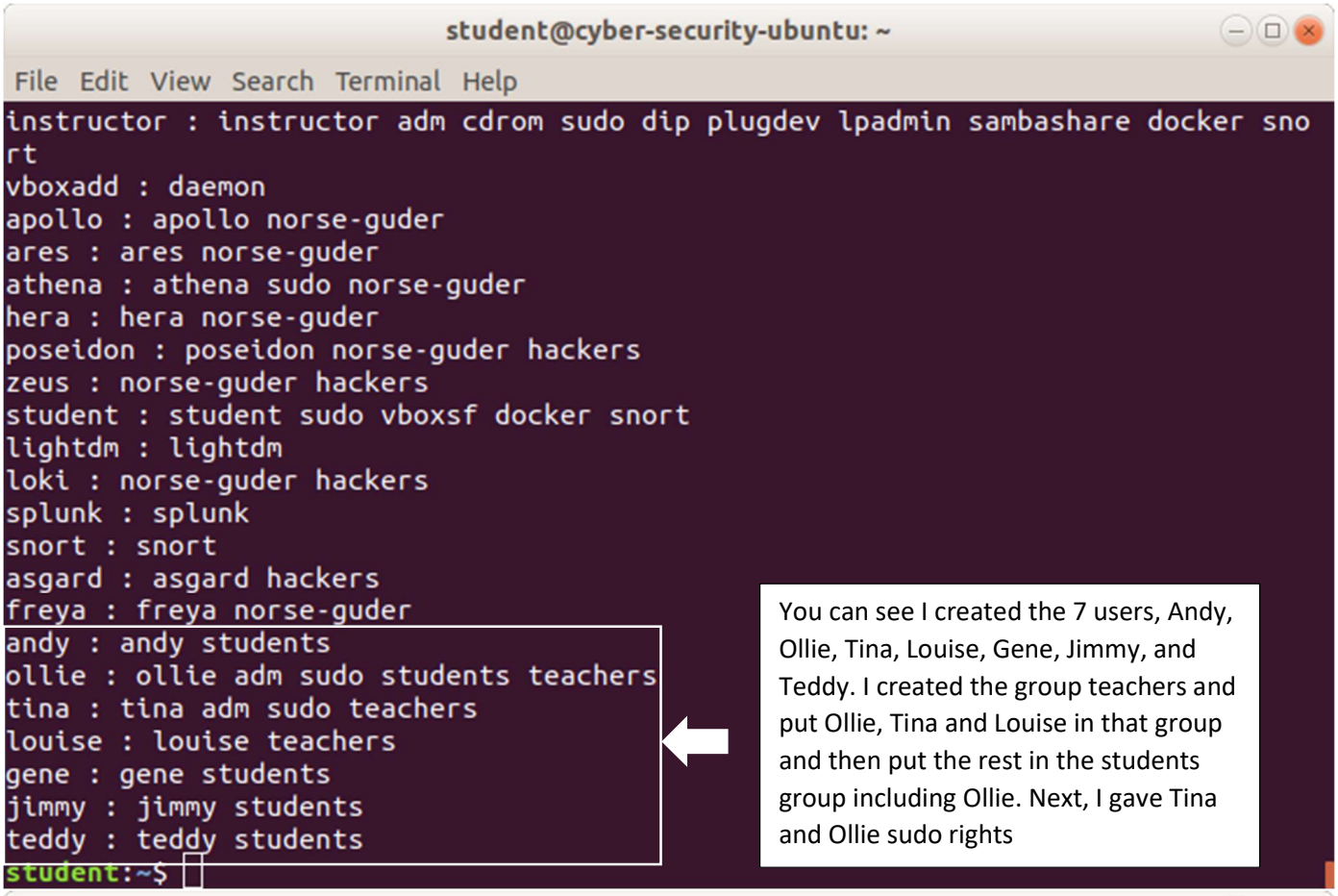
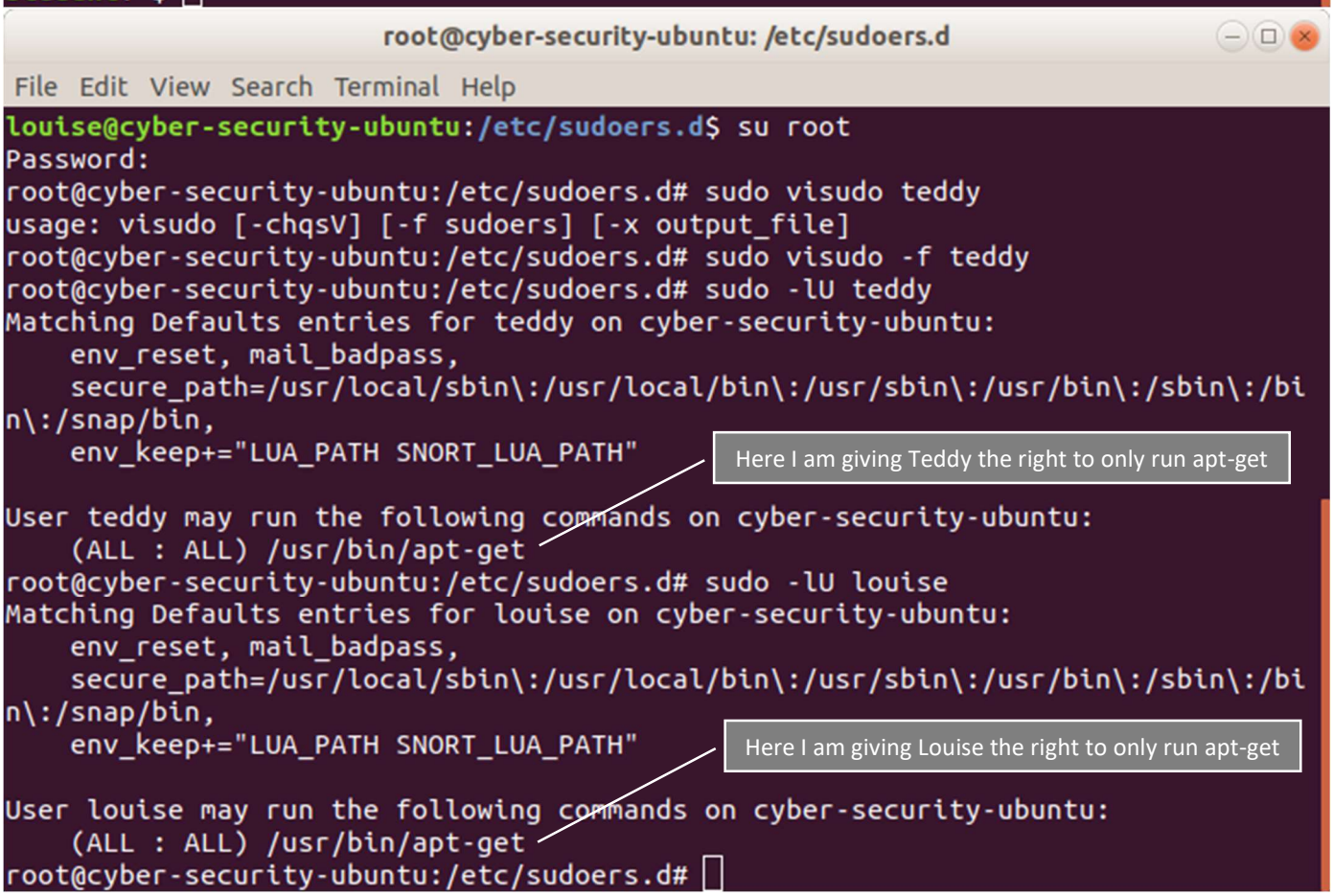
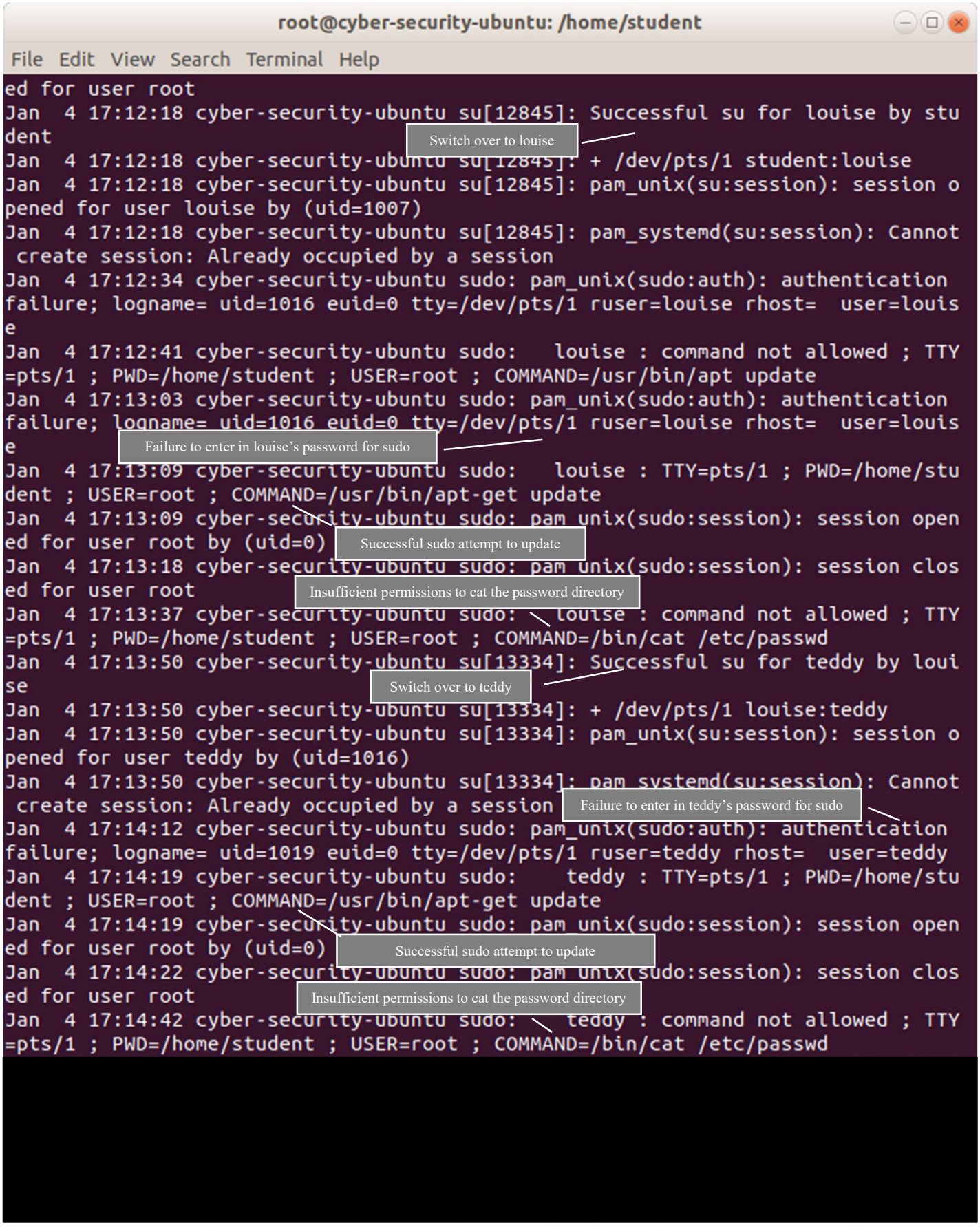
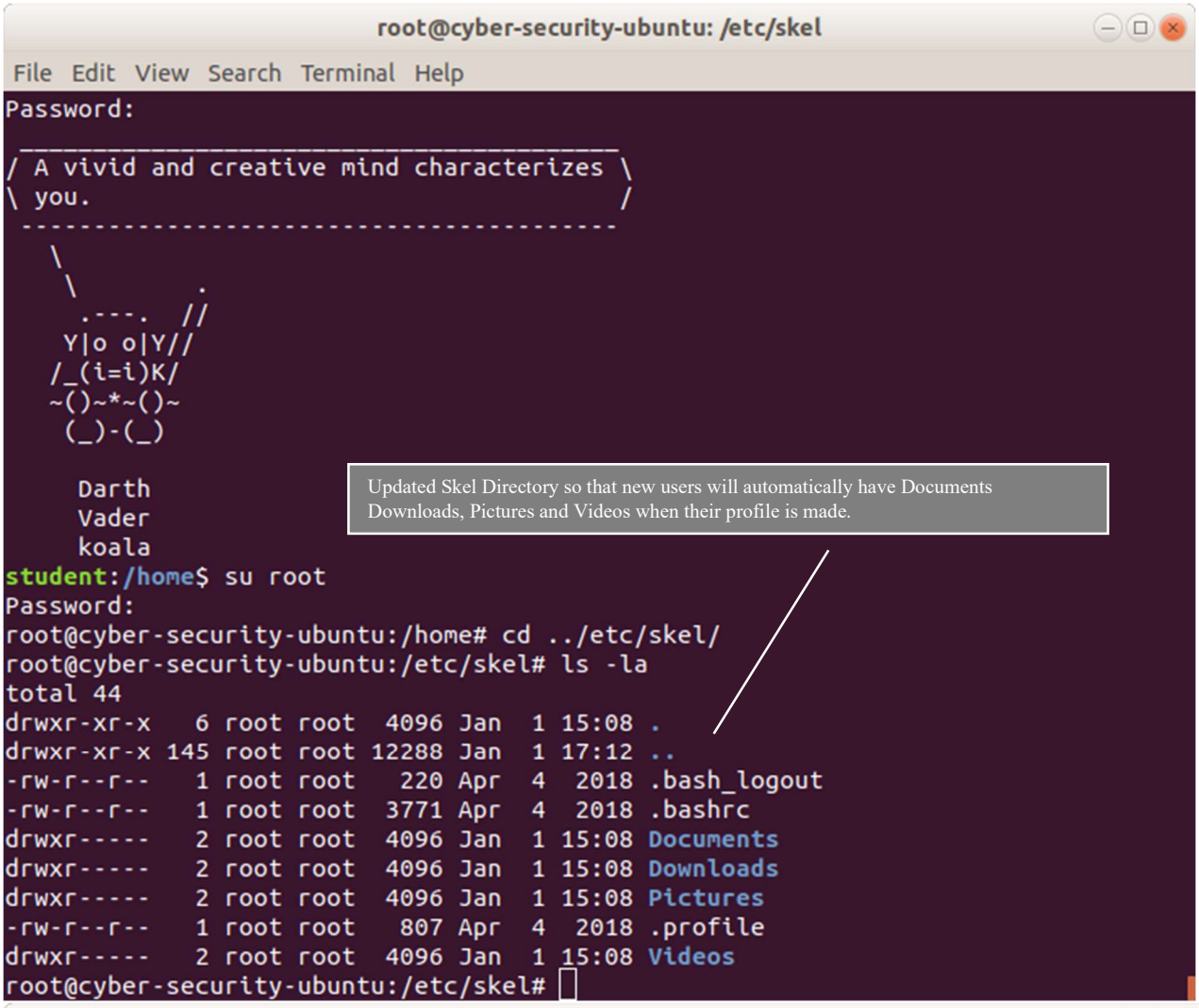
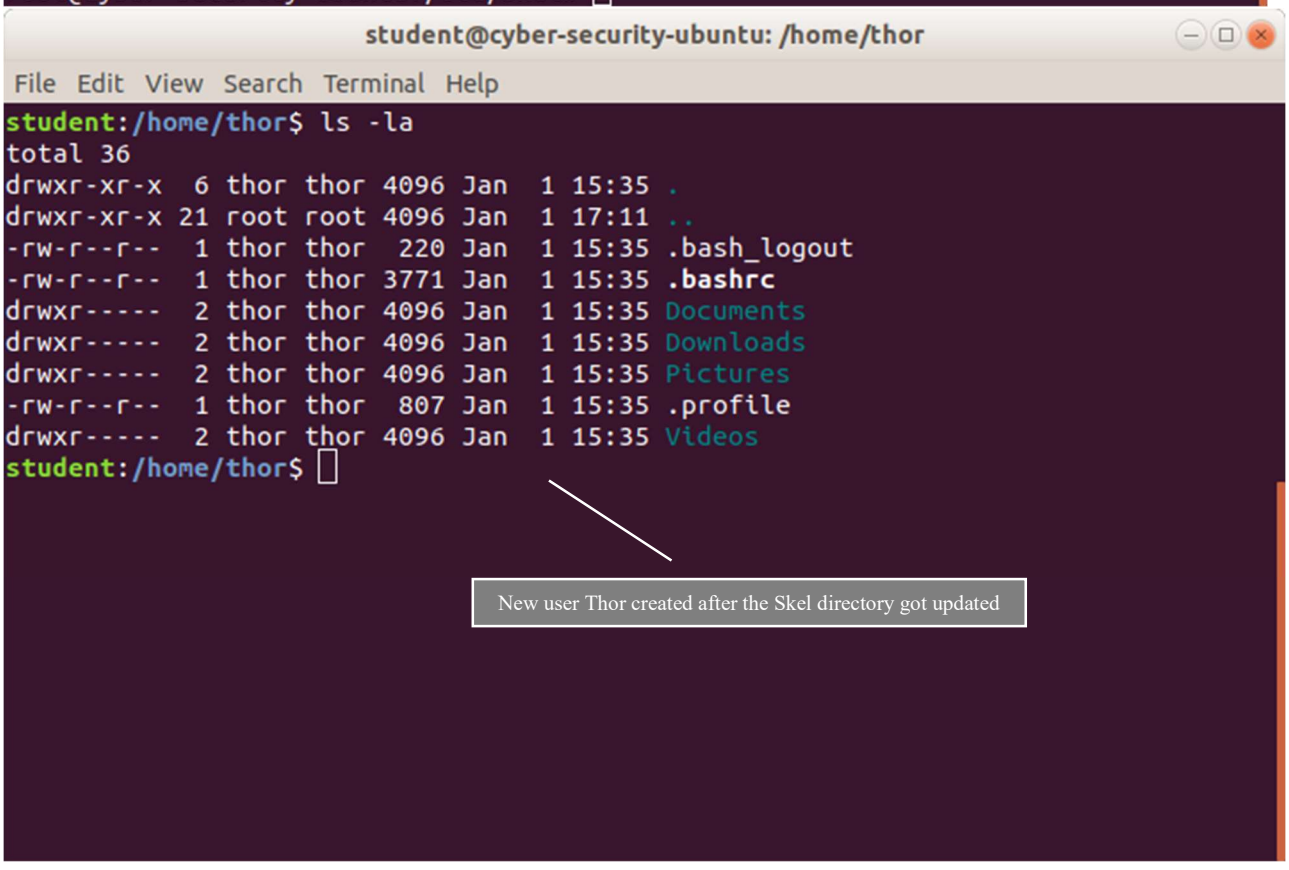

student@cyber-security-ubuntu: ~
File Edit View Search Terminal Help
instructor : instructor adm cdrom sudo dip plugdev lpadmin sambashare docker sno
rt
vboxadd : daemon
apollo : apollo norse-guder
ares : ares norse-guder
athena : athena sudo norse-guder
hera : hera norse-guder
poseidon : poseidon norse-guder hackers
zeus : norse-guder hackers
student : student sudo vboxsf docker snort
lightdm : lightdm
loki : norse-guder hackers
splunk : splunk
snort : snort
asgard : asgard hackers
freya : freya norse-guder
andy : andy students
ollie : ollie adm sudo students teachers
tina : tina adm sudo teachers
louise : louise teachers
gene : gene students
jimmy : jimmy students
teddy : teddy students
student:~$
