

**NAME**

**expand**, **unexpand** - expand tabs to spaces, and vice versa

**SYNOPSIS**

**expand** [-t *tab1,tab2,...,tabn*] [*file ...*]

**unexpand** [-a | -t *tab1,tab2,...,tabn*] [*file ...*]

**DESCRIPTION**

The **expand** utility processes the named files or the standard input writing the standard output with tabs changed into blanks. Backspace characters are preserved into the output and decrement the column count for tab calculations. The **expand** utility is useful for pre-processing character files (before sorting, looking at specific columns, etc.) that contain tabs.

The **unexpand** utility puts tabs back into the data from the standard input or the named files and writes the result on the standard output.

The following options are available:

**-a** (**unexpand** only.) By default, only leading blanks and tabs are reconverted to maximal strings of tabs. If the **-a** option is given, then tabs are inserted whenever they would compress the resultant file by replacing two or more characters.

**-t** *tab1,tab2,...,tabn*

Set tab stops at column positions *tab1,tab2,...,tabn*. If only a single number is given, tab stops are set that number of column positions apart instead of the default number of 8.

**ENVIRONMENT**

The LANG, LC\_ALL and LC\_CTYPE environment variables affect the execution of **expand** and **unexpand** as described in environ(7).

**EXIT STATUS**

The **expand** and **unexpand** utilities exit 0 on success, and >0 if an error occurs.

**STANDARDS**

The **expand** and **unexpand** utilities conform to IEEE Std 1003.1-2001 ("POSIX.1").

**HISTORY**

The **expand** utility first appeared in 1BSD.