



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

\$ man ldiv.3p

LDIV(3P) POSIX Programmer's Manual LDIV(3P)

PROLOG

This manual page is part of the POSIX Programmer's Manual. The Linux implementation of this interface may differ (consult the corresponding Linux manual page for details of Linux behavior), or the interface may not be implemented on Linux.

NAME

ldiv, lldiv ? compute quotient and remainder of a long division

SYNOPSIS

```
#include <stdlib.h>

ldiv_t ldiv(long numer, long denom);

lldiv_t lldiv(long long numer, long long denom);
```

DESCRIPTION

The functionality described on this reference page is aligned with the ISO C standard. Any conflict between the requirements described here and the ISO C standard is unintentional. This volume of POSIX.1?2017 defers to the ISO C standard.

These functions shall compute the quotient and remainder of the division of the numerator numer by the denominator denom. If the division is inexact, the resulting quotient is the long integer (for the ldiv() function) or long long integer (for the lldiv() function) of lesser magnitude that is the nearest to the algebraic quotient. If the result cannot be represented, the behavior is undefined; otherwise, quot * de?

nom+rem shall equal numer.

RETURN VALUE

The `ldiv()` function shall return a structure of type `ldiv_t`, comprising both the quotient and the remainder. The structure shall include the following members, in any order:

```
long quot; /* Quotient */
long rem; /* Remainder */
```

The `lldiv()` function shall return a structure of type `lldiv_t`, comprising both the quotient and the remainder. The structure shall include the following members, in any order:

```
long long quot; /* Quotient */
long long rem; /* Remainder */
```

ERRORS

No errors are defined.

The following sections are informative.

EXAMPLES

None.

APPLICATION USAGE

None.

RATIONALE

None.

FUTURE DIRECTIONS

None.

SEE ALSO

`div()`

The Base Definitions volume of POSIX.1-2017, `<stdlib.h>`

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