```
Examples of basic commands:

[root@naggar-Inspiron:~]# date
[root@naggar-Inspiron:~]# cal
[root@naggar-Inspiron:~]# cal 2016
[root@naggar-Inspiron:~]# cal 3
[root@naggar-Inspiron:~]# cal 3 2016
[root@naggar-Inspiron:~]# whoami
[root@naggar-Inspiron:~]# cal 3; whoami
------------------------------------------------------------

Shell basics:
[root@naggar-Inspiron:~]# clear            (or Ctrl+l)
[root@naggar-Inspiron:~]# pwd              (print working dir)

Changing dir (Absolute Path & Relative Path):
[root@naggar-Inspiron:~]# cd /home/naggar/Downloads

[root@naggar-Inspiron:~]#  cd ~            (go to the home directory of the user)
[root@naggar-Inspiron:~]#  cd -            (go to the previous directory)
[root@naggar-Inspiron:~]#  cd ..           (up one level)
[root@naggar-Inspiron:~]#  cd ../..        (up two levels)

list files:
[root@naggar-Inspiron:~]# ls
[root@naggar-Inspiron:~]# ls -l
[root@naggar-Inspiron:~]# ls -a            (all files and directories including
hidden ones)
[root@naggar-Inspiron:~]# ls --all
[root@naggar-Inspiron:~]# ls -l -a
[root@naggar-Inspiron:~]# ls -la
[root@naggar-Inspiron:~]# ls -la /home
[root@naggar-Inspiron:~]# ls -R            (Recursive)
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Getting help
1- using --help command:
[root@naggar-Inspiron:~]# ls --help

2- man pages:
[root@naggar-Inspiron:~]# man passwd
[root@naggar-Inspiron:~]# man 1 passwd
[root@naggar-Inspiron:~]# man 5 passwd

-Popular system administration topics are in sections 1 (user commands),
 5 (file formats), and 8 (administrative commands).

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Viewing file content:

[root@naggar-Inspiron:~]#  cat /etc/passwd
[root@naggar-Inspiron:~]#  more /etc/passwd
[root@naggar-Inspiron:~]#  head /etc/passwd
[root@naggar-Inspiron:~]#  head -n 3 /etc/passwd
[root@naggar-Inspiron:~]#  head -3 /etc/passwd
[root@naggar-Inspiron:~]#  head /etc/passwd -n 3
[root@naggar-Inspiron:~]#  tail /etc/passwd
[root@naggar-Inspiron:~]#  tail -n 3 /etc/passwd
[root@naggar-Inspiron:~]#  tail -3 /etc/passwd
[root@naggar-Inspiron:~]#  tail /etc/passwd -n 3
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File and Dir Manipulation:

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Creating files:
[root@naggar-Inspiron:~]#  touch file1 FILE1     (case sensitive)
[root@naggar-Inspiron:~]#  touch /home/naggar/Documents/file
[root@naggar-Inspiron:~]#  touch "file 1"
[root@naggar-Inspiron:~]#  touch file 1
[root@naggar-Inspiron:~]#  touch file\ 1

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Create directories:
[root@naggar-Inspiron:~]#  mkdir dir1 dir2 dir3
[root@naggar-Inspiron:~]#  mkdir -p dir4/dir5/dir6           (create dir parents)
[root@naggar-Inspiron:~]#  mkdir 'mohammed alnaggar'
[root@naggar-Inspiron:~]#  mkdir "mohammed alnaggar"
[root@naggar-Inspiron:~]#  mkdir mohammed\ alnaggar
========================================
Copy files and diretories:
[root@naggar-Inspiron:~]#  cp file1 file2                    (creates  file2)
[root@naggar-Inspiron:~]#  cp file1 ~/Documents/
[root@naggar-Inspiron:~]#  cp file1 file2 file3 ~/Documents/     (last argument
must be a directory)
[root@naggar-Inspiron:~]#  cp -r /etc/ dir1                  (copy non-empty
directory)
[root@naggar-Inspiron:~]#  cp -r /etc/* dir1                 (copy the
contents of the directory)


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Move files and directories:
[root@naggar-Inspiron:~]#  mv file1 new_file1               (to rename the
file1)
[root@naggar-Inspiron:~]#  mv file1 file2 file3 /root/Documents/     (last argument
must be a directory)
[root@naggar-Inspiron:~]#  mv dir1 dir2 dir3 dir4          (last argument
must be a directory)
========================================
Remove files and directories:
[root@naggar-Inspiron:~]#  rm file1                              (interactive
by default for the root)
[root@naggar-Inspiron:~]#  rm -f file1 file2 file3             (force
remove)
[root@naggar-Inspiron:~]#  rm -d dir1                          (removes an
empty directory)
[root@naggar-Inspiron:~]#  rmdir dir1                         (removes an
empty directory)
[root@naggar-Inspiron:~]#  rm -rf dir1                        (removes a
non-empty directory)


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File globbing (wildcard) (pattern matching):

[root@naggar-Inspiron:~]# touch delta ahmed baker cast dog easy  echo charlie alfa
bravo
[root@naggar-Inspiron:~]# ls a*      (Only file names beginning with "a")
[root@naggar-Inspiron:~]# ls *a      (Only file names ending with "a")
[root@naggar-Inspiron:~]# rm -f a*
[root@naggar-Inspiron:~]# ls *a*     (Only file names containing "a")
```

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[root@naggar-Inspiron:~]# ls [!a]*    (Only file names where first character is not
"a")
[root@naggar-Inspiron:~]# ls [ac]*
[root@naggar-Inspiron:~]# ls ????
[root@naggar-Inspiron:~]# ls ?????
[root@naggar-Inspiron:~]# touch file1 file2 file3 file4 file11 file12 file111 filea
fileb fileab fa fab fabc
[root@naggar-Inspiron:~]# ls f?
[root@naggar-Inspiron:~]# ls f??
[root@naggar-Inspiron:~]# ls file[a-c]


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Command history:

[root@naggar-Inspiron:~]# cat .bash_history
[root@naggar-Inspiron:~]# history


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Multi commands in one line:

[root@naggar-Inspiron:~]# ls ; date ; cal
[root@naggar-Inspiron:~]# ls && date
[root@naggar-Inspiron:~]# ls /etc/passwd
[root@naggar-Inspiron:~]# head <ESC>.          (to use the last argument)
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```