Filter commands

1. head:

➢ It is used to display the top 10 lines of the file

Syntax: head [options] [filename]

➢ Examples:

➢ head /etc/passwd

➢ To display the custom lines

head -n /etc/passwd (where n can be any number)

Filter commands

2. tail:

➢ It is used to display the last 10 lines of the file

Syntax: tail [options] [filename]

➢ Examples:

➢ tail /etc/passwd

➢ To display the custom lines

tail -n /etc/passwd (where n can be any number)

Filter commands

3. sort:

- It is used to sort the output in numeric or alphabetic order

Syntax: sort [options] <filename>

Filter commands

Example2: To see the file according to numbers

- cat > test1
- 3. Linux is freedom
- 1. Hello world
- 2. Welcome to my world
- press enter
- ctrl + d(save the file)

Filter commands

Example3: To remove the duplicate entries from the output

- cat > test2
- Linux is freedom
- Linux is freedom
- press enter
- ctrl + d(save the file)

Filter commands

sort -u test2

- Linux is freedom

Filter commands

4. cut:

- The cut command in UNIX is a command for cutting out the sections from each line of lines and writing the result to standard output
- It can be used to cut parts of a line by byte position, character and field

syntax: cut [options] <filename>

Filter commands

Example1:-b(byte) is used to extract the specific bytes

cat > state.txt

- Telangana state
- Andhra pradesh
- Assam
- Bihar

Filter commands

cut -b 1,2,3 state.txt

- Tel
- And
- Ass
- Bih

Filter commands

Example2: To delimit spaces and print the field

syntax: cut -d “delimiter” -f <field number> <filename>

- cut -d “ “ -f 1 state.txt

Filter commands

5. sed:

- sed stands for stream editor which is used to search a word in the file and replace it with the word required to be in the output

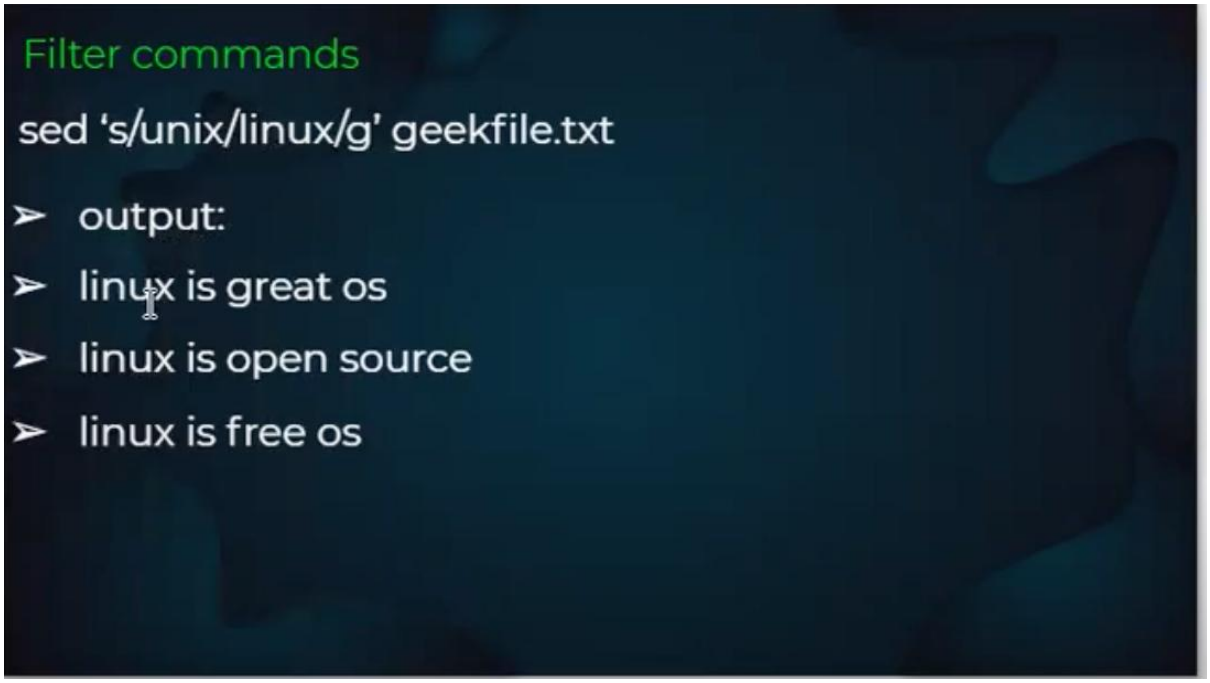
syntax: sed 's/searchfor/replacewith/g' <filename>

