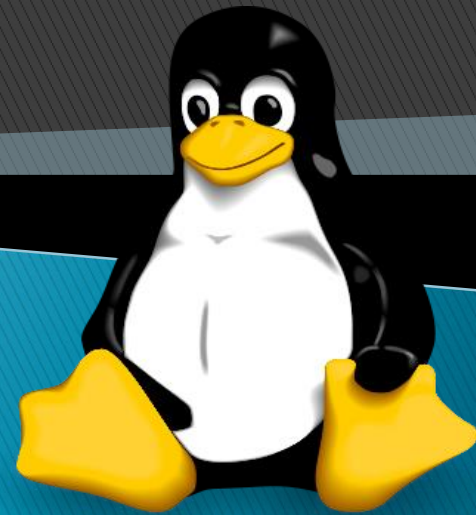


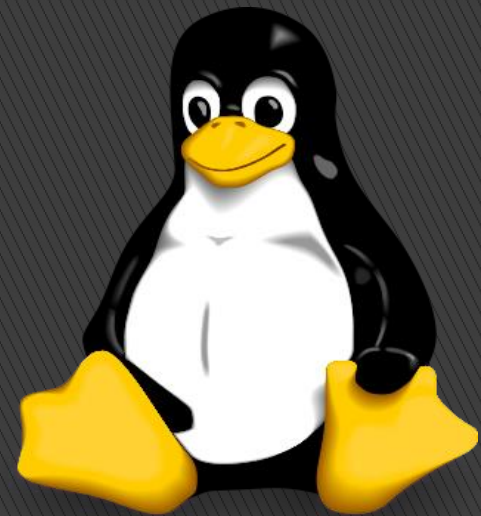


Regular Expressions



What is Regular Expressions?

Regular expressions are special characters which help search data, matching complex patterns.



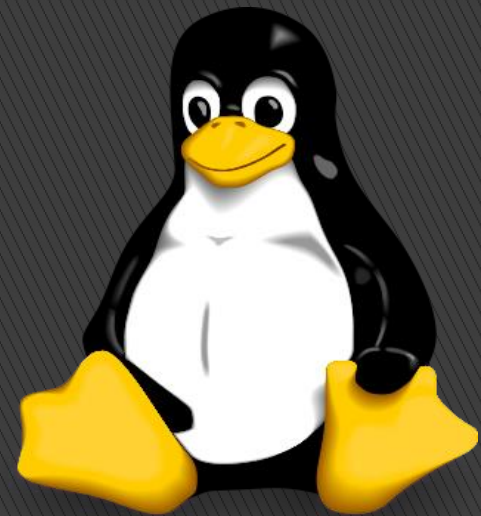
1. Grep : (Global Regular Expression Print)

The grep filter searches a file for a particular pattern of characters, and displays all lines that contain that pattern.



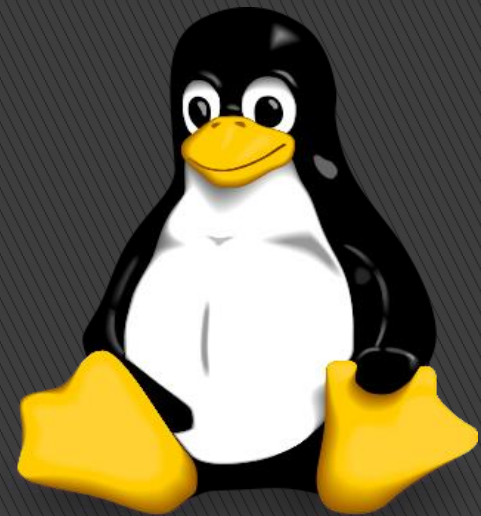
1.Search a word (string) in a file

```
#grep      root      /etc/passwd
```



