

NAME

toupper, toupper_l - lower case to upper case letter conversion

LIBRARY

Standard C Library (libc, -lc)

SYNOPSIS

```
#include <ctype.h>
```

int

```
toupper(int c);
```

int

```
toupper_l(int c, locale_t loc);
```

DESCRIPTION

The **toupper()** and **toupper_l()** functions convert a lower-case letter to the corresponding upper-case letter. The argument must be representable as an *unsigned char* or the value of EOF.

The **toupper_l()** function takes an explicit locale argument, whereas the **toupper()** function uses the current global or per-thread locale.

RETURN VALUES

If the argument is a lower-case letter, the **toupper()** and **toupper_l()** functions return the corresponding upper-case letter if there is one; otherwise, the argument is returned unchanged.

COMPATIBILITY

The 4.4BSD extension of accepting arguments outside of the range of the *unsigned char* type in locales with large character sets is considered obsolete and may not be supported in future releases. The **towupper()** or **towupper_l()** function should be used instead.

SEE ALSO

[ctype\(3\)](#), [ctype_l\(3\)](#), [isupper\(3\)](#), [isupper_l\(3\)](#), [towupper\(3\)](#), [towupper_l\(3\)](#), [xlocale\(3\)](#)

STANDARDS

The **toupper()** function conforms to ISO/IEC 9899:1990 ("ISO C90").