

**NAME**

tr - translate characters

**SYNOPSIS**

```
tr [ -cds ] [ 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*. When *string2* is short it is padded to the length of *string1* by duplicating its last character. Any combination of the options *-cds* may be used: *-c* complements the set of characters in *string1* with respect to the universe of characters whose ASCII codes are 01 through 0377 octal; *-d* deletes all input characters in *string1*; *-s* squeezes all strings of repeated output characters that are in *string2* to single characters.

In either string the notation *a-b* means a range of characters from *a* to *b* in increasing ASCII order. The character *\* followed by 1, 2 or 3 octal digits stands for the character whose ASCII code is given by those digits. A *\* followed by any other character stands for that character.

**EXAMPLE**

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 second string is quoted to protect *\* from the Shell. 012 is the ASCII code for new-line.

```
tr -cs A-Za-z '\012' <file1 >file2
```

**SEE ALSO**

ed(1), ascii(7)

**BUGS**

Won't handle ASCII NUL in *string1* or *string2*; always deletes NUL from input.