

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	<pre>void *memchr(const void *str, int c, size_t n)</pre> <p>Searches for the first occurrence of the character <i>c</i> (an unsigned char) in the first <i>n</i> bytes of the string pointed to, by the argument <i>str</i>.</p>
2	<pre>int memcmp(const void *str1, const void *str2, size_t n)</pre> <p>Compares the first <i>n</i> bytes of <i>str1</i> and <i>str2</i>.</p>
3	<pre>void *memcpy(void *dest, const void *src, size_t n)</pre> <p>Copies <i>n</i> characters from <i>src</i> to <i>dest</i>.</p>
4	<pre>void *memmove(void *dest, const void *src, size_t n)</pre> <p>Another function to copy <i>n</i> characters from <i>str2</i> to <i>str1</i>.</p>
5	<pre>void *memset(void *str, int c, size_t n)</pre> <p>Copies the character <i>c</i> (an unsigned char) to the first <i>n</i> characters of the string pointed to, by the argument <i>str</i>.</p>
6	<pre>char *strcat(char *dest, const char *src)</pre> <p>Appends the string pointed to, by <i>src</i> to the end of the string pointed to by <i>dest</i>.</p>
7	<pre>char *strncat(char *dest, const char *src, size_t n)</pre> <p>Appends the string pointed to, by <i>src</i> to the end of the string pointed to, by <i>dest</i> up to <i>n</i> characters long.</p>
8	<pre>char *strchr(const char *str, int c)</pre> <p>Searches for the first occurrence of the character <i>c</i> (an unsigned char) in the string pointed to, by the argument <i>str</i>.</p>
9	<pre>int strcmp(const char *str1, const char *str2)</pre> <p>Compares the string pointed to, by <i>str1</i> to the string pointed to by <i>str2</i>.</p>
10	<pre>int strncmp(const char *str1, const char *str2, size_t n)</pre> <p>Compares at most the first <i>n</i> bytes of <i>str1</i> and <i>str2</i>.</p>
11	<pre>int strcoll(const char *str1, const char *str2)</pre> <p>Compares string <i>str1</i> to <i>str2</i>. The result is dependent on the LC_COLLATE setting of the location.</p>

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