



Rocky Enterprise Linux 9.2 Manual Pages on command 'abs.3'

C:\>man abs.3

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

NAME

abs, labs, llabs, imaxabs - compute the absolute value of an integer

SYNOPSIS

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

```
int abs(int j);
```

```
long int labs(long int j);
```

```
long long int llabs(long long int j);
```

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

```
intmax_t imaxabs(intmax_t j);
```

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

```
llabs():
```

```
    _ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
```

DESCRIPTION

The `abs()` function computes the absolute value of the integer argument `j`. The `labs()`, `llabs()` and `imaxabs()` functions compute the absolute value of the argument `j` of the appropriate integer type for the function.

RETURN VALUE

Returns the absolute value of the integer argument, of the appropriate integer type for the function.

ATTRIBUTES

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

??

?Interface ? Attribute ? Value ?

??

?abs(), labs(), ? Thread safety ? MT-Safe ?

?llabs(), imaxabs() ? ? ?

??

CONFORMING TO

POSIX.1-2001, POSIX.1-2008, C99, SVr4, 4.3BSD. C89 only includes the abs() and labs() functions; the functions llabs() and imaxabs() were added in C99.

NOTES

Trying to take the absolute value of the most negative integer is not defined.

The llabs() function is included in glibc since version 2.0. The imaxabs() function is included in glibc since version 2.1.1.

For llabs() to be declared, it may be necessary to define _ISOC99_SOURCE or _ISOC9X_SOURCE (depending on the version of glibc) before including any standard headers.

By default, GCC handles abs(), labs(), and (since GCC 3.0) llabs() and imaxabs() as built-in functions.

SEE ALSO

cabs(3), ceil(3), fabs(3), floor(3), rint(3)

COLOPHON

This page is part of release 5.05 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/>.