

NAME

isupper, **isupper_l** - upper-case character test

LIBRARY

Standard C Library (libc, -lc)

SYNOPSIS

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

int

```
isupper(int c);
```

int

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

DESCRIPTION

The **isupper()** and **isupper_l()** functions test for any upper-case letter. The value of the argument must be representable as an *unsigned char* or the value of EOF.

In the ASCII character set, this includes the following characters (with their numeric values shown in octal):

| | | | | |
|---------|---------|---------|---------|---------|
| 101 ‘A’ | 102 ‘B’ | 103 ‘C’ | 104 ‘D’ | 105 ‘E’ |
| 106 ‘F’ | 107 ‘G’ | 110 ‘H’ | 111 ‘I’ | 112 ‘J’ |
| 113 ‘K’ | 114 ‘L’ | 115 ‘M’ | 116 ‘N’ | 117 ‘O’ |
| 120 ‘P’ | 121 ‘Q’ | 122 ‘R’ | 123 ‘S’ | 124 ‘T’ |
| 125 ‘U’ | 126 ‘V’ | 127 ‘W’ | 130 ‘X’ | 131 ‘Y’ |
| 132 ‘Z’ | | | | |

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

RETURN VALUES

The **isupper()** and **isupper_l()** functions return zero if the character tests false and return non-zero if the character tests true.

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 **iswupper()** or **iswupper_l()** function should be used instead.

SEE ALSO

ctype(3), ctype_l(3), iswupper(3), iswupper_l(3), toupper(3), toupper_l(3), xlocale(3), ascii(7)

STANDARDS

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

HISTORY

The **isupper()** function first appeared in Version 7 AT&T UNIX.