Assignment 3

Sed

By Nicholas Mueller

Please include the command, a screenshot showing it works as intended, cite all sources you used, and give a short explanation of how the command works and why.

1. Change the name Meg to Megan

For this command I use the -n option to suppress sed’s default behavior I use s/ followed by the string I want to replace Meg in this example with /Megan I use another /then p to print to screen the output.

Command: sed -n s/Meg/Megan/p datebook

Text

Description automatically generated

1. Delete the last 3 lines.

Datebook has 53 lines this command tells sed to delete d lines 51 to 53 in the file datebook.

Command: sed 51,53d datebook

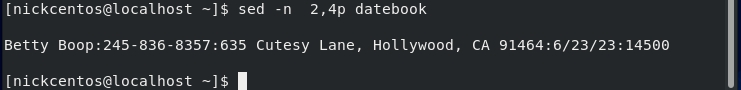
Text

Description automatically generated

1. Print lines 2 through 4 .

Using -n to suppress default sed behavior to show just the lines I want the syntax is 2,4 specifies lines 2 to 4 then p to print followed by the filename

Command: sed -n 2,4p datebook



1. Delete lines containing Place.

Command: sed /Place/d datebook

Text

Description automatically generated

1. Print all lines where the birthdays are in the first week of the month. Be careful of the dates for birthdays, the format is MM/DD/YY

In this problem I use -n to suppress default behavior then I specify /[0-9][/] any number followed by a slash, I want only the first week of the month so [1-7][/] the first seven days then a slash another [0-9] (any number) then /p to print matching lines.

Command: sed -n '/[0-9][/][1-7][/][0-9]/p' datebook

Text

Description automatically generated

1. Append three asterisks to the end of lines starting with Sir

For this problem I use sed /Sir to find the pattern Sir then /a\ the a must be enclosed in forward then backward slashes then the \*\*\* to insert three asterisks and the filename datebook

Command: sed /Sir/a\ \*\*\* datebook

Text

Description automatically generated

1. Replace the line containing "Westley Pirate" with the phrase "As you wish."

This command uses /c\ for replace preceded by the pattern Pirate: this finds lines with Westley Pirate then what follows the /c\ replaces lines that have Pirate: with As You Wish.

Command: sed ‘/Pirate:/c\As You Wish’ datebook (shown on next page)

Text

Description automatically generated

1. Change Minerva McGonagall's birthday to 12/25/1960 . Assume you don't know Minerva's original birthday. Use a regular expression to search for it.

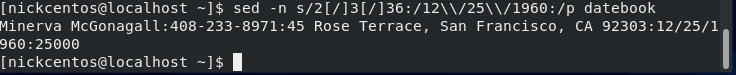
Command: grep -E [0-9][/][0-9][/][0-9] datebook first image and command are the regular expression I used to find Minerva’s birthday.

Next Command: sed -n s/2[/]3[/]36:/12//\/25\\/1960:/p datebook

In this command I tell sed -n to suppress default behavior (I only want to see what I changed) then s/ for substitute 2[/]3[/]36: this is the birthday must enclose the \ in brackets or sed gets confused. Then after my substitution pattern, what to substitute with the syntax /12\\/25\\/1960:/p note you must escape the / between the numbers by using \\ or it gives syntax error the /p means print.

Text

Description automatically generated



1. Delete all blank lines

Source Used: “Complete sed command | Delete empty lines in a file using sed command”

<https://www.youtube.com/watch?v=JOg1Ap9-HJE>

I looked up this command in a youtube video the syntax is

sed /^$/d datebook where the ^ and $ combined finds blank lines and /d deletes them from datebook file.

Command: sed /^$/d datebook

Text

Description automatically generated

Source used: “Using sed, how can I append "START" above the first line and "END" below the last line?”

Link is here

<https://www.youtube.com/watch?v=M_8epMEIW4c>

1. Write a sed script that will (actual sed script, NOT just the commands on the command line)

This is the sed script I wrote starts with the #!/usr/bin/sed because this is a sed script and must use #!/usr/bin/sed that is where the sed commands are.

Text

Description automatically generated

a. Insert above the first line the title - Great Literary Characters -.

Command: 1i/-Great Literary Characters-/Text

Description automatically generated

b. Remove the duplicate lines

For b. the duplicate line was line 17 of datebook so it’s deleted with the command 17d in the script.

I didn’t think the remaining lines were duplicates as two start with Westley Pirate but end with different numbers and dates.

Also, blank lines are deleted using /^$/d

c. Print the contents of the file with the first name then the phone number

\*\*\*For part C.

I couldn’t find a way to get this kind of output using the sed script alone, so I piped the output to awk. shown below. I tell awk to print the first and second fields.

Text

Description automatically generated

d. Append at the end of the file "Happily Ever after. The End"

I do this using

Command: $s/$Happily Ever after.The End/

shown below at the bottom of the picture.

Text

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