NAME

    col — filter reverse line feeds from input

SYNOPSIS

    col [**−bfhpx**] [**−l** *num*]

DESCRIPTION

    The **col** utility filters out reverse (and half reverse) line feeds so that the output is in the correct order with only forward and half forward line feeds, and replaces white-space characters with tabs where possible. This can be useful in processing the output of nroff(1) and tbl(1).

    The **col** utility reads from the standard input and writes to the standard output.

    The options are as follows:

    −b   Do not output any backspaces, printing only the last character written to each column position.

    −f   Forward half line feeds are permitted ("fine" mode). Normally characters printed on a half line boundary are printed on the following line.

    −h   Do not output multiple spaces instead of tabs (default).

    −l *num*
        Buffer at least *num* lines in memory. By default, 128 lines are buffered.

    −p   Force unknown control sequences to be passed through unchanged. Normally, **col** will filter out any control sequences from the input other than those recognized and interpreted by itself, which are listed below.

    −x   Output multiple spaces instead of tabs.

    In the input stream, **col** understands both the escape sequences of the form escape-digit mandated by Version 2 of the Single UNIX Specification ("SUSv2") and the traditional BSD format escape-control-character. The control sequences for carriage motion and their ASCII values are as follows:

ESC−BELL	reverse line feed (escape then bell).
ESC−7	reverse line feed (escape then 7).
ESC−BACKSPACE	half reverse line feed (escape then backspace).
ESC−8	half reverse line feed (escape then 8).
ESC−TAB	half forward line feed (escape than tab).
ESC−9	half forward line feed (escape then 9). In **−f** mode, this sequence may also occur in the output stream.
backspace	moves back one column (8); ignored in the first column
carriage return	(13)
newline	forward line feed (10); also does carriage return
shift in	shift to normal character set (15)
shift out	shift to alternate character set (14)
space	moves forward one column (32)
tab	moves forward to next tab stop (9)
vertical tab	reverse line feed (11)

    All unrecognized control characters and escape sequences are discarded.

    The **col** utility keeps track of the character set as characters are read and makes sure the character set is correct when they are output.

    If the input attempts to back up to the last flushed line, **col** will display a warning message.

ENVIRONMENT

    The `LANG, LC_ALL` and `LC_CTYPE` environment variables affect the execution of **col** as described in `environ`(7).

EXIT STATUS

    The **col** utility exits 0 on success, and >0 if an error occurs.

SEE ALSO

    `colcrt`(1), `expand`(1), `nroff`(1), `tbl`(1)

STANDARDS

    The **col** utility conforms to Version 2 of the Single UNIX Specification ("SUSv2").

HISTORY

    A **col** command appeared in Version 6 AT&T UNIX.