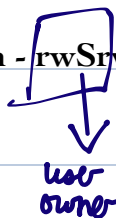


## I. QUIZ

### II. First Half

could u pls explain the diff btwn -rwSrwxrwx and rwxrwsrwx



1. shutdown -r, halt, reboot

2. SUID, SGID, Sticky Session (Was requested by learners in the last session)

3. find, locate

4. screen, tmux

### III. PDF Based Hands-On session 1

### IV. Second Half

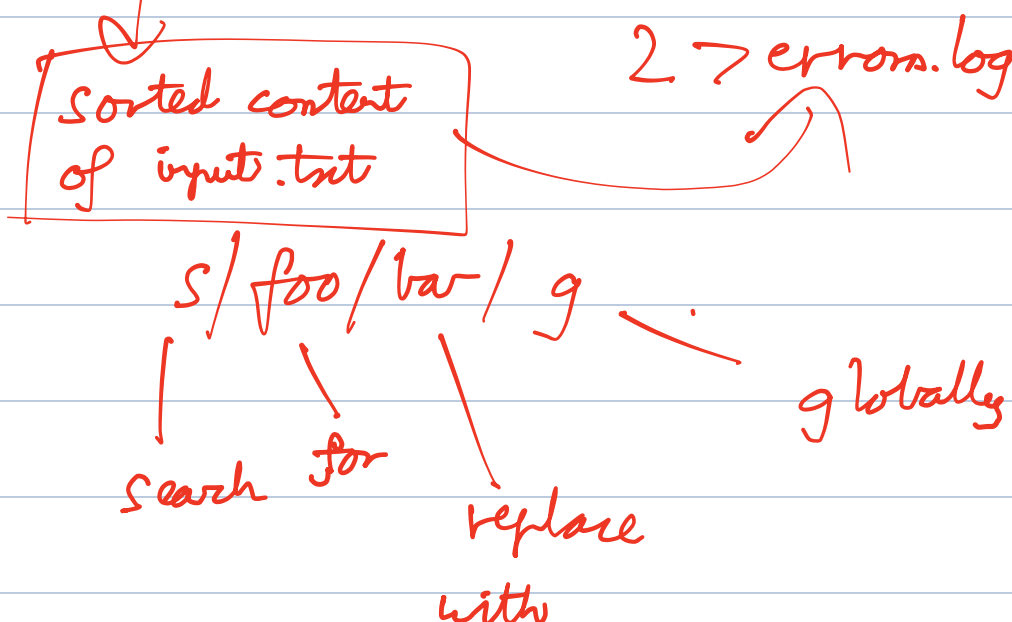
1. Background Processing Commands

2. Process Management Commands

3. System Monitoring Commands

4. Crontab Commands

You run `sort < input.txt > sorted.txt 2> errors.log`. What goes into errors.log?



