

NAME

ssignal, *gsignal* — software signals

SYNOPSIS

```
#include <signal.h>

int (*ssignal (sig, action)) ( )
int sig, (*action) ( );

int gsignal (sig)
int sig;
```

DESCRIPTION

Ssignal and *gsignal* implement a software facility similar to *signal(2)*. This facility is used by the Standard C Library to enable the user to indicate the disposition of error conditions, and is also made available to the user for his own purposes.

Software signals made available to users are associated with integers in the inclusive range 1 through 15. An *action* for a software signal is *established* by a call to *ssignal*, and a software signal is *raised* by a call to *gsignal*. Raising a software signal causes the action established for that signal to be *taken*.

The first argument to *ssignal* is a number identifying the type of signal for which an action is to be established. The second argument defines the action; it is either the name of a (user defined) *action function* or one of the manifest constants **SIG_DFL** (default) or **SIG_IGN** (ignore). *Ssignal* returns the action previously established for that signal type; if no action has been established or the signal number is illegal, *ssignal* returns **SIG_DFL**.

Gsignal raises the signal identified by its argument, *sig*.

If an action function has been established for *sig*, then that action is reset to **SIG_DFL** and the action function is entered with argument *sig*. *Gsignal* returns the value returned to it by the action function.

If the action for *sig* is **SIG_IGN**, *gsignal* returns the value 1 and takes no other action.

If the action for *sig* is **SIG_DFL**, *gsignal* returns the value 0 and takes no other action.

If *sig* has an illegal value or no action was ever specified for *sig*, *gsignal* returns the value 0 and takes no other action.

NOTES

There are some additional signals with numbers outside the range 1 through 15 which are used by the Standard C Library to indicate error conditions. Thus, some signal numbers outside the range 1 through 15 are legal, although their use may interfere with the operation of the Standard C Library.