

LINUX FUNDAMENTALS

ASSIGNMENT REPORT



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cs-sa07-24067,
May 9th, 2024.

1. INTRODUCTION

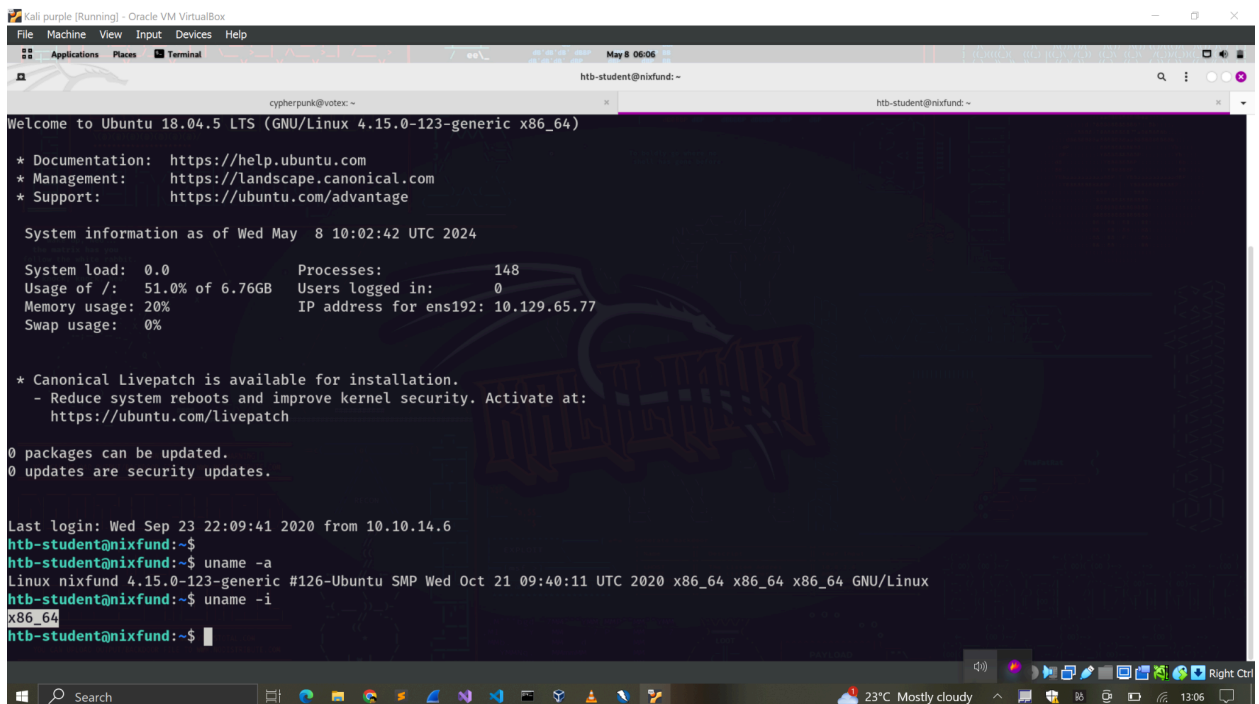
This report documents my completion of the **Linux Fundamentals** Module on the HacktheBox platform. The module covered the fundamentals required to work comfortably with the Linux operating system and shell. Linux is an open-source operating system that is essential for cybersecurity analysts because it contains tools that can help automate tasks and manipulate files easily.

The module covered various topics, from Linux structure, an introduction to the shell, text manipulation, user management, and network management.

2. ANSWERS TO QUESTIONS

System Information

- a. Find out the machine hardware name and submit it as the answer.

