NAME

towlower, towlower_l − convert a wide character to lowercase

LIBRARY

Standard C library (*libc*, *−lc*)

SYNOPSIS

#include <wctype.h>

wint_t towlower(wint_t *wc***);**
wint_t towlower_l(wint_t *wc***, locale_t** *locale***);**

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

```
towlower_l():
    Since glibc 2.10:
        _XOPEN_SOURCE >= 700
    Before glibc 2.10:
        _GNU_SOURCE
```

DESCRIPTION

The **towlower**() function is the wide-character equivalent of the **tolower**(3) function. If *wc* is an uppercase wide character, and there exists a lowercase equivalent in the current locale, it returns the lowercase equivalent of *wc*. In all other cases,*wc* is returned unchanged.

The **towlower_l**() function performs the same task, but performs the conversion based on the character type information in the locale specified by *locale*. The behavior of **towlower_l**() is undefined if *locale* is the special locale object **LC_GLOBAL_LOCALE** (see **duplocale**(3)) or is not a valid locale object handle.

The argument *wc* must be representable as a *wchar_t* and be a valid character in the locale or be the value **WEOF**.

RETURN VALUE

If *wc* was convertible to lowercase, **towlower**() returns its lowercase equivalent; otherwise it returns *wc*.

VERSIONS

The **towlower_l**() function first appeared in glibc 2.3.

ATTRIBUTES

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

Interface	**Attribute**	**Value**
towlower()	Thread safety	MT-Safe locale
towlower_l()	Thread safety	MT-Safe

STANDARDS

towlower(): C99, POSIX.1-2001 (XSI); present as an XSI extension in POSIX.1-2008, but marked obsolete.

towlower_l(): POSIX.1-2008.

NOTES

The behavior of these functions depends on the **LC_CTYPE** category of the locale.

These functions are not very appropriate for dealing with Unicode characters, because Unicode knows about three cases: upper, lower, and title case.

SEE ALSO

iswlower(3), **towctrans**(3), **towupper**(3), **locale**(7)