

NAME

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

LIBRARY

Standard C library (*libc*, *-lc*)

SYNOPSIS

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

```
[[deprecated]] char *ecvt(double number, int ndigits,
                          int *restrict decpt, int *restrict sign);
```

```
[[deprecated]] char *fcvt(double number, int ndigits,
                          int *restrict decpt, int *restrict sign);
```

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

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

Since glibc 2.17

```
(_XOPEN_SOURCE >= 500 && !(_POSIX_C_SOURCE >= 200809L))
```

```
|| /* glibc >= 2.20 */ _DEFAULT_SOURCE
```

```
|| /* glibc <= 2.19 */ _SVID_SOURCE
```

glibc 2.12 to glibc 2.16:

```
(_XOPEN_SOURCE >= 500 && !(_POSIX_C_SOURCE >= 200112L))
```

```
|| _SVID_SOURCE
```

Before glibc 2.12:

```
_SVID_SOURCE || _XOPEN_SOURCE >= 500
```

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

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

Interface	Attribute	Value
ecvt()	Thread safety	MT-Unsafe race:ecvt
fcvt()	Thread safety	MT-Unsafe race:fcvt

STANDARDS

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)**