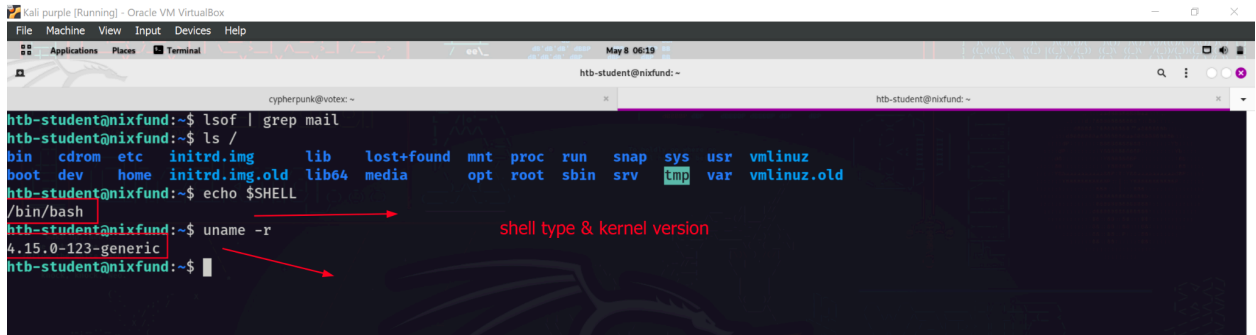
A screenshot of a terminal window within a Kali Linux virtual machine. The terminal shows the output of the 'uname -a' command, which displays system information including the kernel version (4.15.0-123-generic), architecture (x86_64), and hostname (nixfund). The prompt is 'htb-student@nixfund:~\$'. The terminal also shows the output of 'uname -i', which displays 'x86_64'. The terminal window is titled 'Kali purple [Running] - Oracle VM VirtualBox' and has a menu bar with 'File', 'Machine', 'View', 'Input', 'Devices', and 'Help'. The terminal output includes: 'Welcome to Ubuntu 18.04.5 LTS (GNU/Linux 4.15.0-123-generic x86_64)', system information as of Wed May 8 10:02:42 UTC 2024, and a list of system statistics including system load, memory usage, and IP address for ens192: 10.129.65.77. The terminal also shows the output of 'uname -a' and 'uname -i' commands, and a list of packages that can be updated.

- b. What is the path to htb-student's home directory?

Running the command **pwd** at the home directory displays **/home/htb-student** as the path.

- c. Which shell is specified for the htb-student user?

d. Which kernel version is installed on the system? (Format: 1.22.3)

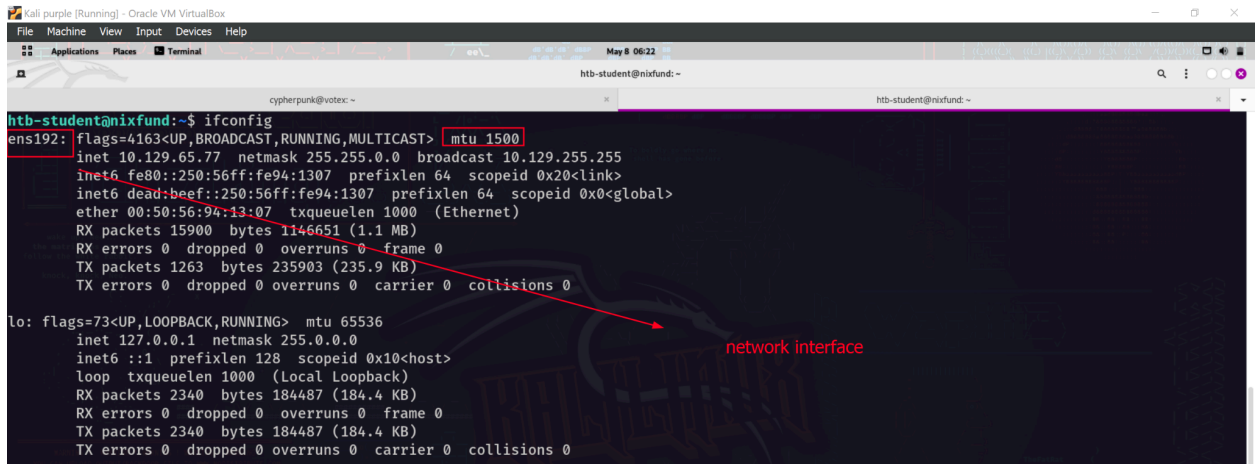


```
htb-student@nixfund:~$ ls -l /
total 112
drwxr-xr-x 1 root root 4096 May 8 06:19 .
drwxr-xr-x 1 root root 4096 May 8 06:19 ..
drwxr-xr-x 1 root root 4096 May 8 06:19 bin
drwxr-xr-x 1 root root 4096 May 8 06:19 boot
drwxr-xr-x 1 root root 4096 May 8 06:19 dev
drwxr-xr-x 1 root root 4096 May 8 06:19 etc
drwxr-xr-x 1 root root 4096 May 8 06:19 home
drwxr-xr-x 1 root root 4096 May 8 06:19 initrd.img
drwxr-xr-x 1 root root 4096 May 8 06:19 initrd.img.old
drwxr-xr-x 1 root root 4096 May 8 06:19 lib
drwxr-xr-x 1 root root 4096 May 8 06:19 lib64
drwxr-xr-x 1 root root 4096 May 8 06:19 media
drwxr-xr-x 1 root root 4096 May 8 06:19 mnt
drwxr-xr-x 1 root root 4096 May 8 06:19 opt
drwxr-xr-x 1 root root 4096 May 8 06:19 proc
drwxr-xr-x 1 root root 4096 May 8 06:19 run
drwxr-xr-x 1 root root 4096 May 8 06:19 snap
drwxr-xr-x 1 root root 4096 May 8 06:19 srv
drwxr-xr-x 1 root root 4096 May 8 06:19 sys
drwxr-xr-x 1 root root 4096 May 8 06:19 tmp
drwxr-xr-x 1 root root 4096 May 8 06:19 usr
drwxr-xr-x 1 root root 4096 May 8 06:19 var
drwxr-xr-x 1 root root 4096 May 8 06:19 vmlinuz
drwxr-xr-x 1 root root 4096 May 8 06:19 vmlinuz.old

htb-student@nixfund:~$ echo $SHELL
/bin/bash

htb-student@nixfund:~$ uname -r
4.15.0-123-generic
```