You can see I created the 7 users, Andy, Ollie, Tina, Louise, Gene, Jimmy, and Teddy. I created the group teachers and put Ollie, Tina and Louise in that group and then put the rest in the students group including Ollie. Next, I gave Tina and Ollie sudo rights


root@cyber-security-ubuntu: /etc/sudoers.d
File Edit View Search Terminal Help
louise@cyber-security-ubuntu:/etc/sudoers.d$ su root
Password:
root@cyber-security-ubuntu:/etc/sudoers.d# sudo visudo teddy
usage: visudo [-chqsV] [-f sudoers] [-x output_file]
root@cyber-security-ubuntu:/etc/sudoers.d# sudo visudo -f teddy
root@cyber-security-ubuntu:/etc/sudoers.d# sudo -lU teddy
Matching Defaults entries for teddy on cyber-security-ubuntu:
env_reset, mail_badpass,
secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bi
n\:/snap/bin,
env_keep+="LUA_PATH SNORT_LUA_PATH"
User teddy may run the following commands on cyber-security-ubuntu:
(ALL : ALL) /usr/bin/apt-get
root@cyber-security-ubuntu:/etc/sudoers.d# sudo -lU louise
Matching Defaults entries for louise on cyber-security-ubuntu:
env_reset, mail_badpass,
secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bi
n\:/snap/bin,
env_keep+="LUA_PATH SNORT_LUA_PATH"
User louise may run the following commands on cyber-security-ubuntu:
(ALL : ALL) /usr/bin/apt-get
root@cyber-security-ubuntu:/etc/sudoers.d#
Here I am giving Teddy the right to only run apt-get
Here I am giving Louise the right to only run apt-get


root@cyber-security-ubuntu: /home/student
File Edit View Search Terminal Help
ed for user root
Jan 4 17:12:18 cyber-security-ubuntu su[12845]: Successful su for louise by stu
dent
Switch over to louise
Jan 4 17:12:18 cyber-security-ubuntu su[12845]: + /dev/pts/1 student:louise
Jan 4 17:12:18 cyber-security-ubuntu su[12845]: pam_unix(su:session): session o
pened for user louise by (uid=1007)
Jan 4 17:12:18 cyber-security-ubuntu su[12845]: pam_systemd(su:session): Cannot
create session: Already occupied by a session
