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

**\$ 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 labs(long j);

long long llabs(long long j);

#include <inttypes.h>

intmax_t imaxabs(intmax_t i);
```

Feature Test Macro Requirements for glibc (see [feature\\_test\\_macros\(7\)](#)):

llabs():

ISO/IEC 9949-1:1999 (E) — SOURCE II — 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 at?

tributes(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 5.10 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/>.