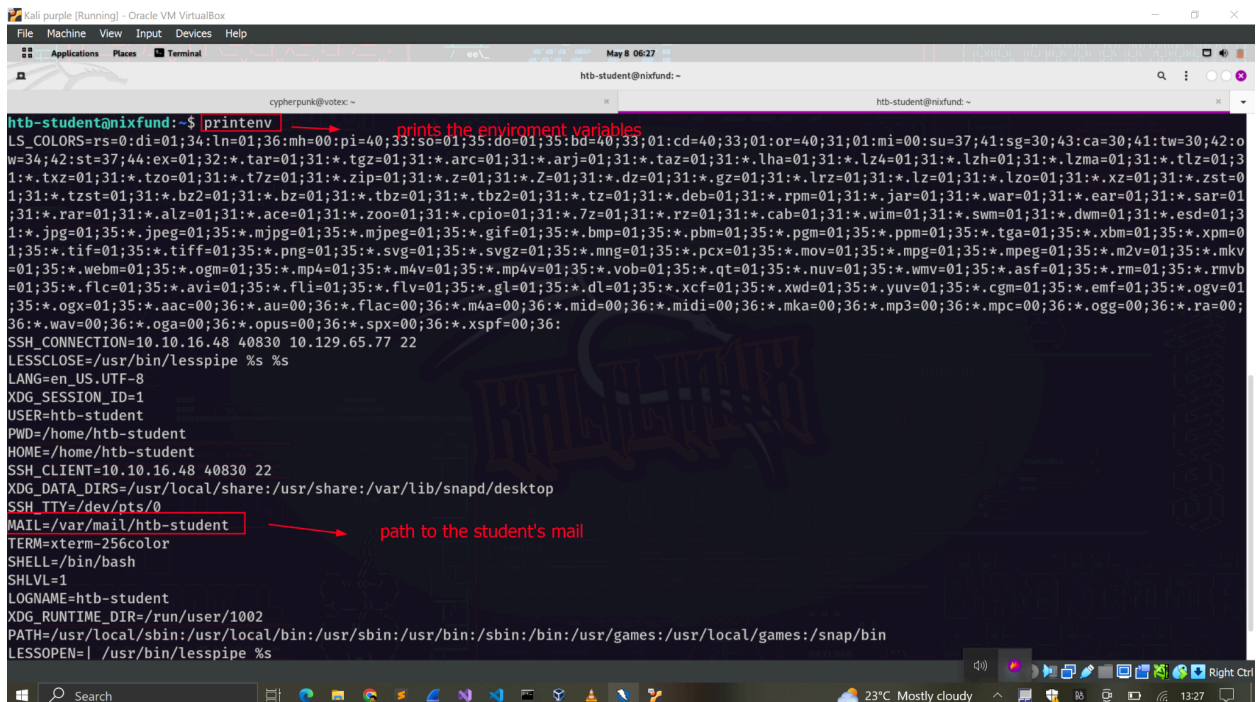
e. What is the name of the network interface that MTU is set to 1500?



```
htb-student@nixfund:~$ ifconfig
ens192: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.129.65.77 netmask 255.255.0.0 broadcast 10.129.255.255
    inet6 fe80::250:56ff:fe94:1307 prefixlen 64 scopeid 0x20<link>
    inet6 dead:beef::250:56ff:fe94:1307 prefixlen 64 scopeid 0x0<global>
    ether 00:50:56:94:13:07 txqueuelen 1000 (Ethernet)
    RX packets 15900 bytes 1146651 (1.1 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 1263 bytes 235903 (235.9 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 2340 bytes 184487 (184.4 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 2340 bytes 184487 (184.4 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

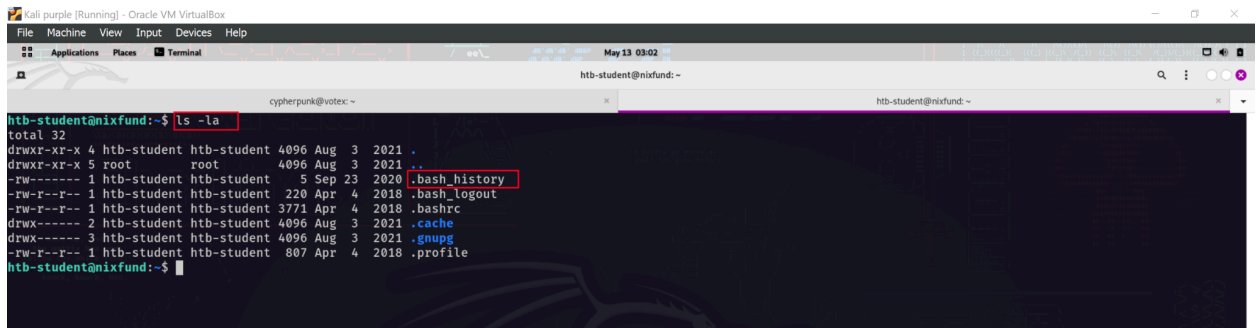
f. What is the path to the htb-student's mail?