Jan 4 17:12:34 cyber-security-ubuntu sudo: pam_unix(sudo:auth): authentication
failure; logname= uid=1016 euid=0 tty=/dev/pts/1 ruser=louise rhost= user=louis
e
Jan 4 17:12:41 cyber-security-ubuntu sudo: louise : command not allowed ; TTY
=pts/1 ; PWD=/home/student ; USER=root ; COMMAND=/usr/bin/apt update
Jan 4 17:13:03 cyber-security-ubuntu sudo: pam_unix(sudo:auth): authentication
failure; logname= uid=1016 euid=0 tty=/dev/pts/1 ruser=louise rhost= user=louis
e
Failure to enter in louise's password for sudo
Jan 4 17:13:09 cyber-security-ubuntu sudo: louise : TTY=pts/1 ; PWD=/home/stu
dent ; USER=root ; COMMAND=/usr/bin/apt-get update
Jan 4 17:13:09 cyber-security-ubuntu sudo: pam_unix(sudo:session): session open
ed for user root by (uid=0)
Successful sudo attempt to update
Jan 4 17:13:18 cyber-security-ubuntu sudo: pam_unix(sudo:session): session clos
ed for user root
Insufficient permissions to cat the password directory
Jan 4 17:13:37 cyber-security-ubuntu sudo: louise : command not allowed ; TTY
=pts/1 ; PWD=/home/student ; USER=root ; COMMAND=/bin/cat /etc/passwd
Jan 4 17:13:50 cyber-security-ubuntu su[13334]: Successful su for teddy by loui
se
Switch over to teddy
Jan 4 17:13:50 cyber-security-ubuntu su[13334]: + /dev/pts/1 louise:teddy
Jan 4 17:13:50 cyber-security-ubuntu su[13334]: pam_unix(su:session): session o
pened for user teddy by (uid=1016)
Jan 4 17:13:50 cyber-security-ubuntu su[13334]: pam_systemd(su:session): Cannot
create session: Already occupied by a session
Failure to enter in teddy's password for sudo
Jan 4 17:14:12 cyber-security-ubuntu sudo: pam_unix(sudo:auth): authentication
failure; logname= uid=1019 euid=0 tty=/dev/pts/1 ruser=teddy rhost= user=teddy
Jan 4 17:14:19 cyber-security-ubuntu sudo: teddy : TTY=pts/1 ; PWD=/home/stu
dent ; USER=root ; COMMAND=/usr/bin/apt-get update
Jan 4 17:14:19 cyber-security-ubuntu sudo: pam_unix(sudo:session): session open
