Assignment – 1
OPERATING SYSTEM

TOPIC: BASIC UNIX COMMANDS & FILE SYSTEM COMMANDS

Sourav Paul, Roll -43

1.Display the date using the "date" command.

Dell@DESKTOP-JFU402L:~

Dell@DESKTOP-JFU402L:~$ date Sun Nov 5 19:19:12 PST 2023

Dell@DESKTOP-JFU402L:~$

2.Check who are the users logged in using the "who" command.

Dell@DESKTOP-JFU402L: ~

Dell@DESKTOP-JFU402L:~$ who
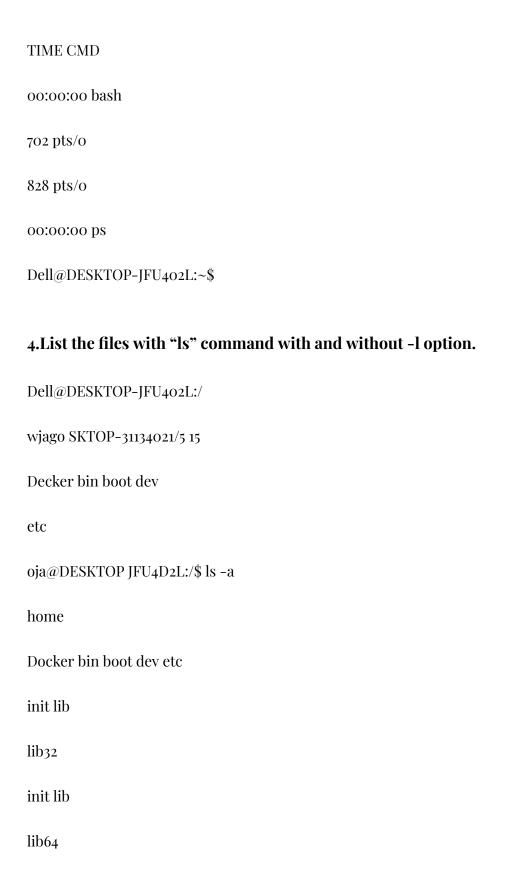
Dell pts/1

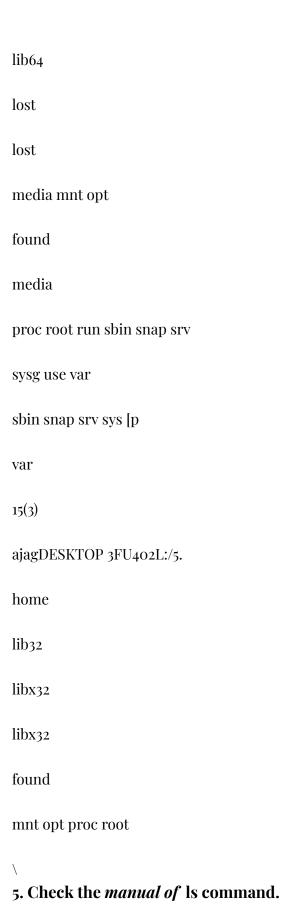2023-11-05 19:17

Dell@DESKTOP-JFU402L:~$

3.Check the running processes using the "ps" command.

Dell@DESKTOP-JFU402L: ~

Dell@DESKTOP-JFU402L:~$ ps

PID TTY

TIME CMD

00:00:00 bash

702 pts/0

828 pts/0

00:00:00 ps

Dell@DESKTOP-JFU402L:~$

4.List the files with "ls" command with and without -l option.

Dell@DESKTOP-JFU402L:/

wjago SKTOP-31134021/5 15

Decker bin boot dev

etc

oja@DESKTOP JFU4D2L:/$ ls -a

home

Docker bin boot dev etc

init lib

lib32

init lib

lib64

lib64

lost

lost

media mnt opt

found

media

proc root run sbin snap srv

sysg use var

sbin snap srv sys [p

var

15(3)

ajagDESKTOP 3FU402L:/5.

home

lib32

libx32

libx32

found
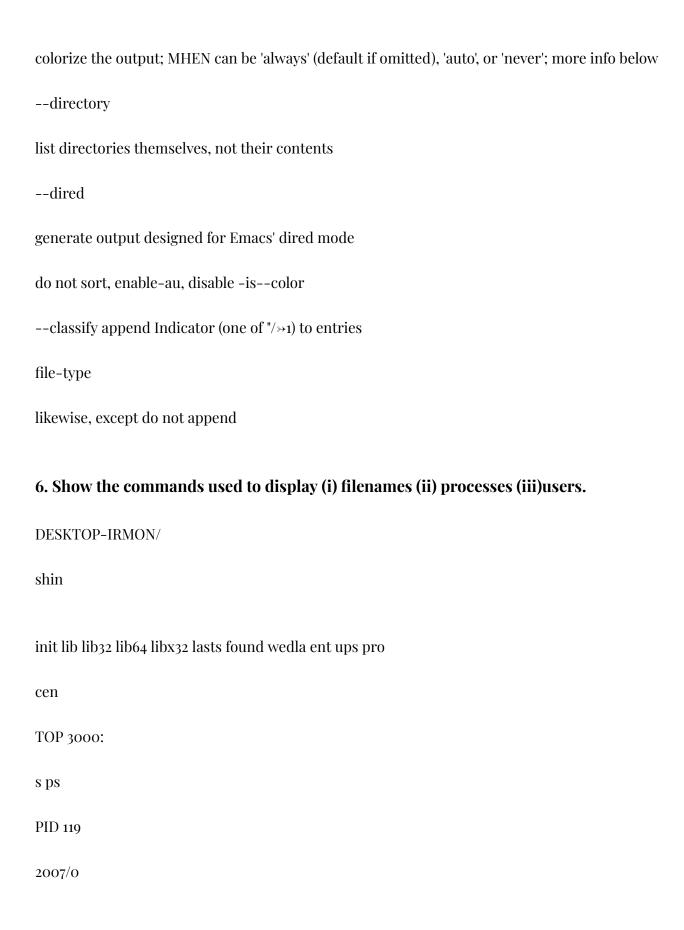
mnt opt proc root

\

5. Check the *manual of* ls command.

@DESKTOP MOL/

15- list directory contents

User Conrands

SYNOPSIS

DESCRIPTION

list information about the FILES (the current directory by default). Sort entries alphabetically if none of cftuvSIX nor sort is specified.

