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).
- -1 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.

The control sequences for carriage motion that **col** understands and their decimal values are listed in the following table:

ESC-7 reverse line feed (escape then 7)
ESC-8 half reverse line feed (escape then 8)
ESC-9 half forward line feed (escape then 9)

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 $\verb"col"$ utility conforms to Version 2 of the Single UNIX Specification (" SUSv2").

HISTORY

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