ed for user root by (uid=0)
Successful sudo attempt to update
Jan 4 17:14:22 cyber-security-ubuntu sudo: pam_unix(sudo:session): session clos
ed for user root
Insufficient permissions to cat the password directory
Jan 4 17:14:42 cyber-security-ubuntu sudo: teddy : command not allowed ; TTY
=pts/1 ; PWD=/home/student ; USER=root ; COMMAND=/bin/cat /etc/passwd


root@cyber-security-ubuntu: /etc/skel
File Edit View Search Terminal Help
Password:
/ A vivid and creative mind characterizes \
\ you.   /
Darth
Vader
koala
student:/home$ su root
Password:
root@cyber-security-ubuntu:/home# cd ../etc/skel/
root@cyber-security-ubuntu:/etc/skel# ls -la
total 44
drwxr-xr-x   6 root root 4096 Jan 1 15:08 .
drwxr-xr-x 145 root root 12288 Jan 1 17:12 ..
-rw-r--r--   1 root root   220 Apr 4 2018 .bash_logout
-rw-r--r--   1 root root 3771 Apr 4 2018 .bashrc
drwxr-----   2 root root 4096 Jan 1 15:08 Documents
drwxr-----   2 root root 4096 Jan 1 15:08 Downloads
drwxr-----   2 root root 4096 Jan 1 15:08 Pictures
-rw-r--r--   1 root root   807 Apr 4 2018 .profile
drwxr-----   2 root root 4096 Jan 1 15:08 Videos
root@cyber-security-ubuntu:/etc/skel#
Updated Skel Directory so that new users will automatically have Documents Downloads, Pictures and Videos when their profile is made.


student@cyber-security-ubuntu: /home/thor
File Edit View Search Terminal Help
student:/home/thor$ ls -la
total 36
drwxr-xr-x 6 thor thor 4096 Jan 1 15:35 .
drwxr-xr-x 21 root root 4096 Jan 1 17:11 ..
-rw-r--r-- 1 thor thor 220 Jan 1 15:35 .bash_logout
-rw-r--r-- 1 thor thor 3771 Jan 1 15:35 .bashrc
drwxr----- 2 thor thor 4096 Jan 1 15:35 Documents
drwxr----- 2 thor thor 4096 Jan 1 15:35 Downloads
drwxr----- 2 thor thor 4096 Jan 1 15:35 Pictures
-rw-r--r-- 1 thor thor 807 Jan 1 15:35 .profile
drwxr----- 2 thor thor 4096 Jan 1 15:35 Videos
student:/home/thor$
New user Thor created after the Skel directory got updated