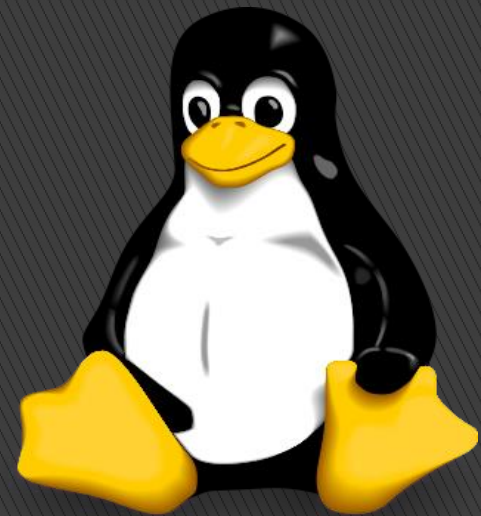
2.Search a string in multiple files

```
#grep      root    /etc/passwd    /etc/group
```



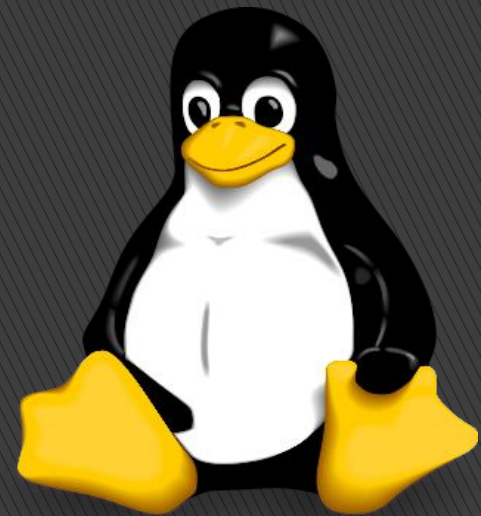
3.Search string insensitive in file

```
#grep -i Root /etc/passwd
```



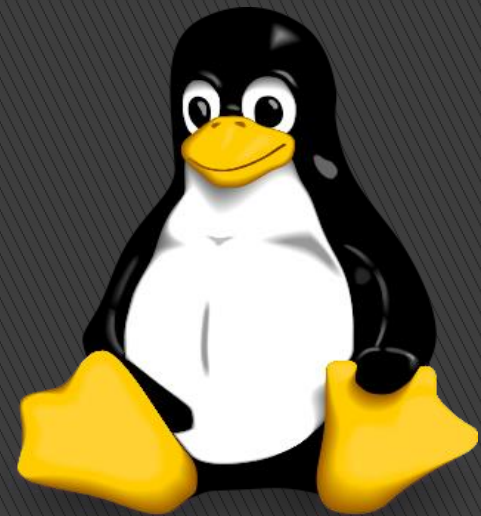
4. Search a string in all files recursively

```
#grep -r root /
```



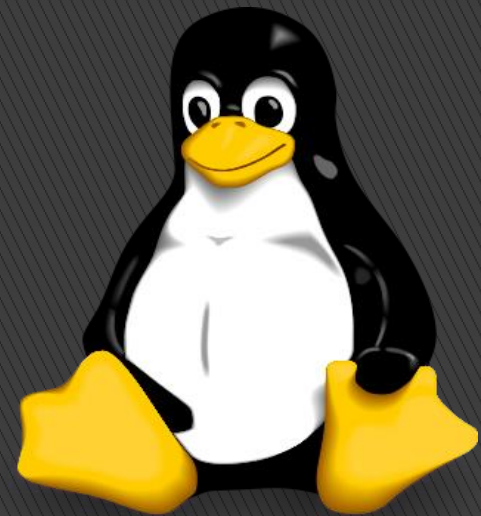
5. Inverting the string match

```
#grep -v root /etc/passwd
```



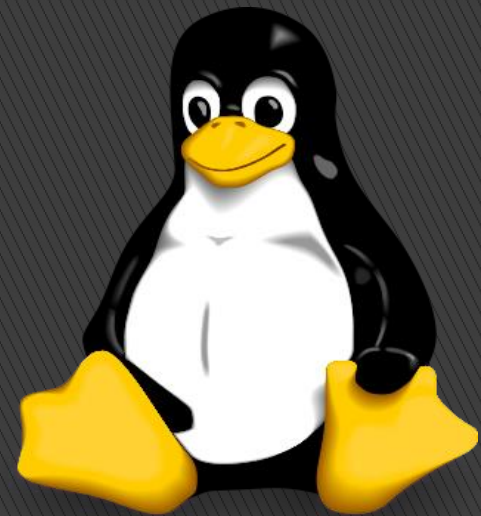
6.Displaying the string match total line no

```
#grep -c root /etc/passwd
```



