

NAME

sem_post - increment (unlock) a semaphore

LIBRARY

Standard C Library (libc, -lc)

SYNOPSIS

```
#include <semaphore.h>
```

int

```
sem_post(sem_t *sem);
```

DESCRIPTION

The **sem_post()** function increments (unlocks) the semaphore pointed to by *sem*. If there are threads blocked on the semaphore when **sem_post()** is called, then the highest priority thread that has been blocked the longest on the semaphore will be allowed to return from **sem_wait()**.

The **sem_post()** function is signal-reentrant and may be called within signal handlers.

RETURN VALUES

The **sem_post()** function returns the value 0 if successful; otherwise the value -1 is returned and the global variable *errno* is set to indicate the error.

ERRORS

The **sem_post()** function will fail if:

[EINVAL] The *sem* argument points to an invalid semaphore.

[EOVERFLOW] The semaphore value would exceed SEM_VALUE_MAX.

SEE ALSO

sem_getvalue(3), sem_trywait(3), sem_wait(3)

STANDARDS

The **sem_post()** function conforms to ISO/IEC 9945-1:1996 ("POSIX.1").