NAME

ecvt, fcvt - convert a floating-point number to a string

SYNOPSIS

#include <stdlib.h>

char *ecvt(double *number*, **int** *ndigits*, **int ****decpt*, **int ****sign***);**

char *fcvt(double *number*, **int** *ndigits*, **int ****decpt*, **int ****sign***);**

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

ecvt(), **fcvt**():

    Since glibc 2.12:

        _SVID_SOURCE ||
        (_XOPEN_SOURCE >= 500 ||
        _XOPEN_SOURCE && _XOPEN_SOURCE_EXTENDED) &&
        !(_POSIX_C_SOURCE >= 200112L || _XOPEN_SOURCE >= 600)

    Before glibc 2.12:

        _SVID_SOURCE || _XOPEN_SOURCE >= 500 ||
        _XOPEN_SOURCE && _XOPEN_SOURCE_EXTENDED

DESCRIPTION

The **ecvt**() function converts *number* to a null-terminated string of *ndigits* digits (where *ndigits* is reduced to a system-specific limit determined by the precision of a *double*), and returns a pointer to the string. The high-order digit is nonzero, unless *number* is zero. The low order digit is rounded. The string itself does not contain a decimal point; however, the position of the decimal point relative to the start of the string is stored in **decpt*. A negative value for **decpt* means that the decimal point is to the left of the start of the string. If the sign of *number* is negative, **sign* is set to a nonzero value, otherwise it is set to 0. If *number* is zero, it is unspecified whether **decpt* is 0 or 1.

The **fcvt**() function is identical to **ecvt**(), except that *ndigits* specifies the number of digits after the decimal point.

RETURN VALUE

Both the **ecvt**() and **fcvt**() functions return a pointer to a static string containing the ASCII representation of *number*. The static string is overwritten by each call to **ecvt**() or **fcvt**().

ATTRIBUTES

Multithreading (see pthreads(7))

The **ecvt**() and **fcvt**() functions are not thread-safe.

CONFORMING TO

SVr2; marked as LEGACY in POSIX.1-2001. POSIX.1-2008 removes the specifications of **ecvt**() and **fcvt**(), recommending the use of sprintf(3) instead (though snprintf(3) may be preferable).

NOTES

Not all locales use a point as the radix character (decimal point).

SEE ALSO

ecvt_r(3), gcvt(3), qecvt(3), setlocale(3), sprintf(3)

COLOPHON

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