NAME
fread, fwrite − binary stream input/output

SYNOPSIS
#include <stdio.h>

size_t fread(void ***ptr, size_t** *size**, size_t** *nmemb**, FILE ***stream**);**

size_t fwrite(const void ***ptr, size_t** *size**, size_t** *nmemb**,
        FILE ***stream**);**

DESCRIPTION
The function **fread**() reads *nmemb* items of data, each *size* bytes long, from the stream pointed to by *stream*, storing them at the location given by *ptr*.

The function **fwrite**() writes *nmemb* items of data, each *size* bytes long, to the stream pointed to by *stream*, obtaining them from the location given by *ptr*.

For nonlocking counterparts, see **unlocked_stdio**(3).

RETURN VALUE
On success, **fread**() and **fwrite**() return the number of items read or written. This number equals the number of bytes transferred only when *size* is 1. If an error occurs, or the end of the file is reached, the return value is a short item count (or zero).

fread() does not distinguish between end-of-file and error, and callers must use **feof**(3) and **ferror**(3) to determine which occurred.

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

Interface	Attribute	Value
fread(), **fwrite**()	Thread safety	MT-Safe

CONFORMING TO
POSIX.1-2001, POSIX.1-2008, C89.

SEE ALSO
read(2), **write**(2), **feof**(3), **ferror**(3), **unlocked_stdio**(3)

COLOPHON
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