

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.

C Library string.h 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.

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C Library string.h 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 .

