

**NAME**

tr – transliterate

**SYNOPSIS****tr** [ **-c****d****s** ] [ string1 [ string2 ] ]**DESCRIPTION**

*Tr* copies the standard input to the standard output with substitution or deletion of selected characters. Input characters found in *string1* are mapped into the corresponding characters of *string2*. If *string2* is short, it is padded with corresponding characters from *string1*. Any combination of the options **-c****d****s** may be used. **-c** complements the set of characters in *string1* with respect to the universe of characters whose ascii codes are 001 through 377 octal. **-d** deletes all input characters in *string1*. **-s** squeezes all strings of repeated output characters that are in *string2* to single characters.

The following abbreviation conventions may be used to introduce ranges of characters or repeated characters into the strings:

[*a*–*b*] stands for the string of characters whose ascii codes run from character *a* to character *b*.

[*a*\**n*], where *n* is an integer or empty, stands for *n*-fold repetition of character *a*. *n* is taken to be octal or decimal according as its first digit is or is not zero. A zero or missing *n* is taken to be huge; this facility is useful for padding *string2*.

The escape character ‘\’ may be used as in *sh* to remove special meaning from any character in a string. In addition, ‘\’ followed by 1, 2 or 3 octal digits stands for the character whose ascii code is given by those digits.

The following example creates a list of all the words in ‘file1’ one per line in ‘file2’, where a word is taken to be a maximal string of alphabetic. The strings are quoted to protect the special characters from interpretation by the Shell; 012 is the ascii code for newline.

```
tr -cs "[A-Z][a-z]" "[\012*]" <file1 >file2
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**SEE ALSO**

sh (I), ed (I), ascii (VII)

**BUGS**

Won’t handle ascii NUL in *string1* or *string2*; always deletes NUL from input.