NAME
        lrint, lrintf, lrintl, llrint, llrintf, llrintl − round to nearest integer

SYNOPSIS
        #include <math.h>

        long int lrint(double *x***);**
        long int lrintf(float *x***);**
        long int lrintl(long double *x***);**

        long long int llrint(double *x***);**
        long long int llrintf(float *x***);**
        long long int llrintl(long double *x***);**

        Link with −*lm*.

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

        All functions shown above:
            _ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L

DESCRIPTION
        These functions round their argument to the nearest integer value, using the current rounding direction (see
        fesetround(3)).

        Note that unlike the rint(3) family of functions, the return type of these functions differs from that of their
        arguments.

RETURN VALUE
        These functions return the rounded integer value.

        If *x* is a NaN or an infinity, or the rounded value is too large to be stored in a *long* (*long long* in the case of
        the **ll*** functions), then a domain error occurs, and the return value is unspecified.

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 a NaN or infinite, or the rounded value is too large
                An invalid floating-point exception (**FE_INVALID**) is raised.

        These functions do not set *errno*.

VERSIONS
        These functions first appeared in glibc in version 2.1.

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

Interface	Attribute	Value
lrint(), **lrintf**(), **lrintl**(), **llrint**(), **llrintf**(), **llrintl**()	Thread safety	MT-Safe

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

SEE ALSO
        ceil(3), floor(3), lround(3), nearbyint(3), rint(3), round(3)

COLOPHON
        This page is part of release 4.16 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/.