tar -czf  
|  
filename

Masks → Filter

file.txt

setfacl -m u:bob:rw file.txt

11T → chmod - Mask cutoff

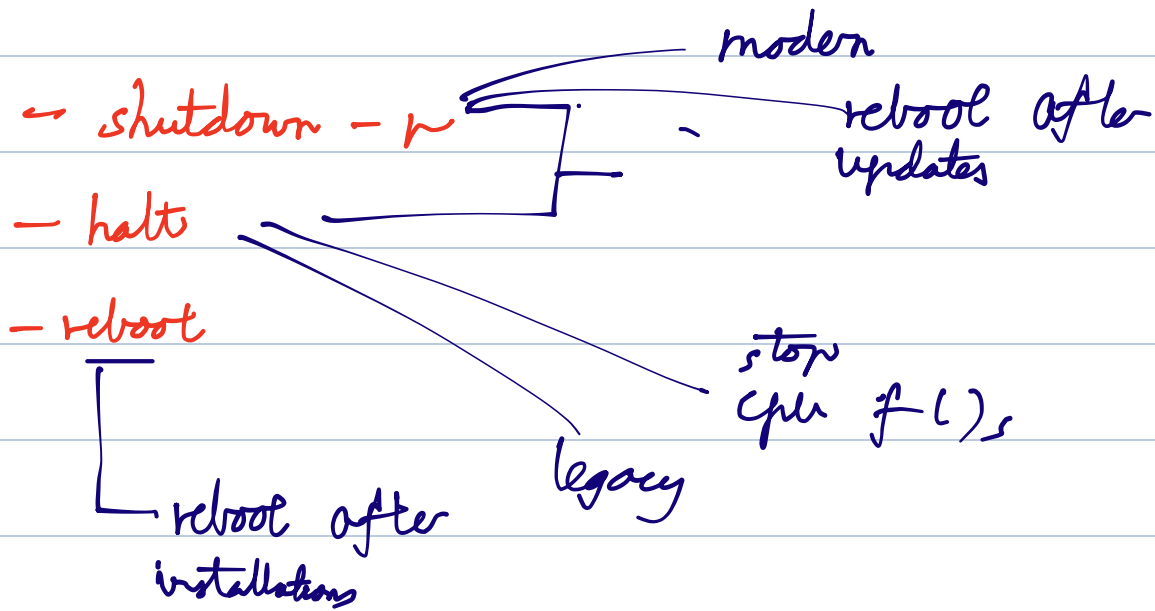
setfacl - Spots cutoff

mask - < 60 is NOT allowed

rw -> 7

mask -> 6

## On pperm commands



SUID & SGID

- < -

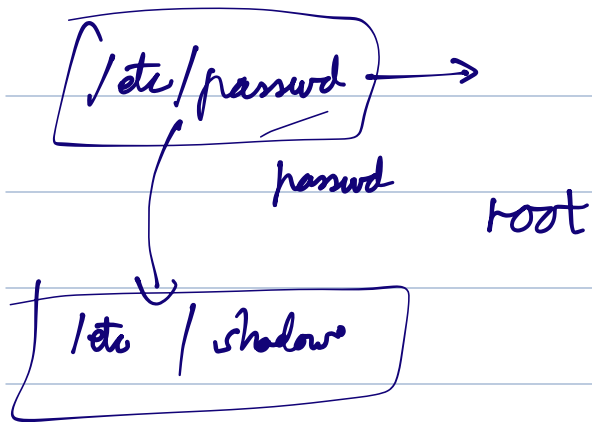
CONTROLLED PRIVILEGE ESCALATION

PRIVILEGE DELEGATION

TEMPORARY ELEVATION

file.txt  $\xrightarrow{10 \text{ bits}}$  user group  
others

sudo



S → misconfiguration  
s → works fine

STICKY BIT → don't let anybody delete anyone else's  
file in a shared directory  
/tmp — chmod +t /tmp

/opt —

/data

/devops

chown → define owner user  
& owner group

chmod → define rwx on  
user, group & others

suid, sgid → elevated privilege for  
execution

sticky bit → separation of delete rights

sudo/root → you can do anything!!!

ACLs → Granular rxw privileges

## find & locate

**find** → Scan through folders

FINDING ALL .log files in /var/log directory

— find /var/log -name "\*.log"

FIND FILES BIGGER THAN 10MB

— find /var/log -size +10M **PREFERRED FOR NEW FILES**

**locate** →

locate.db

**Faster**

locate \*.png

locate \*.log

locate nginx

# old SCREEN & new Tmux

OBJ: KEEP LONG RUNNING PROCESSES ALIVE

## SCREEN CMDS

Task	Command
Start a screen	screen -S <name>
Detach from session	Ctrl + A then D
Reattach by name	screen -r <name>
List sessions	screen -ls
Kill session by name	screen -S <name> -X quit

## Tmux CMDS

tmux new -s devops

### Detach:

Ctrl + B then D

### Reattach:

tmux attach -t devops

### List sessions:

tmux ls

### Kill a session:

tmux kill-session -t devops

Action	Key Combo
Split window horizontally	Ctrl + B then "
Split window vertically	Ctrl + B then %
Switch panes	Ctrl + B then Arrow Keys
New window (tab)	Ctrl + B then C
List windows	Ctrl + B then W
Rename window	Ctrl + B then ,

sudo su - bob ./script.sh →

sudo su - bob ./script.sh ✓

ubuntu → root → bob

