Linux Fundamentals

3. Some of the commands in the previous question can be run with the -r/-R flag. What does it do? Give an example to when you would use it

A) -r/-R flag stands for recursive.

Ex: rm -r <folder-name>

Above command will recursively delete all the files and folders inside the given directory.

4. Explain each field in the output of `ls -l` command

* First character represents type. - (File), d (Directory),
* Next 9 characters represents permissions of user, group, others “rwxrwxrwx”.
* Second Colom represents link type (Hard/Soft link).
* Third Colom represents user/create of particular file/directory.
* Fourth Colom represents group.
* Fifth Colom represents size.
* Sixth, Seventh and Eight Colom represents data and time.
* Ninth Colom displays file/directory name.

5. Explain what each of the following commands does and give an example on how to use it:

* Sed – It stands for stream editor and it can perform lots of functions on file like searching, find and replace, insertion or deletion.  
  Ex: sed ‘/^$/d’ <file-name>  
  Above command will remove empty lines in a file.
* Grep – Stands for global regular expression pattern  
  Ex: ls -l | grep ^d  
  Above command will only list directories
* Cut – It is used to cut pars of lines from a specific files.  
  Ex: cut -f1,3-5 -d “,” <file-name>  
  Above command will only print first, third, fourth and fifth lines from file. And it will cut based on “,” delimiter.
* Awk – It is a utility/language designed for data extraction.  
  Ex: awk ‘{print $1, $3, $NF}’ <file-name>  
  Above command will print only firs, third and list line for file.