7.Display the file names that matches the string

```
#grep -l root /etc/passwd  
/etc/shadow
```



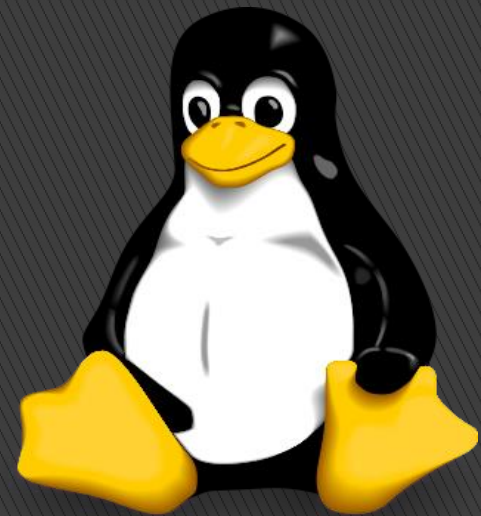
8.Display the file names that do not contain the string

```
#grep -L root /etc/passwd /etc/shadow
```



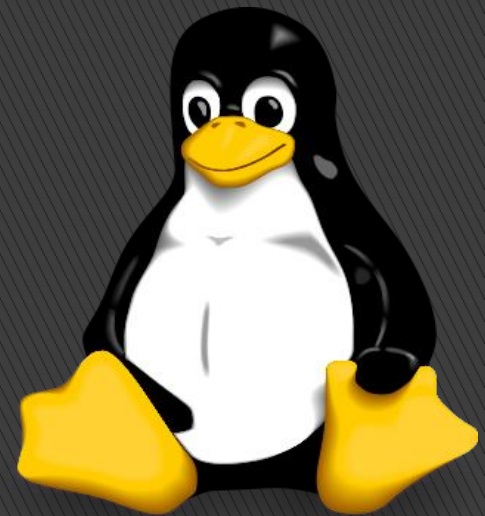
9.Displaying the string match line with number

```
#grep -n root /etc/passwd
```



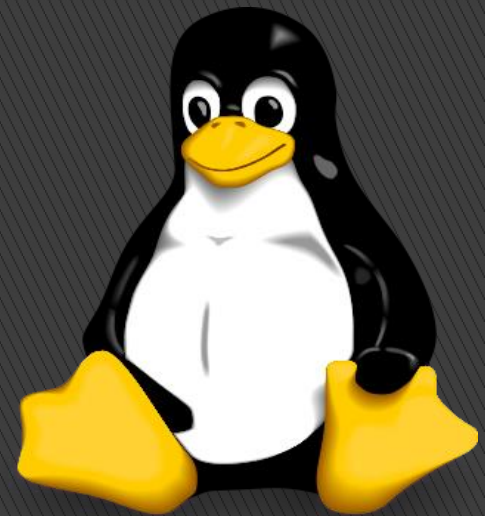
10.Display the lines that start with a string

```
#grep      ^root      /etc/passwd
```



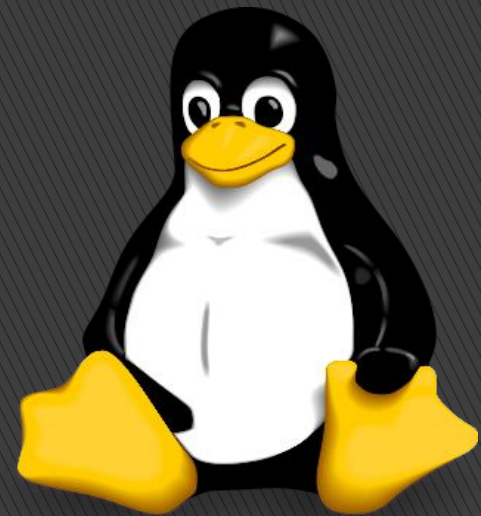
11.Display the lines that end with a string

```
#grep      /bin/bash$      /etc/passwd
```



