

**COMPUTER NETWORK LAB**  
TOPIC: LINUX COMMANDS

Submitted By:

JISHA CHACKO

S2RMCA :A Batch

Roll no:44

echo

echo is used to print the text

```
jisha@jisha-VirtualBox:~$ echo hai hello >> hai.txt
jisha@jisha-VirtualBox:~$ cat hai .txt
cat: hai: No such file or directory
cat: .txt: No such file or directory
jisha@jisha-VirtualBox:~$ echo hello.txt
hello.txt
jisha@jisha-VirtualBox:~$ echo hai hello>>hello.txt
jisha@jisha-VirtualBox:~$ cat hello.txt
hai hello
jisha@jisha-VirtualBox:~$
```

head

it is used to view the topest texts

```
jisha@jisha-VirtualBox:~$ head -n 3 /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
jisha@jisha-VirtualBox:~$
```

tail

it is used to view the bottom of texts

```
jisha@jisha-VirtualBox:~$ tail /etc/passwd
nm-openvpn:x:118:124:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
hplip:x:119:7:HPLIP system user,,,:/run/hplip:/bin/false
whoopsie:x:120:125:/:nonexistent:/bin/false
colord:x:121:126:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
geoclue:x:122:127:/:/var/lib/geoclue:/usr/sbin/nologin
pulse:x:123:128:PulseAudio daemon,,,:/var/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:124:65534:/:run/gnome-initial-setup:/bin/false
gdm:x:125:130:Gnome Display Manager:/var/lib/gdm3:/bin/false
jisha:x:1000:1000:Jisha Chacko,,,:/home/jisha:/bin/bash
systemd-coredump:x:999:999:systemd Core Dumper:/:/usr/sbin/nologin
jisha@jisha-VirtualBox:~$
```

**read** :read the contents of a line into a variable

```
jisha@jisha-VirtualBox:~$ read v1 v2 v3
hai hello how
jisha@jisha-VirtualBox:~$ echo "[$v1] [$v2] [$v3]"
[hai] [hello] [how]
jisha@jisha-VirtualBox:~$
```

**more**

displays content of the file.Only difference is that in case of larger files cat command output will scroll off your screen while more command displays output one screenful at a time.

```
jisha@jisha-VirtualBox:~$ more /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
systemd-timesync:x:102:104:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:103:106:/:nonexistent:/usr/sbin/nologin
syslog:x:104:110:/:home/syslog:/usr/sbin/nologin
_apt:x:105:65534:/:nonexistent:/usr/sbin/nologin
tss:x:106:111:TPM software stack,,,:/var/lib/tpm:/bin/false
uuid:x:107:114:/:run/uuid:/usr/sbin/nologin
tcpdump:x:108:115:/:nonexistent:/usr/sbin/nologin
avahi-autoipd:x:109:116:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:110:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
rtkit:x:111:117:RealtimeKit,,,:/proc:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
cups-pk-helper:x:113:120:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin

```

**less**

Automatically adjust with the width and height of terminal window

```

root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
systemd-timesync:x:102:104:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:103:106:/:nonexistent:/usr/sbin/nologin
syslog:x:104:110:/:home/syslog:/usr/sbin/nologin
_apt:x:105:65534:/:nonexistent:/usr/sbin/nologin
tss:x:106:111:TPM software stack,,,:/var/lib/tpm:/bin/false
uidd:x:107:114:/:run/uidd:/usr/sbin/nologin
tcpdump:x:108:115:/:nonexistent:/usr/sbin/nologin
avahi-autoipd:x:109:116:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:110:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
rtkit:x:111:117:RealtimeKit,,,:/proc:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
cups-pk-helper:x:113:120:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
speech-dispatcher:x:114:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
avahi:x:115:121:Avahi mDNS daemon,,,:/var/run/avahi-daemon:/usr/sbin/nologin
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,,:/usr/sbin/nologin
saned:x:117:123:/:var/lib/saned:/usr/sbin/nologin
nm-openvpn:x:118:124:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
hplip:x:119:7:HPLIP system user,,,:/run/hplip:/bin/false
whoopsie:x:120:125:/:nonexistent:/bin/false
colord:x:121:126:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
geoclue:x:122:127:/:var/lib/geoclue:/usr/sbin/nologin
pulse:x:123:128:PulseAudio daemon,,,:/var/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:124:65534:/:run/gnome-initial-setup:/bin/false
gdm:x:125:130:Gnome Display Manager:/var/lib/gdm3:/bin/false
jisha:x:1000:1000:Jisha Chacko,,,:/home/jisha:/bin/bash
systemd-coredump:x:999:999:systemd Core Dumper:/:usr/sbin/nologin
/etc/passwd (END)

```

cut

used for cutting out the section from each lines of files and writing the standard output.

```
jisha@jisha-VirtualBox:~$ cut -b 1,2 hi.txt
```

```

a
n
a
p
m
m
p
i
d
o

```

```
jisha@jisha-VirtualBox:~$
```

## paste

it is used to join files horizontally by outputting lines consisting of lines from each file specified, separated by tab as delimiter, to the standard output.

```
jisha@jisha-VirtualBox:~$ cat>>h.txt
ji
s
h
a
jisha@jisha-VirtualBox:~$ cat h.txt
ji
s
h
a
jisha@jisha-VirtualBox:~$ paste hai.txt h.txt
hai hello      ji
      s
      h
      a
jisha@jisha-VirtualBox:~$
```

## uname

will print detailed information about your linux system like machine name, operating system, kernel etc..

```
jisha@jisha-VirtualBox:~$ uname
Linux
jisha@jisha-VirtualBox:~$
```

## cp

it is used to copy files from the current directory to a different directory

```
jisha@jisha-VirtualBox:~$ cp -r hai.txt h.txt
jisha@jisha-VirtualBox:~$
```