```
htb-student@nixfund:~$ printenv
LS_COLORS=rs=0:di=01;34:ln=01;36:mh=00:pi=40;33:so=01;35:do=01;35:bd=40;33:01:cd=40;33;01:or=40;31;01:mi=00:su=37;41:sg=30;43:ca=30;41:tw=30;42:ow=34;42:st=37;44:ex=01;32:*tar=01;31:*tgz=01;31:*arc=01;31:*arj=01;31:*lha=01;31:*lzh=01;31:*lzma=01;31:*tlz=01;31:*txz=01;31:*tzo=01;31:*t7z=01;31:*zip=01;31:*z=01;31:*Z=01;31:*dz=01;31:*gz=01;31:*lrz=01;31:*lz=01;31:*lzo=01;31:*xz=01;31:*zst=01;31:*tzt=01;31:*bz2=01;31:*bz=01;31:*tbz=01;31:*tbz2=01;31:*tz=01;31:*deb=01;31:*rpm=01;31:*jar=01;31:*war=01;31:*ear=01;31:*sar=01;31:*rar=01;31:*alz=01;31:*ace=01;31:*zoo=01;31:*cpio=01;31:*7z=01;31:*rz=01;31:*cab=01;31:*wim=01;31:*swm=01;31:*dwm=01;31:*esd=01;31:*jpg=01;35:*jpeg=01;35:*mjpg=01;35:*mjpeg=01;35:*gif=01;35:*bmp=01;35:*pbm=01;35:*pgm=01;35:*ppm=01;35:*tga=01;35:*xbm=01;35:*xpm=01;35:*tif=01;35:*tiff=01;35:*png=01;35:*svg=01;35:*svgz=01;35:*mng=01;35:*pcx=01;35:*mov=01;35:*mpg=01;35:*mpeg=01;35:*m2v=01;35:*mkv=01;35:*webm=01;35:*ogm=01;35:*mp4=01;35:*m4v=01;35:*mp4v=01;35:*vob=01;35:*qt=01;35:*nuv=01;35:*wmv=01;35:*asf=01;35:*rm=01;35:*rmvb=01;35:*flc=01;35:*avi=01;35:*fli=01;35:*flv=01;35:*gl=01;35:*dl=01;35:*xcf=01;35:*xwd=01;35:*yuv=01;35:*cgm=01;35:*emf=01;35:*ogv=01;35:*ogx=01;35:*aac=00;36:*au=00;36:*flac=00;36:*m4a=00;36:*mid=00;36:*midi=00;36:*mka=00;36:*mp3=00;36:*mpc=00;36:*ogg=00;36:*ra=00;36:*wav=00;36:*oga=00;36:*opus=00;36:*spx=00;36:*xspf=00;36:
SSH_CONNECTION=10.10.16.48 40830 10.129.65.77 22
LESSCLOSE=/usr/bin/lesspipe %s %s
LANG=en_US.UTF-8
XDG_SESSION_ID=1
USER=htb-student
PWD=/home/htb-student
HOME=/home/htb-student
SSH_CLIENT=10.10.16.48 40830 22
XDG_DATA_DIRS=/usr/local/share:/usr/share:/var/lib/snapd/desktop
SSH_TTY=/dev/pts/0
MAIL=/var/mail/htb-student
TERM=xterm-256color
SHELL=/bin/bash
SHLVL=1
LOGNAME=htb-student
XDG_RUNTIME_DIR=/run/user/1002
PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
LESSOPEN=| /usr/bin/lesspipe %s
```

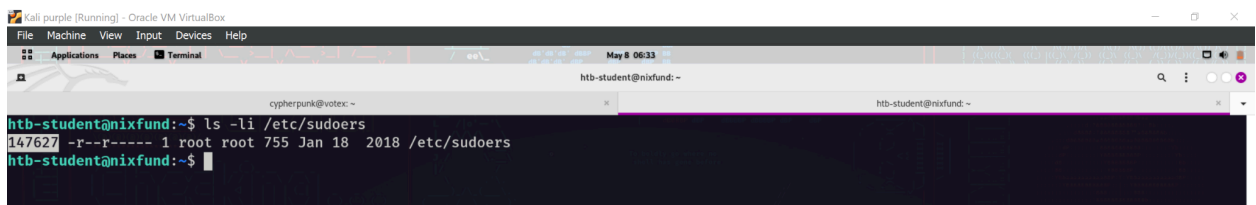
Navigation - Your way around Linux

- a. What is the name of the hidden "history" file in the htb-user's home directory?



