

CS241 : Assignment III-Part(2)

Prof. Hemangee K. Kapoor
Dr. Aryabartta Sahu
Department of CSE,
IIT Guwahati
Submission Due: October 9, 2018

October 6, 2018

Bash Commands with Sed

In each of the following problems, use the SED (Stream EDitor) command to answer the following queries. SED is used to perform a basic transformation on a stream of data which is provided either from a file or from a pipe. For some of the following problems, you may need to combine grep/egrep and sed using |. Each problem should use at most one call to sed, but you may use input/output redirection operators such as >, <, and | to combine it with other commands as per the requirement.

1. By using sed, write a command to output the content of file email_old.txt to the new file email_new.txt with all “ernet.in” replaced with “ac.in”.
2. Write a sed command to output the content of the file QuizProgram.java with all occurrences of word public replaced with private (Note that the word contain the substring “public” is not replaced and changed with the command you used. For eg: the word publicly in the file remains to be intact.)
3. Suppose a file msg.txt is given which are having too many exclamation symbols (!). Use a sed command output a content of a file that replaces one or more occurrences of ! with the single period. (Note that the multiple occurrences of !!!!! is also to be replaced with the single period(.).)
4. For a given Appointment_dates.txt file American time format is given, (such as May 12, 2010) where the European uses different time format (such as 12 May 2010). Write a sed command to change the content of time format in the file from the American to European. (**Note:** can use multiple sed commands)
5. Write a sed command to print the lines that do not contain the word “This” from the file hello.txt.

6. Write a SED command to view the following sections or line(s) of file “comm_ind_wi_day3_second_ings.txt”.
 - (a) Viewing a file from 10.3 to 10.5 range.
 - (b) View the entire file except the given range (10.3 to 10.5).
 - (c) Print 5th line of the file.
 - (d) Print lines from 2nd line to 8th line.
 - (e) Print only the last line.
 - (f) Print from 9th line to end of file.
 - (g) Find and replace text ‘Ashwin’ with ‘Jadeja’ between line numbers 9 to 11.

7. Using sed command replace the second occurrence of “I” with “We” in a line of the msg.txt file. Write a command you used here.

8. You have given a file named “sed_practice”, where each line contains a 9 digit number, a string and a 2 digit number . The first 9 digit number denotes the roll number of a student, the string denotes the name of the student and the last 2 digit number denotes the age of the student. Put keywords “Roll :” before the 9 digit number, “Name : ” before the string, and “Age :” before the 2-digit number in each record (i.e. line) of the file. **For example:** A line written like “166101006 Arijit Nath 28”, should look like “Roll : 166101006 Name : Arijit Nath Age : 28” after execution of the sed command. Redirect the output into a new file named “output_sed_practice”

9. There is a screen reader for blind people but it has some bugs, it cannot read digits. So we need to convert all the digits into word format by using sed to fix the bug. 1 needs to be replaced with ‘one’, 2 needs to be replaced with ‘two’ and 3 needs to be replaced with ‘three’. File contains only one of the three digits 1,2,3 Input file for this problem is digit_word

10. Given a file vowel_fav.txt, delete all the lines that doesn’t contains any instance of vowels using sed command.

11. Given a file mobile_review.txt, replace only 3rd and 5th occurrence of the word “apple iphone” with “samsung s8” using sed command.

12. Given a file digit.txt. Write a command to remove the first number on all lines that start with “@”?

Problem 1-12 are some set of problems. During the evaluation, we may ask similar kind of questions.