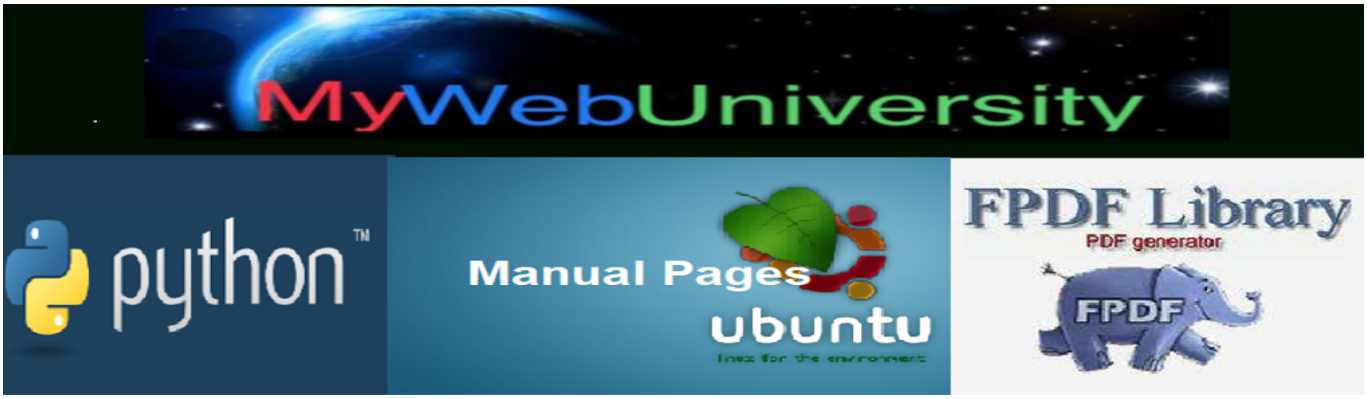

Rocky Enterprise Linux 9.2 Manual Pages on command 'fmodl.3'

$ man fmodl.3

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

NAME

fmod, fmodf, fmodl - floating-point remainder function

SYNOPSIS

```
#include <math.h>

double fmod(double x, double y);

float fmodf(float x, float y);

long double fmodl(long double x, long double y);
```

Link with -lm.

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

fmodf(), fmodl():

```
_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
    || /* Since glibc 2.19: */ _DEFAULT_SOURCE
    || /* Glibc versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

DESCRIPTION

These functions compute the floating-point remainder of dividing x by y. The return value is x - n * y, where n is the quotient of x / y, rounded toward zero to an integer.

RETURN VALUE

On success, these functions return the value x - n*y, for some integer n, such that the returned value has the same sign as x and a magnitude less than the magnitude of y.

If x or y is a NaN, a NaN is returned.

If x is an infinity, a domain error occurs, and a NaN is returned.

If y is zero, a domain error occurs, and a NaN is returned.

If x is +0 (-0), and y is not zero, +0 (-0) is returned.

ERRORS

See math_error(7) for information on how to determine whether an error has occurred when calling these functions.

The following errors can occur:

Domain error: x is an infinity

errno is set to EDOM (but see BUGS). An invalid floating-point exception (FE_IN? VALID) is raised.

Domain error: y is zero

errno is set to EDOM. An invalid floating-point exception (FE_INVALID) is raised.

ATTRIBUTES

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

Interface	Attribute	Value
fmod(), fmodf(), fmodl()	Thread safety	MT-Safe

CONFORMING TO

C99, POSIX.1-2001, POSIX.1-2008.

The variant returning double also conforms to SVr4, 4.3BSD, C89.

BUGS

Before version 2.10, the glibc implementation did not set errno to EDOM when a domain er? ror occurred for an infinite x.

SEE ALSO

remainder(3)

COLOPHON

This page is part of release 5.10 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/.