

YOU DON'T SAY?

CIS241

System-Level Programming and Utilities

Stream Editor (`sed`)

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Based on material provided by Erin Carrier, Austin Ferguson, and Katherine Bowers

sed

Manipulates input (stream or file)

Typically:

- `sed [options] '/pattern/ command' input_file`
- `sed [options] 'range command' input_file`

Common options

`-E` to use extended regex

`-f filename` to load `sed` commands from a file

`--in-place` or `-i` to modify a file in place

- `--in-place=suffix` or `-isuffix` to create a backup file with suffix extension

Stream manipulation - Deleting lines:

- `sed '4 d'`
- `sed '1,4 d'`
- `sed -E '/pattern/ d'`

(`$` is the end of file when using ranges!)

Stream manipulation - substituting text:

- `sed -E 's/pattern/replace_str'`
 - Ex: `sed -E 's/ *$//' filename`

By default, only replaces first match per line

- Replace all: `sed -E 's/pattern/replace_str/g'`
- Replace second: `sed -E 's/pattern/replace_str/2'`

Can combine patterns with ranges!

- `sed -E '5,$ s/pattern/replace_str/'`

Stream manipulation - substituting text:

- `sed -E 's/pattern/replace_str'`

Can also use parts of matched pattern in replacement!

- Uses (parentheses groupings)
- To refer to parentheses groups: `\1`, `\2`, ...

- `sed -E 's/the ([[alpha:]]+) /\1/`

- To refer to the whole matched pattern: `&`

- `sed -E 's/(.+\.com)/www.&/'`

<https://www.geeksforgeeks.org/linux-unix/sed-command-in-linux-unix-with-examples/>