

C LIBRARY FUNCTION - MEMCMP

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

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Description

The C library function **int memcmp(const void * str1, const void * str2, size_t n)** compares the first **n** bytes of memory area **str1** and memory area **str2**.

Declaration

Following is the declaration for memcmp function.

```
int memcmp(const void *str1, const void *str2, size_t n)
```

Parameters

- **str1** -- This is the pointer to a block of memory.
- **str2** -- This is the pointer to a block of memory.
- **n** -- This is the number of bytes to be compared.

Return Value

- if Return value < 0 then it indicates str1 is less than str2.
- if Return value > 0 then it indicates str2 is less than str1.
- if Return value = 0 then it indicates str1 is equal to str2.

Example

The following example shows the usage of memcmp function.

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

int main ()
{
    char str1[15];
    char str2[15];
    int ret;

    memcpy(str1, "abcdef", 6);
    memcpy(str2, "ABCDEF", 6);

    ret = memcmp(str1, str2, 5);

    if(ret > 0)
    {
        printf("str2 is less than str1");
    }
    else if(ret < 0)
    {
        printf("str1 is less than str2");
    }
    else
    {
        printf("str1 is equal to str2");
    }

    return(0);
}
```

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

`str2 is less than str1`

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