Red Hat Enterprise Linux Release 9.2 Manual Pages on 'ldiv.3' command

$ man ldiv.3

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

NAME

   div, ldiv, lldiv, imaxdiv - compute quotient and remainder of an inte?

   ger division

SYNOPSIS

   #include <stdlib.h>

   div_t div(int numerator, int denominator);

   ldiv_t ldiv(long numerator, long denominator);

   lldiv_t lldiv(long long numerator, long long denominator);

   #include <inttypes.h>

   imaxdiv_t imaxdiv(intmax_t numerator, intmax_t denominator);

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

   lldiv():

      _ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L

DESCRIPTION

   The div() function computes the value numerator/denominator and returns

   the quotient and remainder in a structure named div_t that contains two

   integer members (in unspecified order) named quot and rem.   The quo?

   tient is rounded toward zero.   The result satisfies quot*denomina?

   tor+rem = numerator.

   The ldiv(), lldiv(), and imaxdiv() functions do the same, dividing num?

   bers of the indicated type and returning the result in a structure of

   the indicated name, in all cases with fields quot and rem of the same

type as the function arguments.

RETURN VALUE

The div_t (etc.) structure.

ATTRIBUTES

For an explanation of the terms used in this section, see at?

tributes(7).

??

?Interface   ? Attribute   ? Value   ?

??

?div(), ldiv(), lldiv(), imaxdiv() ? Thread safety ? MT-Safe ?

??

CONFORMING TO

POSIX.1-2001, POSIX.1-2008, C89, C99, SVr4, 4.3BSD. The functions ll?

div() and imaxdiv() were added in C99.

EXAMPLES

After

    div_t q = div(-5, 3);

the values q.quot and q.rem are -1 and -2, respectively.

SEE ALSO

abs(3), 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/.

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