NAME

memchr, memrchr, rawmemchr − scan memory for a character

LIBRARY

Standard C library (*libc*, *−lc*)

SYNOPSIS

```
#include <string.h>

void *memchr(const void s[.n], int c, size_t n);
void *memrchr(const void s[.n], int c, size_t n);

[[deprecated]] void *rawmemchr(const void s[.n], int c);
```

Feature Test Macro Requirements for glibc (see **feature_test_macros**(7)):

memrchr(), **rawmemchr**():
_GNU_SOURCE

DESCRIPTION

The **memchr**() function scans the initial *n* bytes of the memory area pointed to by *s* for the first instance of *c*. Both *c* and the bytes of the memory area pointed to by *s* are interpreted as *unsigned char*.

The **memrchr**() function is like the **memchr**() function, except that it searches backward from the end of the *n* bytes pointed to by *s* instead of forward from the beginning.

The **rawmemchr**() function is similar to **memchr**(), but it assumes (i.e., the programmer knows for certain) that an instance of *c* lies somewhere in the memory area starting at the location pointed to by *s*. If an instance of *c* is not found, the behavior is undefined. Use either **strlen**(3) or **memchr**(3) instead.

RETURN VALUE

The **memchr**() and **memrchr**() functions return a pointer to the matching byte or NULL if the character does not occur in the given memory area.

The **rawmemchr**() function returns a pointer to the matching byte.

VERSIONS

rawmemchr() first appeared in glibc 2.1.

memrchr() first appeared in glibc 2.2.

ATTRIBUTES

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

Interface	Attribute	Value
memchr(), **memrchr**(), **rawmemchr**()	Thread safety	MT-Safe

STANDARDS

memchr(): POSIX.1-2001, POSIX.1-2008, C99, SVr4, 4.3BSD.

The **memrchr**() function is a GNU extension, available since glibc 2.1.91.

The **rawmemchr**() function is a GNU extension, available since glibc 2.1.

SEE ALSO

bstring(3), **ffs**(3), **memmem**(3), **strchr**(3), **strpbrk**(3), **strrchr**(3), **strsep**(3), **strspn**(3), **strstr**(3), **wmemchr**(3)