



Linux Ubuntu 26.04 Manual Pages on command 'nextdownl.3'

\$ man nextdownl.3

nextup(3) Library Functions Manual nextup(3)

NAME

nextup, nextupf, nextupl, nextdown, nextdownf, nextdownl - return next floating-point number toward positive/negative infinity

LIBRARY

Math library (libm, -lm)

SYNOPSIS

```
#define _GNU_SOURCE    /* See feature_test_macros(7) */
#include <math.h>

double nextup(double x);
float nextupf(float x);
long double nextupl(long double x);
double nextdown(double x);
float nextdownf(float x);
long double nextdownl(long double x);
```

DESCRIPTION

The nextup(), nextupf(), and nextupl() functions return the next representable floating-point number greater than x.

If x is the smallest representable negative number in the corresponding type, these functions return -0. If x is +0 or -0, the returned value is the smallest representable positive number of the corresponding type.

If x is positive infinity, the returned value is positive infinity. If x is negative infinity,

the returned value is the largest representable finite negative number of the corresponding

If `x` is NaN, the returned value is NaN.

The value returned by `nextdown(x)` is `-nextup(-x)`, and similarly for the other types.

See DESCRIPTION.

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

STANDARDS

HISTORY

glibc 2.24.

nearbyint(3), nextafter(3)

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