12. Search and redirect output in a new file

```
#grep      root      /etc/passwd      >  
          /mnt/find.txt
```

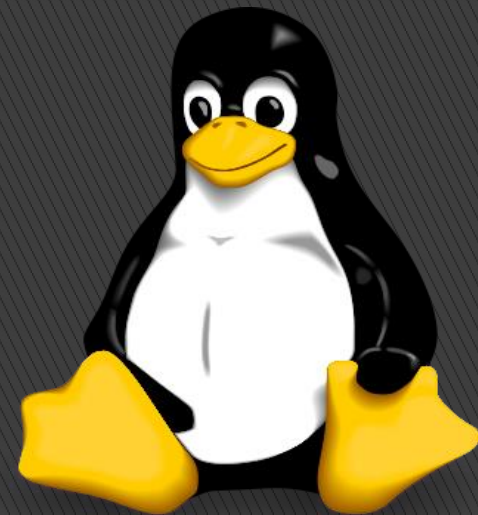


2. Find

The Linux Find Command is one of the most important and much used command in Linux systems.

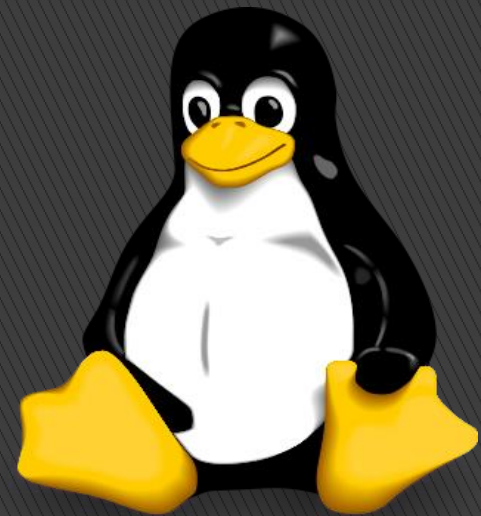
Find command used to search and locate list of files and directories based on conditions you specify for files that match the arguments.

Find can be used in variety of conditions like you can find files by permissions, users, groups, file type, date, size and other possible criteria



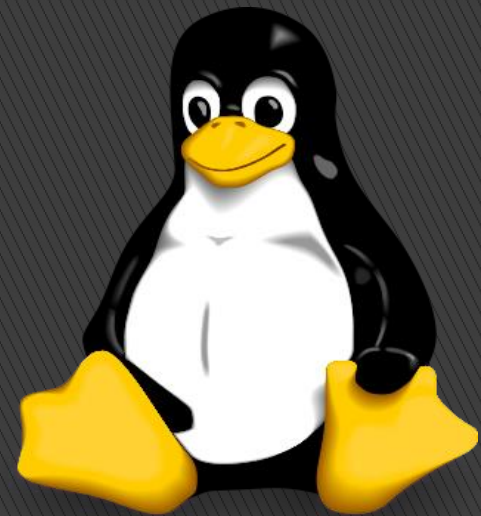
1.Find Files Under Home Directory

```
#find      /home      -name      india.txt
```



2.Find files with suid permission

```
#find      /      -perm      4755
```



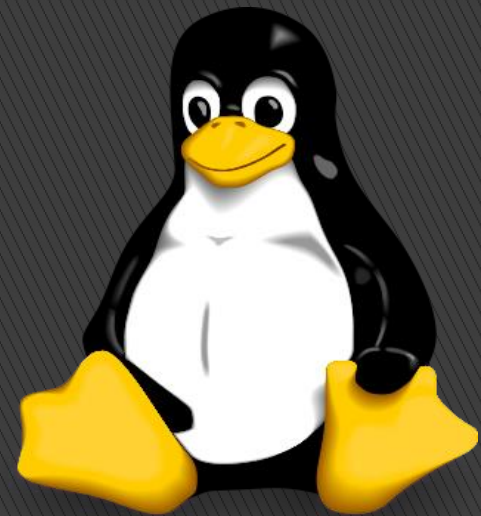
3.Find files with guid permission

```
#find      /      -perm      2644
```



