

NAME

div_t, ldiv_t, lldiv_t, imaxdiv_t – quotient and remainder of an integer division

LIBRARY

Standard C library (*libc*)

SYNOPSIS

```
#include <stdlib.h>
```

```
typedef struct {
    int quot; /* Quotient */
    int rem;  /* Remainder */
} div_t;
```

```
typedef struct {
    long quot; /* Quotient */
    long rem;  /* Remainder */
} ldiv_t;
```

```
typedef struct {
    long long quot; /* Quotient */
    long long rem;  /* Remainder */
} lldiv_t;
```

```
#include <inttypes.h>
```

```
typedef struct {
    intmax_t quot; /* Quotient */
    intmax_t rem;  /* Remainder */
} imaxdiv_t;
```

DESCRIPTION

`[[l]l]div_t` is the type of the value returned by the `[[l]l]div(3)` function.

`imaxdiv_t` is the type of the value returned by the `imaxdiv(3)` function.

STANDARDS

C11, POSIX.1-2024.

HISTORY

`div_t`

`ldiv_t` SUSv1, C99, POSIX.1-2001.

`lldiv_t`

`imaxdiv_t`

C99, POSIX.1-2001.

SEE ALSO

`div(3)`, `imaxdiv(3)`, `ldiv(3)`, `lldiv(3)`