

C LIBRARY FUNCTION - MEMCPY

http://www.tutorialspoint.com/c_standard_library/c_function_memcpy.htm

Copyright © tutorialspoint.com

Description

The C library function **void *memcpy(void * str1, const void * str2, size_t n)** copies **n** characters from memory area **str2** to memory area **str1**.

Declaration

Following is the declaration for memcpy function.

```
void *memcpy(void *str1, const void *str2, size_t n)
```

Parameters

- **str1** -- This is pointer to the destination array where the content is to be copied, type-casted to a pointer of type void*.
- **str2** -- This is pointer to the source of data to be copied, type-casted to a pointer of type void*.
- **n** -- This is the number of bytes to be copied.

Return Value

This function returns a pointer to destination, which is str1.

Example

The following example shows the usage of memcpy function.

```
#include <stdio.h>
#include <string.h>

int main ()
{
    const char src[50] = "http://www.tutorialspoint.com";
    char dest[50];

    printf("Before memcpy dest = %s\n", dest);
    memcpy(dest, src, strlen(src)+1);
    printf("After memcpy dest = %s\n", dest);

    return(0);
}
```

Let us compile and run the above program that will produce the following result:

```
Before memcpy dest =
After memcpy dest = http://www.tutorialspoint.com
Loading [MathJax]/jax/output/HTML-CSS/jax.js
```