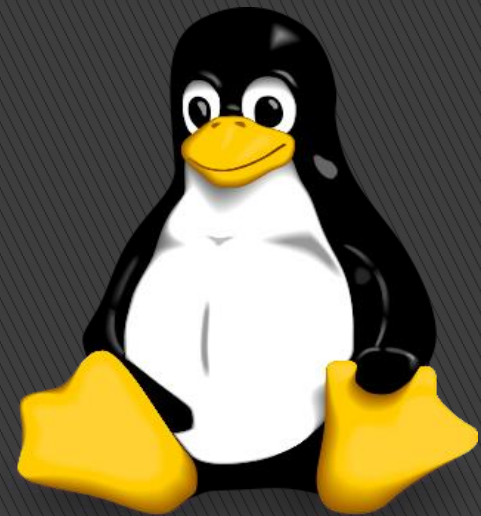
4.Find files with sticky bit permission

```
#find      /      -perm      1755
```



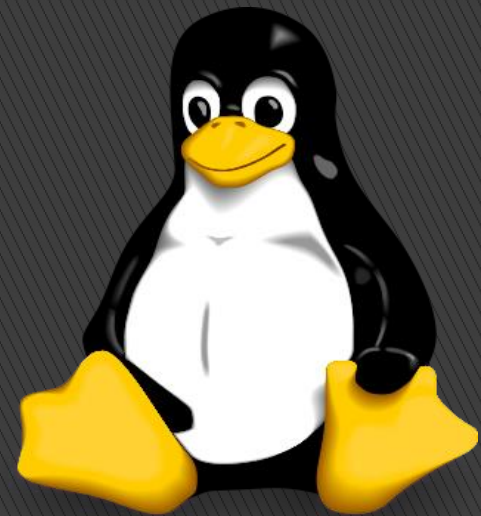
5.Using Find command based on users

```
#find      /      -user      root
```



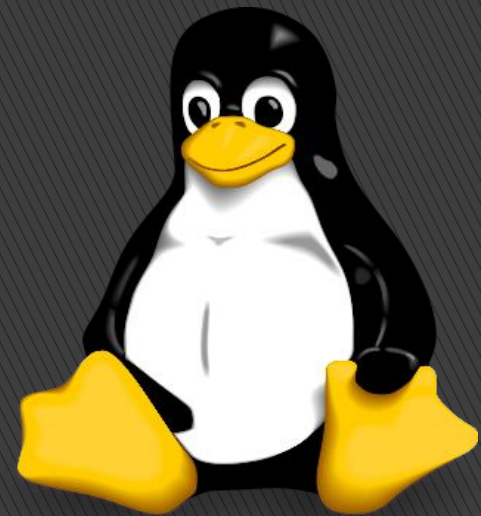
6.Using Find command based on groups

```
#find      /      -group      ibmgrp
```



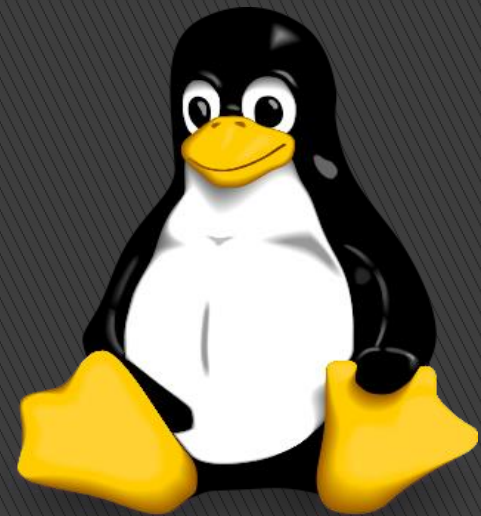
7. Search the file with less than 10MB in a folder

```
#find      /tmp      -size      -10M
```



