

NAME

lfind, lsearch – linear search of an array

LIBRARY

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

SYNOPSIS

```
#include <search.h>
```

```
void *lfind(const void key[.size], const void base[.size * .nmemb],
            size_t *nmemb, size_t size,
            int(*compar)(const void [size], const void [size]));
void *lsearch(const void key[.size], void base[.size * .nmemb],
              size_t *nmemb, size_t size,
              int(*compar)(const void [size], const void [size]));
```

DESCRIPTION

lfind() and **lsearch()** perform a linear search for *key* in the array *base* which has **nmemb* elements of *size* bytes each. The comparison function referenced by *compar* is expected to have two arguments which point to the *key* object and to an array member, in that order, and which returns zero if the *key* object matches the array member, and nonzero otherwise.

If **lsearch()** does not find a matching element, then the *key* object is inserted at the end of the table, and **nmemb* is incremented. In particular, one should know that a matching element exists, or that more room is available.

RETURN VALUE

lfind() returns a pointer to a matching member of the array, or NULL if no match is found. **lsearch()** returns a pointer to a matching member of the array, or to the newly added member if no match is found.

ATTRIBUTES

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

Interface	Attribute	Value
lfind() , lsearch()	Thread safety	MT-Safe

STANDARDS

POSIX.1-2001, POSIX.1-2008, SVr4, 4.3BSD. Present in libc since libc-4.6.27.

BUGS

The naming is unfortunate.

SEE ALSO

bsearch(3), **hsearch(3)**, **tsearch(3)**