```
htb-student@nixfund:~$ ls -la
total 32
drwxr-xr-x 4 htb-student htb-student 4096 Aug 3 2021 .
drwxr-xr-x 5 root root 4096 Aug 3 2021 ..
-rw-r--r-- 1 htb-student htb-student 5 Sep 23 2020 .bash_history
-rw-r--r-- 1 htb-student htb-student 220 Apr 4 2018 .bash_logout
-rw-r--r-- 1 htb-student htb-student 3771 Apr 4 2018 .bashrc
drwx----- 2 htb-student htb-student 4096 Aug 3 2021 .cache
drwx----- 3 htb-student htb-student 4096 Aug 3 2021 .gnupg
-rw-r--r-- 1 htb-student htb-student 807 Apr 4 2018 .profile
htb-student@nixfund:~$
```

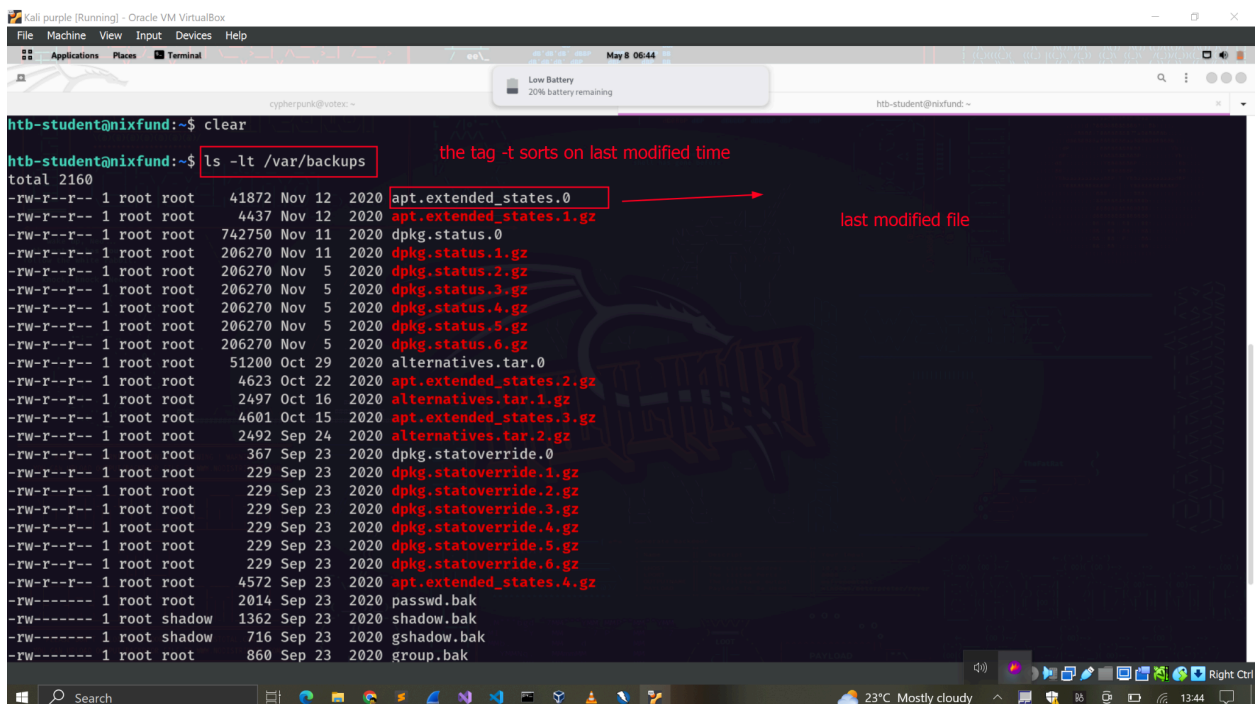
- b. What is the index number of the "sudoers" file in the "/etc" directory?



