

NAME

exit, **_Exit** - perform normal program termination

LIBRARY

Standard C Library (libc, -lc)

SYNOPSIS

#include <stdlib.h>

void

exit(*int status*);

void

_Exit(*int status*);

DESCRIPTION

The **exit**() and **_Exit**() functions terminate a process.

Before termination, **exit**() performs the following functions in the order listed:

1. Call all functions registered with the `__cxa_atexit(3)` function (which are typically destructors from the loaded dynamic objects), and the functions registered with the `atexit(3)` function, in the reverse order of their registration.
2. Flush all open output streams.
3. Close all open streams.

The **_Exit**() function terminates without calling the functions registered with the `atexit(3)` function, and may or may not perform the other actions listed. The FreeBSD implementation of the **_Exit**() function does not call destructors registered with `__cxa_atexit(3)`, does not flush buffers, and does not close streams.

Both functions make the low-order eight bits of the *status* argument available to a parent process which has called a `wait(2)`-family function.

The C Standard (ISO/IEC 9899:1999 ("ISO C99")) defines the values 0, `EXIT_SUCCESS`, and `EXIT_FAILURE` as possible values of *status*. Cooperating processes may use other values; in a program which might be called by a mail transfer agent, the values described in `sysexits(3)` may be used to provide more information to the parent process.

Note that **exit()** does nothing to prevent bottomless recursion should a function registered using **atexit(3)** itself call **exit()**. Such functions must call **_Exit()** instead (although this has other effects as well which may not be desired).

RETURN VALUES

The **exit()** and **_Exit()** functions never return.

SEE ALSO

_exit(2), **abort(2)**, **wait(2)**, **at_quick_exit(3)**, **atexit(3)**, **intro(3)**, **quick_exit(3)**, **sysexits(3)**, **tmpfile(3)**

STANDARDS

The **exit()** and **_Exit()** functions conform to ISO/IEC 9899:1999 ("ISO C99").

HISTORY

The **exit()** function appeared in Version 1 AT&T UNIX.