

NAME

llround, llroundf, llroundl, lround, lroundf, lroundl - convert to nearest integral value

LIBRARY

Math Library (libm, -lm)

SYNOPSIS

#include <math.h>

long long

llround(*double x*);

long long

llroundf(*float x*);

long long

llroundl(*long double x*);

long

lround(*double x*);

long

lroundf(*float x*);

long

lroundl(*long double x*);

DESCRIPTION

The **lround**() function returns the integer nearest to its argument *x*, rounding away from zero in halfway cases. If the rounded result is too large to be represented as a *long* value, an invalid exception is raised and the return value is undefined. Otherwise, if *x* is not an integer, **lround**() may raise an inexact exception. When the rounded result is representable as a *long*, the expression **lround**(*x*) is equivalent to (*long*)**round**(*x*) (although the former may be more efficient).

The **llround**(), **llroundf**(), **llroundl**(), **lroundf**() and **lroundl**() functions differ from **lround**() only in their input and output types.

SEE ALSO

lrint(3), math(3), rint(3), round(3)

STANDARDS

The **llround()**, **llroundf()**, **llroundl()**, **lround()**, **lroundf()**, and **lroundl()** functions conform to ISO/IEC 9899:1999 ("ISO C99").

HISTORY

The *float* and *double* versions of these routines first appeared in FreeBSD 5.4. The *long double* versions appeared in FreeBSD 6.0.