Filter commands

Example1:

cat > geekfile.txt

- unix is great os
- unix is open source
- unix is free os
- press enter
- ctrl + d(save the file)


Filter commands
sed 's/unix/linux/g' geekfile.txt
output:
linux is great os
linux is open source
linux is free os

File permissions

1. Permissions are applied on three levels
   - Owner or User level
   - Group level
   - Others level
2. Access modes are of three types
   - r - read only
   - w - write/edit/delete/append
   - x - execute/run a command

File permissions

2. Absolute method(numbers):
   - In Absolute method we use numbers instead of using symbols ie.,
   - Read = 4
   - Write = 2
   - Execute = 1

File permissions

3. Permissions can be set on any file or directory by two methods:

- Symbolic method(ugo)
- Absolute method(numbers)

File permissions

1. Symbolic method(ugo):

- Here u means user/owner
- Here g means group
- Here o means others

File permissions

Example1: Assigning different permissions to the file ie., user=rwx, group =rw and others =r

- ls -l <filename>
- chmod u=rwx,g=rw,o=r <filename>
- ls -l <filename>

File permissions

Example2: Assigning full permissions to the file ie., rwx to all

- ls -l <filename>
- chmod ugo=rwx <filename>
- ls -l <filename>

File permissions

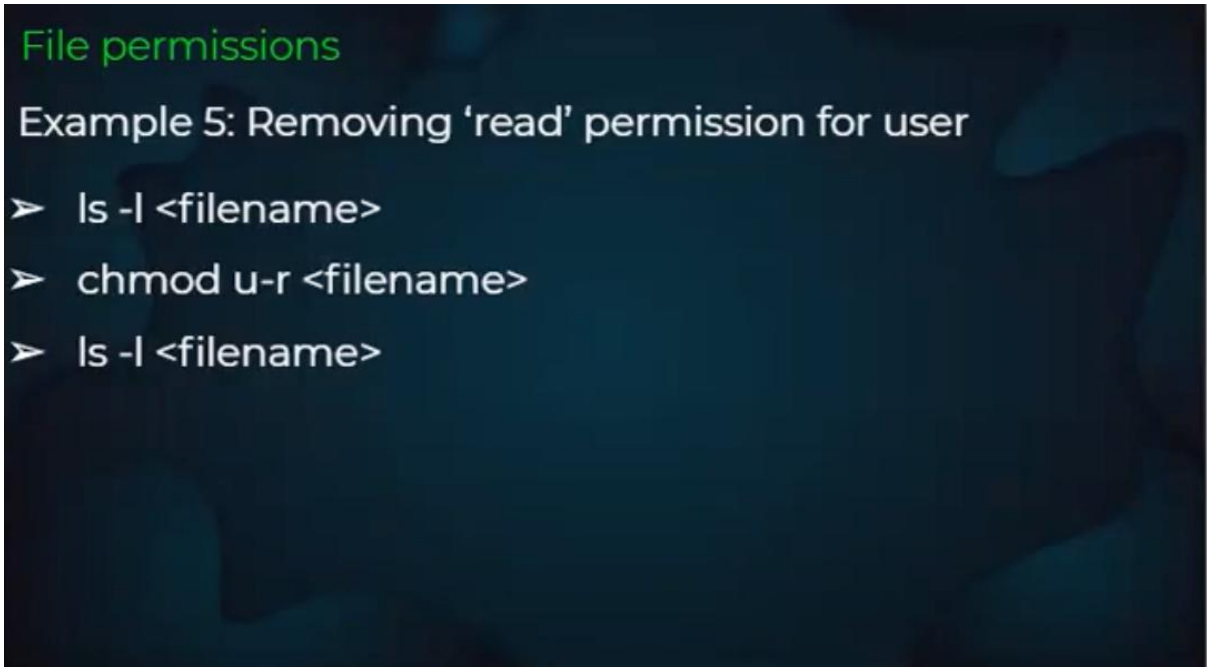
Example3: setting full permissions to other users

- ls -l <filename>
- chmod o=rwx <filename>
- ls -l <filename>

File permissions

Example4: Adding 'execute' permissions to the user group

- ls -l <filename>
- chmod g+x <filename>
- ls -l <filename>


File permissions
Example 5: Removing 'read' permission for user
ls -l <filename>
chmod u-r <filename>
ls -l <filename>