### NAME

ffs, ffsl, ffsl, fls, flsl, flsl - find first or last bit set in a bit string

## LIBRARY

Standard C Library (libc, -lc)

## SYNOPSIS

#include <strings.h>

int
ffs(int value);

int
ffsl(long value);

int
ffsll(long long value);

int
fls(int value);

int
flsl(long value);

int
flsll(long long value);

### DESCRIPTION

The **ffs**(), **ffsl**() and **ffsll**() functions find the first (least significant) bit set in *value* and return the index of that bit.

The **fls**(), **flsl**() and **flsll**() functions find the last (most significant) bit set in *value* and return the index of that bit.

Bits are numbered starting at 1, the least significant bit. A return value of zero from any of these functions means that the argument was zero.

SEE ALSO bitstring(3), bitset(9)

# HISTORY

The **ffs**() function appeared in 4.3BSD. Its prototype existed previously in  $\langle string.h \rangle$  before it was moved to  $\langle strings.h \rangle$  for IEEE Std 1003.1-2001 ("POSIX.1") compliance.

The **ffsl**(), **fls**() and **flsl**() functions appeared in FreeBSD 5.3. The **ffsll**() and **flsll**() functions appeared in FreeBSD 7.1.