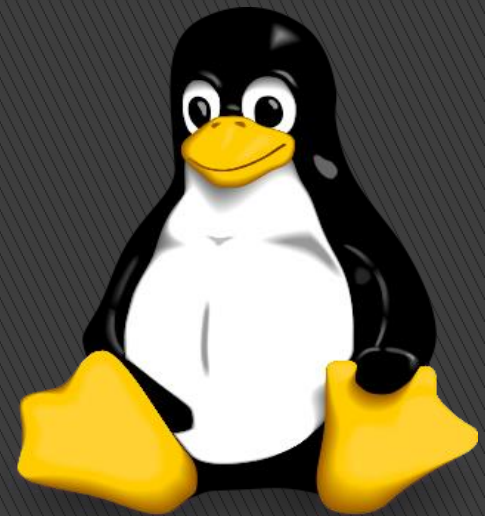
8. Search the file with more than 10MB in a folder

```
#find      /tmp      -size      +10M
```



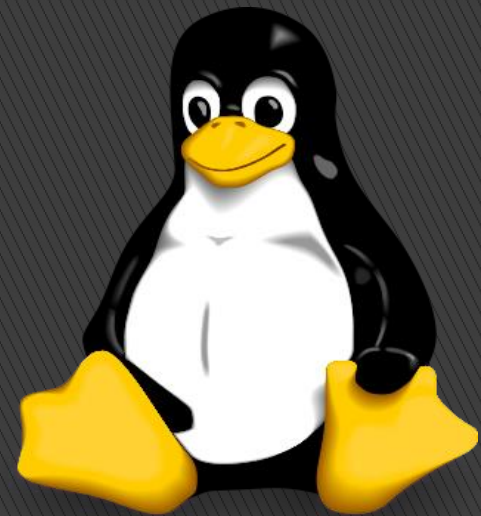
3. wc (word count)

The wc command is use for the count word and line numbers.



1.Count Number of Lines

```
#wc -l /etc/passwd
```



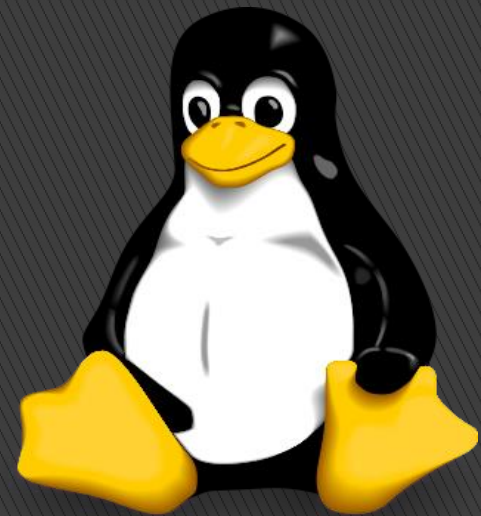
2.Count Number of Words

```
#wc -w /etc/passwd
```



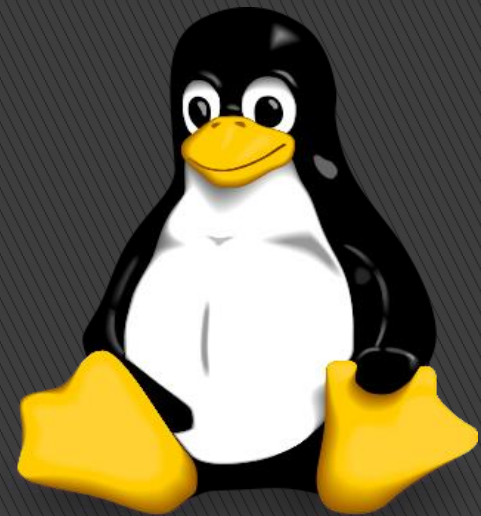
4. head

Head command is used for to display top line of the file.



