**SED**

sed: stream editor. It is a filter that sits on the way of data stream and changes the data as per the action. It just displays the changed file or output content on the screen, but does NOT change the file.

>> These are the 3 ways of executing the sed.

sed actions [files]

sed -e action1 -e action2 [files]

sed -f action-file [files]

>> the most common action is text substitution ( find- replace). the actions is: 's/foo/bar/' (here it replaces first foo with bar in each line of the entire file.)

>> **sed -e 's/india/Bharata/' testfile.**txt --> this will replace india to Bharata in each line first match.

>> **sed -e 's/india/Bharata/g' testfile.txt** --> this will replace ALL matches of india to Bharata.

>> Another common action is deleting the lines.

**sed -e '/india/d' testfile.txt** --> it will delete all the lines with india in it.

>> **sed -e '/india/!d' testfile.txt** --> here the "!d" causes not to delete the lines which has india in it. all other lines will be deleted.

>> **sed '1,10d' testfile** --> this will delete lines from 1 to 10.

>> **sed '90,$d'** testfile --> this will delete the lines from 90 to the end of the file.

>> **sed '90,$!d' testfile** --> this will NOT delete the lines from 90 to the end of the file, ie, it will delete lines from 1 to 90.

>> we can write executable sed scripts just like shell scripts. Example below

#! /bin/sed -f

s/india/Bharat/

/america/d

save this file with any name for ex: sedscript

chmod +x sedscript --> this will make the script executable.

>> cat testfile | sedscript

Sed scripts can be used to remove the control-m characters. (to type ^M, press control and press v and m)

**>> sed -e "s/^M//" file\_whihc\_has\_ctrl\_M > newfilename**

**>> mv newfilenamme original filename**