

02/04/22
SATURDAY

LSS SEMIDIAL-05/06
ASSIGNMENT

Question: ① Explain filters in Linux, both sorting and searching.

Ans: Filters are programs that take plain text as standard input, transform it into a meaningful format and then returns it as standard output.

① cat: Displays the text of the file line by line.

② cat [location of the file]

② head: displays the first n lines of specified text files. If not specified then it will print first 10 lines.

head [-no-of lines to print] [location of the file]

③ Tail: It is reverse of head. It prints the lines from the bottom of the file.

tail [no. of lines] [location]

④ sort: sort the lines alphabetically in the file.

Ex: sort [-option] [location of the file].

⑤ uniq: removes duplicate lines present in the file.

uniq [-option] [location]

⑥ wc: word count, gives the no. of lines, words or characters present in a file.

wc [-option] [path]

⑦ grep: Grep is used to search a particular information from a file.

grep [-option] pattern [path]

⑧ tac: It is opposite of cat. It prints the lines present in a text file in reverse order instead of ^{original} sequence.

Question 2 Grep and its options on regular expression.

Grep searches one or more input files for lines that match a regular expression and writes each matching line to standard output.

- A regular expression or regex is a pattern that matches a set of strings. A pattern consists of operators, constructs, literal characters, and meta characters, which have special meaning.

In its simplest form, when no regular expression type is given, grep interprets search pattern as basic regular expressions. To interpret the pattern as an extended regular expression, use the -E option.

⇒ Literal matcher:

grep bash /etc/passwd.

⇒ Anchoring:

grep ^linux file.txt

⇒ Matching single character:

grep 'kan-roo' file.txt.

⇒ Bracket Expression:

• It allows match a group of characters by enclosing them in bracket `[]`.

grep 'all[ap]t' file.txt