



## Rocky Enterprise Linux 9.2 Manual Pages on command 'memcmp.3'

C:\>man memcmp.3

MEMCMP(3)                   Linux Programmer's Manual                   MEMCMP(3)

### NAME

memcmp - compare memory areas

### SYNOPSIS

```
#include <string.h>

int memcmp(const void *s1, const void *s2, size_t n);
```

### DESCRIPTION

The memcmp() function compares the first n bytes (each interpreted as unsigned char) of the memory areas s1 and s2.

### RETURN VALUE

The memcmp() function returns an integer less than, equal to, or greater than zero if the first n bytes of s1 is found, respectively, to be less than, to match, or be greater than the first n bytes of s2.

For a nonzero return value, the sign is determined by the sign of the difference between the first pair of bytes (interpreted as unsigned char) that differ in s1 and s2.

If n is zero, the return value is zero.

### ATTRIBUTES

For an explanation of the terms used in this section, see attributes(7).

```
????????????????????????????????????????????????????????
?Interface ? Attribute ? Value ?
????????????????????????????????????????????????????????
```

?memcmp() ? Thread safety ? MT-Safe ?

??

CONFORMING TO

POSIX.1-2001, POSIX.1-2008, C89, C99, SVr4, 4.3BSD.

NOTES

Do not use memcmp() to compare security critical data, such as cryptographic secrets, because the required CPU time depends on the number of equal bytes. Instead, a function that performs comparisons in constant time is required. Some operating systems provide such a function (e.g., NetBSD's consttime\_memequal()), but no such function is specified in POSIX. On Linux, it may be necessary to implement such a function oneself.

SEE ALSO

bcmp(3), bstring(3), strcasecmp(3), strcmp(3), strcoll(3), strncasecmp(3), strncmp(3), wmemcmp(3)

COLOPHON

This page is part of release 5.05 of the Linux man-pages project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.

2017-09-15

MEMCMP(3)