```
htb-student@nixfund:~$ ls -li /etc/sudoers
147627 -r--r----- 1 root root 755 Jan 18 2018 /etc/sudoers
htb-student@nixfund:~$
```

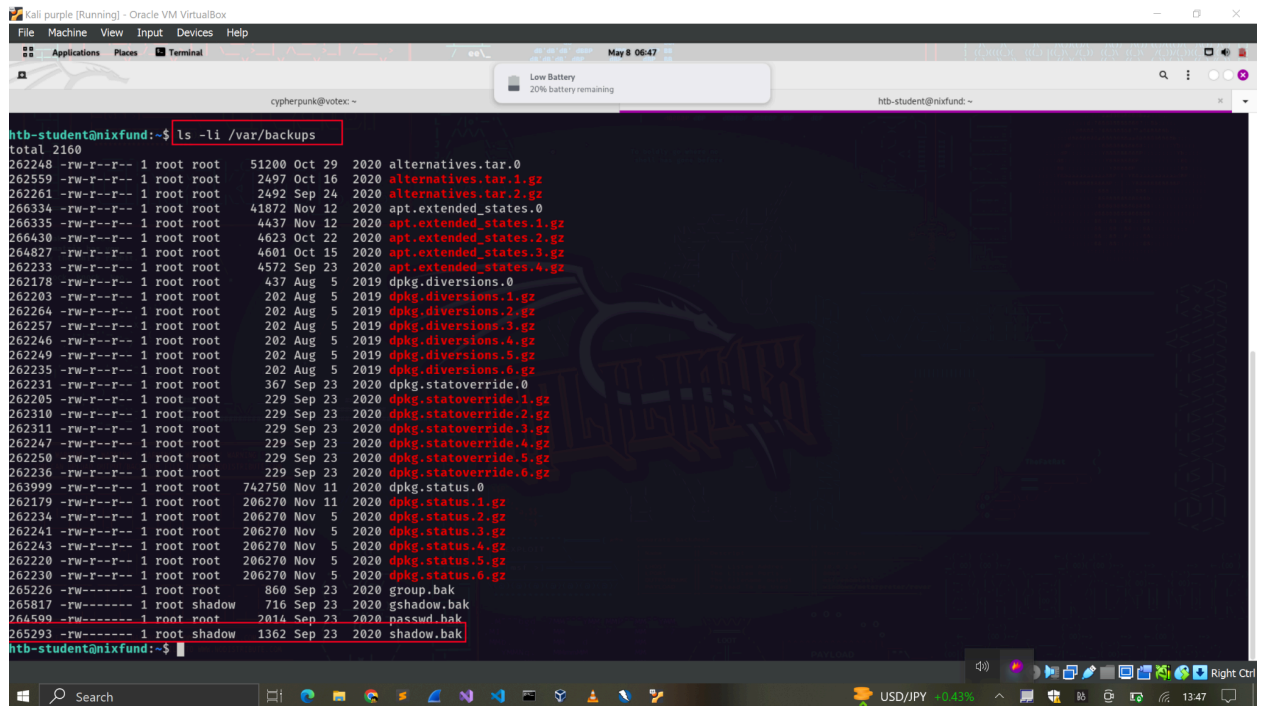
Working with files

- a. What is the name of the last modified file in the "/var/backups" directory?



