NAME

nearbyint, **nearbyintf**, **nearbyintl**, **rint**, **rintf**, **rintl** - round to integral value in floating-point format

LIBRARY

Math Library (libm, -lm)

SYNOPSIS

#include <math.h>

double
nearbyint(*double x*);

float
nearbyintf(*float x*);

long double
nearbyintl(*long double x*);

double
rint(*double x*);

float
rintf(*float x*);

long double
rintl(*long double x*);

DESCRIPTION

The **rint**(), **rintf**(), and **rintl**() functions return the integral value nearest to *x* according to the prevailing rounding mode. These functions raise an inexact exception when the original argument is not an exact integer.

The **nearbyint**(), **nearbyintf**(), and **nearbyintl**() functions perform the same operation, except that they do not raise an inexact exception.

SEE ALSO

abs(3), ceil(3), fabs(3), fenv(3), floor(3), ieee(3), lrint(3), lround(3), math(3), round(3)

STANDARDS

These functions conform to ISO/IEC 9899:1999 ("ISO C99").

HISTORY

A **rint**() function appeared in Version 6 AT&T UNIX. The **nearbyint**() and **nearbyintf**() functions appeared in FreeBSD 5.3, and the long double variants were first available in FreeBSD 8.0.