

**NAME**

setjmp, longjmp – execute non-local goto

**SYNOPSIS**

**int save[3];**

**setjmp(save)**

**longjmp(save)**

**DESCRIPTION**

These routines are useful for dealing with errors and interrupts encountered in a low-level subroutine of a program.

*Setjmp* saves its stack environment in *save* for later use by *longjmp*. It returns 0 on the initial call.

*Longjmp* restores the environment saved in *save* by *setjmp*. It then returns in such a way that execution continues as if the call of *setjmp* had just returned (with a nonzero value). All accessible automatic and register data have values as of the time *setjmp* was called.

The routine that called *setjmp* must still be active when *longjmp* is called.

Although these functions are similar in purpose to *setexit* and *reset*, they permit several *setjmp* calls to be made, each with a different *save*. *Longjmp* may then return to any of them by selecting the appropriate one.

**SEE ALSO**

signal(II), reset(III)