

**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.