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***Rocky Enterprise Linux 9.2 Manual Pages on command 'imaxabs.3'***

**\$ man imaxabs.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 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(), llabs(), ? Thread safety ? MT-Safe ?

?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

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