```
htb-student@nixfund:~$ clear
htb-student@nixfund:~$ ls -lt /var/backups
total 2160
-rw-r--r-- 1 root root 41872 Nov 12 2020 apt.extended_states.0
-rw-r--r-- 1 root root 4437 Nov 12 2020 apt.extended_states.1.gz
-rw-r--r-- 1 root root 742750 Nov 11 2020 dpkg.status.0
-rw-r--r-- 1 root root 206270 Nov 11 2020 dpkg.status.1.gz
-rw-r--r-- 1 root root 206270 Nov 5 2020 dpkg.status.2.gz
-rw-r--r-- 1 root root 206270 Nov 5 2020 dpkg.status.3.gz
-rw-r--r-- 1 root root 206270 Nov 5 2020 dpkg.status.4.gz
-rw-r--r-- 1 root root 206270 Nov 5 2020 dpkg.status.5.gz
-rw-r--r-- 1 root root 206270 Nov 5 2020 dpkg.status.6.gz
-rw-r--r-- 1 root root 51200 Oct 29 2020 alternatives.tar.0
-rw-r--r-- 1 root root 4623 Oct 22 2020 apt.extended_states.2.gz
-rw-r--r-- 1 root root 2497 Oct 16 2020 alternatives.tar.1.gz
-rw-r--r-- 1 root root 4601 Oct 15 2020 apt.extended_states.3.gz
-rw-r--r-- 1 root root 2492 Sep 24 2020 alternatives.tar.2.gz
-rw-r--r-- 1 root root 367 Sep 23 2020 dpkg.statoverride.0
-rw-r--r-- 1 root root 229 Sep 23 2020 dpkg.statoverride.1.gz
-rw-r--r-- 1 root root 229 Sep 23 2020 dpkg.statoverride.2.gz
-rw-r--r-- 1 root root 229 Sep 23 2020 dpkg.statoverride.3.gz
-rw-r--r-- 1 root root 229 Sep 23 2020 dpkg.statoverride.4.gz
-rw-r--r-- 1 root root 229 Sep 23 2020 dpkg.statoverride.5.gz
-rw-r--r-- 1 root root 229 Sep 23 2020 dpkg.statoverride.6.gz
-rw-r--r-- 1 root root 4572 Sep 23 2020 apt.extended_states.4.gz
-rw-r--r-- 1 root root 2014 Sep 23 2020 passwd.bak
-rw-r--r-- 1 root shadow 1362 Sep 23 2020 shadow.bak
-rw-r--r-- 1 root shadow 716 Sep 23 2020 gshadow.bak
-rw-r--r-- 1 root root 860 Sep 23 2020 group.bak
```

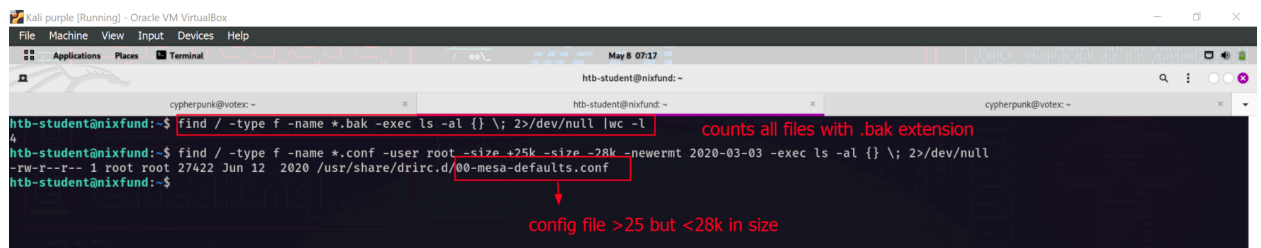

- b. What is the inode number of the "shadow.bak" file in the "/var/backups" directory?