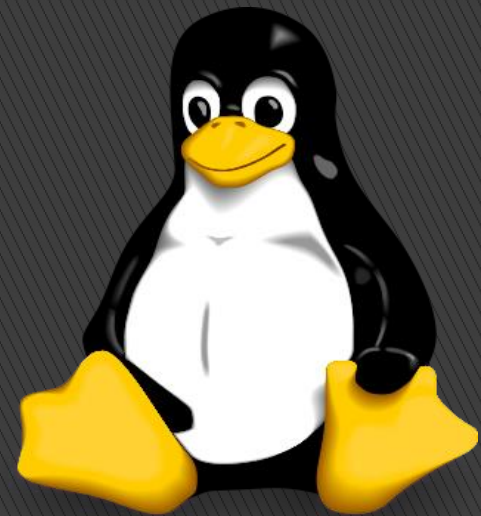
1.Display top 10 line of the file

```
#head /etc/passwd
```



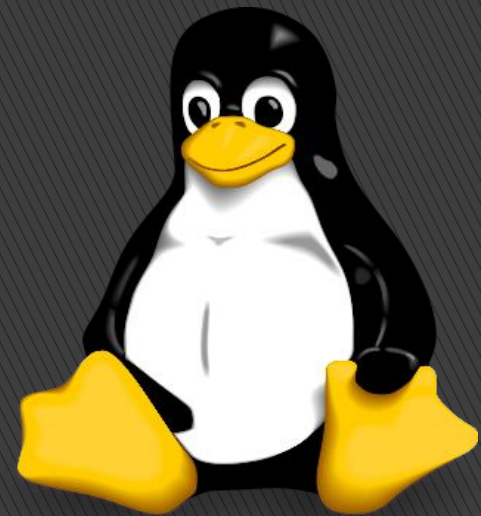
2.Display top specific no line of the file

```
#head -n 15 /etc/passwd
```



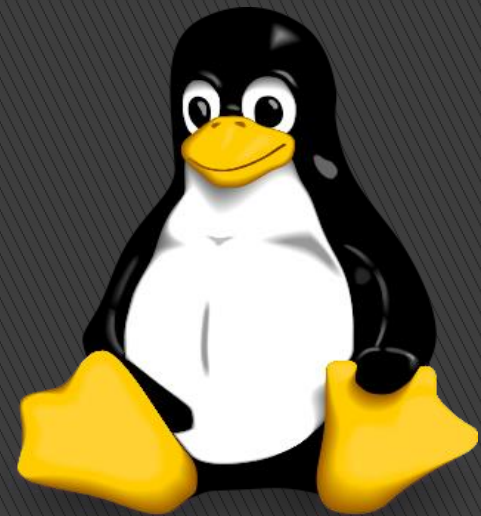
5. tail

Tail command is used for to display the bottom line of the file.



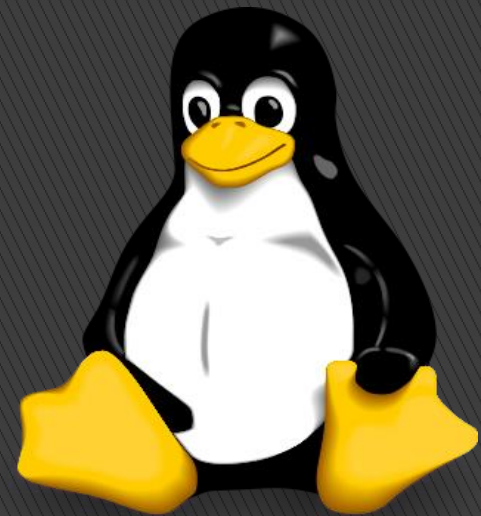
1.Display bottom 10 line of the file

```
#tail      /etc/passwd
```



2.Display bottom specific line of the file

```
#tail -n 5 /etc/passwd
```



Exam Que on grep

Search for the string 'strato' in the file /usr/share/dict/words & copy this to a file /root/lines.txt .The new file should not have any blank spaces or lines. The order of the names in the new file should be same as the order in which it appears in the original file

```
#grep strato /usr/share/dict/words > /root/lines.txt
```

