str, const char *delim) Breaks string *str* into a series of tokens separated by *delim*.
22	size_t strxfrm(char *dest, const char *src, size_t n) Transforms the first **n** characters of the string **src** into current locale and places them in the string **dest**.