Mandatory arguments to long options are mandatory for short options too.

all do not ignore entries starting with.

--almost-all do not list implied. and..

-author

with -1, print the author of each file

--escape print C-style escapes for nongraphic characters

-block-size-51ZE

with -1, scale sizes by SIZE when printing them; e.., .block-size-H'; see SIZE format below

--ignore-backups do not list implied entries ending with -

with -1t: sort by, and show, ctime (time of last modification of file status information); with -1: show ctime and sort by name; otherwise: sort by ctime, newest first

list entries by columns

--color[-MIEN]

colorize the output; MHEN can be 'always' (default if omitted), 'auto', or 'never'; more info below

--directory

list directories themselves, not their contents

--dired

generate output designed for Emacs' dired mode

do not sort, enable-au, disable -is--color

--classify append Indicator (one of "/»1) to entries

file-type

likewise, except do not append

6. Show the commands used to display (i) filenames (ii) processes (iii)users.

DESKTOP-IRMON/

shin

init lib lib32 lib64 libx32 lasts found wedla ent ups pro

cen

TOP 3000:

s ps

PID 119

2007/0

00:00:00 bu

945 pts/0

00:00:00 ps

ESKTOP-FUROR:/$ cat /etc/passand

0:0:root:/root:/bin/bash

x:1:1:daemon:/usr/sbin:/usr/sbin/nologin

Sincx:2:2:bin:/bin:/usr/sbin/nologin

ys:x:3:3:sys:/dev:/usr/sbin/nologin

sync:4:65534:sync:/bin:/bin/sync

games:x:5:60:games:/usr/games:/usr/sbin/nologin 6:12:man:/var/cache/man:/usr/sbin/nologin

1pcx:7:7:1p:/var/spool/1pd:/usr/sbin/nologin

C8:8:mail:/var/mail:/usr/sbin/nologin

exs:x:9:9:news:/var/spool/news:/usr/sbin/nologin
cp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin

proxy:x:13:13:proxy:/bin:/usr/sbin/nologin

ar-data:x:33:33:-data:/var/ar:/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

inc:x:39:39:incd:/run/incd:/usr/sbin/nologin

nats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin

ystemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin

systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin

essagebus:x:102:105::/nonexistent:/usr/sbin/nologin

systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin

syslog:x:104:111::/home/syslog:/usr/sbin/nologin

apt:x:105:65534::/nonexistent:/usr/sbin/nologin

uidd:x:106:112::/run/uuidd:/usr/sbin/nologin

tcpdump:x:107:113::/nonexistent:/usr/sbin/nologin raja:x:1000:1000;,,,:/home/raja:/bin/bash

ostgres:x:108:118:PostgreSQL administrator,,,:/var/lib/postgresql:/bin/bash

dnsmasq:x:109:65534: dnsmasq,,,:/var/lib/aisc:/usr/sbin/nologin

sshd:x:110:65534::/run/sshd:/usr/sbin/nologin

dev:x:1001:1002::/home/dev:/bin/bash

Dell@DESKTOP-3FU602L:/$

7. Check and state the difference between man and whatis command by checking man cp & whatis cp.

Dell@DESKTOP-JFU402L:/

Dell@DESKTOP-JFU402L:/$ whatis cp

cp (1) copy files and directories

Dell@DESKTOP-JFU4o2L:/$

8. What is the primary difference between printf and echo command. Check and print.

Dell@DESKTOP-JFU4o2L: ~

Dell@DESKTOP-JFU4o2L:$ printf hello helloraja@DESKTOP-JFU4o2L:$ echo hello hello

Dell@DESKTOP-JFU4o2L:~$

9. In the home directory, create a directory *BCA2022*. Inside the *BCA2022,* create another directory *<FistName_ Section_ ClassRoll>* and get into the directory [~ /BCA2020/Ankur_A_00$].

Dell@DESKTOP-JFU4o2L: /home/MCA2022

Dell@DESKTOP-JFU4o2L:/home$ sudo mkdir MCA2022 && cd MCA2022

Dell@DESKTOP-JFU4o2L:/home/MCA2022$ mkdir Name_A_15

mkdir: cannot create directory 'Name_A_15': Permission denied

Dell@DESKTOP-JFU4o2L:/home/MCA2022$ sudo mkdir Name_A_15

Dell@DESKTOP-JFU4o2L:/home/MCA2022$ ls -a Name_A_15

Dell@DESKTOP-JFU4o2L:/home/MCA2022$

10. Go to the subdirectory and create another subdirectory "Unix_File_System" within it.

@DESKTOP U402 /home/MCA2022/Unis File System

(SKTOP-3F040213/home/1A2022$ sudo mkdir Unix File System && cd Unix File System

File Systems sudo mkdir TestA Test Testc/TestA/TestA-1/TestB/TestB-1 /Testo/Test8-2/TestB/Test8-3/Testc/TestC-1 ./Test8/Test8-7/le SKTOP FURO211/home/NCA2022/Unix File Systems is a

TestA Test TestC

Dell@OESKTOP-3F040243/home/MCA2022/Unix_File System