## **BASIC FILE MANIPULATION**

- cut accessing specific fields from delimited files
- tr translating characters in files
  - Examples:
    - Replace as with bs tr a b
    - Upper to lowercase

```
tr [:upper:] [:lower:] <
inputfile
tr [A-Z] [a-z] < inputfile</pre>
```

• Delete characters tr -d 'N'

## WC

- Default (no options) outputs: lines, words, bytes
   Ex: wc filename
- No filename -> input from stdin
- Multiple files: separate with spaces
- Options to get only specific info:
  - Ex:wc -l filename just number of lines
  - Ex:wc -m filename -- number of chars