sed Stream editor

CONCEPTS

sed reads input one line at a time, runs your script on it, and prints the result. Without -i the file itself is never changed.

Read line into pattern space
↓ run script
Commands address? command
↓ auto-print
Output stdout, or -i file
Repeated for every input line

macOS ships BSD sed: -i needs an argument (-i ''), and \U, \n in replacements and 0~2 are not supported. This sheet is GNU sed.

SUBSTITUTE

sed 's/<re>**/**<new>**/'** <file>
Replace first match on each line

sed 's/<re>**/**<new>**/g'** <file>
Replace every match

sed 's/<re>**/**<new>**/**<N>**'** <file>
Replace only the Nth match

sed 's/<re>**/**<new>**/gI'** <file>
Ignore case

sed 's/<re>**/&!/'** <file>
& inserts the whole match

sed 's|<path>**|**<new>**|g'** <file>
Pick another delimiter for slashes

sed -E 's/(<a>**)(**<b>**)/\2\1/'** <file>
Swap groups with backreferences

OPTIONS

sed -n
Print only when told to (p)

sed -i[<suffix>**]**
Edit in place, optional backup

sed -E
Extended regex: (), +, ?, |

sed -e '<cmd>**' -e '**<cmd>**'**
Combine several commands

sed -f <script.sed> <file>
Read commands from a file

ADDRESSES

sed '<N>**cmd'**
Act on line N

sed '$cmd'
Act on the last line

sed '<N>**,**<M>**cmd'**
Act on lines N to M

sed '/<re>**/cmd'**
Act on lines matching a regex

sed '/<re>**/!cmd'**
Act on lines not matching

sed '/<a>**/,/**<b>**/cmd'**
From the first match to the next

sed '<N>**,+**<K>**cmd'**
Line N and the K lines after

sed '<N>**~**<K>**cmd'**
Every Kth line, starting at N

COMMANDS

p
Print the pattern space

d
Delete line, start next cycle

q / Q
Quit (Q without printing)

a <text>
Append text after the line

i <text>
Insert text before the line

c <text>
Replace the line with text

{ cmd; cmd }
Group commands under one address

REGEX NOTES

^ $. *
Start, end, any char, repeat

[abc] [^abc] [a-z]
Character classes

\+ \? \| \(\)
BRE needs backslashes (GNU)

+ ? | () {n,m}
Plain in -E mode

\. * \/ \[
Escape a special character