**NAME**

curs_border, border, wborder, box, whline, wvline – create curses borders, horizontal and vertical lines

**SYNOPSIS**

**cc** [ *flag* ... ] *file* ... **–lcurses** [ *library* .. ]

**#include <curses.h>**

**int border(chtype** *ls*, **chtype** *rs*, **chtype** *ts*, **chtype** *bs*, **chtype** *tl*, **chtype** *tr*, **chtype** *bl*, **chtype** *br***);**

**int wborder(WINDOW** **win*, **chtype** *ls*, **chtype** *rs*, **chtype** *ts*, **chtype** *bs*, **chtype** *tl*, **chtype** *tr*, **chtype** *bl*, **chtype** *br***);**

**int box(WINDOW** **win*, **chtype** *verch*, **chtype** *horch***);**

**int hline(chtype** *ch*, **int** *n***);**

**int whline(WINDOW** **win*, **chtype** *ch*, **int** *n***);**

**int vline(chtype** *ch*, **int** *n***);**

**int wvline(WINDOW** **win*, **chtype** *ch*, **int** *n***);**

**MT-LEVEL**

Unsafe

**DESCRIPTION**

With the **border( )**, **wborder( )**, and **box( )** routines, a border is drawn around the edges of the window. The arguments and attributes are:

*ls* left side of the border
*rs* right side of the border
*ts* top side of the border
*bs* bottom side of the border
*tl* top left-hand corner
*tr* top right-hand corner
*bl* bottom left-hand corner
*br* bottom right-hand corner

If any of these arguments is zero, then the following default values (defined in **<curses.h>**) are used respectively instead: **ACS_VLINE**, **ACS_VLINE**, **ACS_HLINE**, **ACS_HLINE**, **ACS_ULCORNER**, **ACS_URCORNER**, **ACS_BLCORNER**, **ACS_BRCORNER**.

**box(***win*, *verch*, *horch***)** is a shorthand for the following call:

**wborder(***win*, *verch*, *verch*, *horch*, **horch , 0, 0, 0, 0)**

**hline( )** and **whline( )** draw a horizontal (left to right) line using *ch* starting at the current cursor position in the window. The current cursor position is not changed. The line is at most *n* characters long, or as many as fit into the window.

**vline( )** and **wvline( )** draw a vertical (top to bottom) line using *ch* starting at the current cursor position in the window. The current cursor position is not changed. The line is at most *n* characters long, or as many as fit into the window.

**RETURN VALUES**

All routines return the integer **OK**, or a non-negative integer if **immedok( )** is set. See **curs_outopts**(3X).

**SEE ALSO**

**curs_outopts**(3X), **curses**(3X)

**NOTES**

The header **<curses.h>** automatically includes the headers **<stdio.h>** and **<unctrl.h>**.

Note that **border( )** and **box( )** may be macros.