



The 19th International Conference on Web Engineering (ICWE-2019)

June 11 - 14, 2019 - Daejeon, Korea

Powerful Unix-Tools - tr

Andreas Schmidt

Department of Informatics and Business Information Systems University of Applied Sciences Karlsruhe Germany Institute for Automation and Applied Informatics Karlsruhe Institute of Technologie Germany

Andreas Schmidt ICWE - 2019





tr - command

• Purpose:

Translate, squeeze, and/or delete characters from standard input, writing to standard output.

- Translate: Mapping between characters, i.e.
 - {A->a, B->b, ...}
 - {A->*, E->*, I->*, O->*, U->*, }
- Examples:
 - Translate to lowercase:

```
tr 'A-Z' 'a-z' < The-Adventures-of-Tom-Sawyer.txt
```

Replace <newline> with <space>

```
tr '\n' ' ' < short-story.txt > one-liner.txt
```





tr - command

• Squeeze (remove duplicate characters):

{aa...a \rightarrow a, xx...x \rightarrow x, $\ln \ldots \ln n$ }

- Examples:
 - Replace multiple space or newline-characters by a single representation of this character

tr -s ' n' < papers/1587.txt

• Write each word in its own line

```
tr -c -s 'A-Za-z' '\n' < papers/1587.txt
complement flag</pre>
```





Further Examples ...

```
$ cat tr-demo.txt
                                               $ tr < tr-demo2.txt -s -c 'A-Za-z'
1
                                               This is
2
                                               paragraph one.
3
                                               And this is
4
                                               paragraph two.
5
                                               Paragraph 3 is the
6
                                               last one.
7
                                               $ tr < tr-demo2.txt -sc 'A-Za-z' '\n'</pre>
$ tr < tr-demo.txt '\n' ' '</pre>
                                               This
1 2 3 4 5 6 7
                                               is
                                               paragraph
                                               one
$ cat tr-demo2.txt
                                               And
This is
                                               this
paragraph one.
                                               is
                                               paragraph
And this is
                                               two
paragraph two.
                                               Paragraph
                                               is
Paragraph 3 is the
                                               the
last one.
                                               last
                                               one
```