## mv

it is used to move files and rename files

```
jisha@jisha-VirtualBox:~$ cp -i h.txt h.txt
jisha@jisha-VirtualBox:~$ mv h1.txt h.txt
jisha@jisha-VirtualBox:~$ ls
ammu.txt  appu  appu.txt  dai.txt  Desktop  de.txt  Documents  Downloads  hello.txt  h1.txt  h.txt  minnu  Music  number.txt  Pictures  Public  Templates  Videos
jisha@jisha-VirtualBox:~$
```

locate

it is used to find a file

```
jisha@jisha-VirtualBox:~$ locate -i where

Command 'locate' not found, but can be installed with:
sudo apt install mlocate

jisha@jisha-VirtualBox:~$
```

find

it is used to search for files or directories

```
jisha@jisha-VirtualBox:~$ find h.txt
h.txt
jisha@jisha-VirtualBox:~$
```

grep

it is used to Search through all the text in a given file

```
jisha@jisha-VirtualBox:~$ ls
ammu.txt  appu  appu.txt  dai.txt  Desktop  de.txt  Documents  Downloads
jisha@jisha-VirtualBox:~$ grep 'ji'h.txt
jisha@jisha-VirtualBox:~$ grep boo/etc/passwd
jisha@jisha-VirtualBox:~$ grep /etc/passwd/minnu
```

df

it is used to get report on the system's disk space usage shows in percentage and kbs.

```
jisha@jisha-VirtualBox:~$ df -h
Filesystem      1M-blocks    Used Available Use% Mounted on
udev              574         0       574    0% /dev
tmpfs             121         2        120    2% /run
/dev/sda5        9509      5644      3363   63% /
tmpfs             603         0        603    0% /dev/shm
tmpfs              5          1          5    1% /run/lock
tmpfs            603         0        603    0% /sys/fs/cgroup
/dev/loop1        65         65          0 100% /snap/gtk-common-themes/1514
/dev/loop0        52         52          0 100% /snap/snap-store/518
/dev/loop3        56         56          0 100% /snap/core18/1988
/dev/loop4        32         32          0 100% /snap/snapd/11036
/dev/loop2       219        219          0 100% /snap/gnome-3-34-1804/66
/dev/sda1         511         1        511    1% /boot/efi
tmpfs            121         1        121    1% /run/user/1000
jisha@jisha-VirtualBox:~$
```

du

it is used to check how many space a file or directory takes.

```
984K  ./cache/mesa_shader_cache
360K  ./cache/gstreamer-1.0
8.8M  ./cache
4.0K  ./Public
4.0K  ./Music
4.0K  ./Desktop
4.0K  ./config/gnome-session/saved-session
8.0K  ./config/gnome-session
8.0K  ./config/gtk-3.0
4.0K  ./config/nautilus
4.0K  ./config/goa-1.0
12K   ./config/dconf
84K   ./config/pulse
8.0K  ./config/ibus/bus
12K   ./config/ibus
16K   ./config/evolution/sources
20K   ./config/evolution
4.0K  ./config/update-notifier
176K  ./config
4.0K  ./Videos
4.0K  ./ssh
4.0K  ./Documents
4.0K  ./gnupg/private-keys-v1.d
16K   ./gnupg
4.0K  ./Downloads
4.0K  ./local/share/ibus-table
4.0K  ./local/share/flatpak/db
8.0K  ./local/share/flatpak
12K   ./local/share/keyrings
4.0K  ./local/share/sounds
12K   ./local/share/rhythmbox
4.0K  ./local/share/gnome-settings-daemon
4.0K  ./local/share/nautilus/scripts
8.0K  ./local/share/nautilus
60K   ./local/share/xorg
4.0K  ./local/share/evolution/calendar/trash
8.0K  ./local/share/evolution/calendar/system
16K   ./local/share/evolution/calendar
4.0K  ./local/share/evolution/addressbook/trash
4.0K  ./local/share/evolution/addressbook/system/photos
92K   ./local/share/evolution/addressbook/system
100K  ./local/share/evolution/addressbook
4.0K  ./local/share/evolution/mail/trash
8.0K  ./local/share/evolution/mail
4.0K  ./local/share/evolution/tasks/trash
8.0K  ./local/share/evolution/tasks/system
16K   ./local/share/evolution/tasks
```

## useradd

It is used to create new user

```
jisha@jisha-VirtualBox:~$ useradd anju
useradd: Permission denied.
useradd: cannot lock /etc/passwd; try again later.
```

## userdel

it is used to remove user or delete user account

```
jisha@jisha-VirtualBox:~$ userdel anju
```

## sudo

it enables you to perform tasks that require administrative or root permissions.

```
jisha@jisha-VirtualBox:~$ sudo
usage: sudo -h | -K | -k | -V
usage: sudo -v [-AknS] [-g group] [-h host] [-p prompt] [-u user]
usage: sudo -l [-AknS] [-g group] [-h host] [-p prompt] [-U user] [-u user] [command]
usage: sudo [-AbEHknPS] [-r role] [-t type] [-C num] [-g group] [-h host] [-p prompt] [-T timeout] [-u user] [VAR=value] [-i|-s] [<command>]
usage: sudo -e [-AknS] [-r role] [-t type] [-C num] [-g group] [-h host] [-p prompt] [-T timeout] [-u user] file ...
jisha@jisha-VirtualBox:~$
```

## passwd

- it is used to change passwords for user account.

```
usage: sudo -e [-AknS] [-r role] [-t type] [-C num] [-g group] [-h host] [-p prompt] [-T timeout] [-u user] file ...
jisha@jisha-VirtualBox:~$ passwd
Changing password for jisha.
Current password: 
```