C library function - memcmp()

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.

Live Demo

```
#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
```