```
htb-student@nixfund:~$ ls -li /var/backups
total 2160
-rw-r--r-- 1 root root 51200 Oct 29 2020 alternatives.tar.0
-rw-r--r-- 1 root root 2497 Oct 16 2020 alternatives.tar.1.gz
-rw-r--r-- 1 root root 2492 Sep 24 2020 alternatives.tar.2.gz
-rw-r--r-- 1 root root 41872 Nov 12 2020 apt.extended_states.0
-rw-r--r-- 1 root root 4437 Nov 12 2020 apt.extended_states.1.gz
-rw-r--r-- 1 root root 4623 Oct 22 2020 apt.extended_states.2.gz
-rw-r--r-- 1 root root 4601 Oct 15 2020 apt.extended_states.3.gz
-rw-r--r-- 1 root root 4572 Sep 23 2020 apt.extended_states.4.gz
-rw-r--r-- 1 root root 437 Aug 5 2019 dpkg.diversions.0
-rw-r--r-- 1 root root 202 Aug 5 2019 dpkg.diversions.1.gz
-rw-r--r-- 1 root root 202 Aug 5 2019 dpkg.diversions.2.gz
-rw-r--r-- 1 root root 202 Aug 5 2019 dpkg.diversions.3.gz
-rw-r--r-- 1 root root 202 Aug 5 2019 dpkg.diversions.4.gz
-rw-r--r-- 1 root root 202 Aug 5 2019 dpkg.diversions.5.gz
-rw-r--r-- 1 root root 202 Aug 5 2019 dpkg.diversions.6.gz
-rw-r--r-- 1 root root 367 Sep 23 2020 dpkg.statoverride.0
-rw-r--r-- 1 root root 229 Sep 23 2020 dpkg.statoverride.1.gz
-rw-r--r-- 1 root root 229 Sep 23 2020 dpkg.statoverride.2.gz
-rw-r--r-- 1 root root 229 Sep 23 2020 dpkg.statoverride.3.gz
-rw-r--r-- 1 root root 229 Sep 23 2020 dpkg.statoverride.4.gz
-rw-r--r-- 1 root root 229 Sep 23 2020 dpkg.statoverride.5.gz
-rw-r--r-- 1 root root 229 Sep 23 2020 dpkg.statoverride.6.gz
-rw-r--r-- 1 root root 742750 Nov 11 2020 dpkg.status.0
-rw-r--r-- 1 root root 206270 Nov 11 2020 dpkg.status.1.gz
-rw-r--r-- 1 root root 206270 Nov 5 2020 dpkg.status.2.gz
-rw-r--r-- 1 root root 206270 Nov 5 2020 dpkg.status.3.gz
-rw-r--r-- 1 root root 206270 Nov 5 2020 dpkg.status.4.gz
-rw-r--r-- 1 root root 206270 Nov 5 2020 dpkg.status.5.gz
-rw-r--r-- 1 root root 206270 Nov 5 2020 dpkg.status.6.gz
-rw-r--r-- 1 root root 860 Sep 23 2020 group.bak
-rw-r--r-- 1 root shadow 716 Sep 23 2020 gshadow.bak
-rw-r--r-- 1 root root 2014 Sep 23 2020 passwd.bak
-rw-r--r-- 1 root shadow 1362 Sep 23 2020 shadow.bak
```

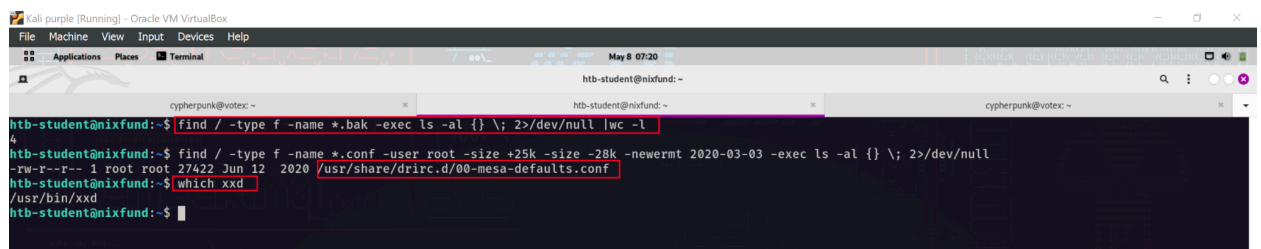
Finding files

- a. What is the name of the config file that has been created after 2020-03-03 and is smaller than 28k but larger than 25k?



```
htb-student@nixfund:~$ find / -type f -name *.bak -exec ls -al {} \; 2>/dev/null | wc -l
4
htb-student@nixfund:~$ find / -type f -name *.conf -user root -size +25k -size -28k -newermt 2020-03-03 -exec ls -al {} \; 2>/dev/null
-rw-r--r-- 1 root root 27422 Jun 12 2020 /usr/share/drirc.d/00-mesa-defaults.conf
htb-student@nixfund:~$
```

- b. How many files exist on the system that have the ".bak" extension?
c. Submit the full path of the "xxd" binary.



```
htb-student@nixfund:~$ find / -type f -name *.bak -exec ls -al {} \; 2>/dev/null | wc -l
4
htb-student@nixfund:~$ find / -type f -name *.conf -user root -size +25k -size -28k -newermt 2020-03-03 -exec ls -al {} \; 2>/dev/null
-rw-r--r-- 1 root root 27422 Jun 12 2020 /usr/share/drirc.d/00-mesa-defaults.conf
htb-student@nixfund:~$ which xxd
/usr/bin/xxd
htb-student@nixfund:~$
```

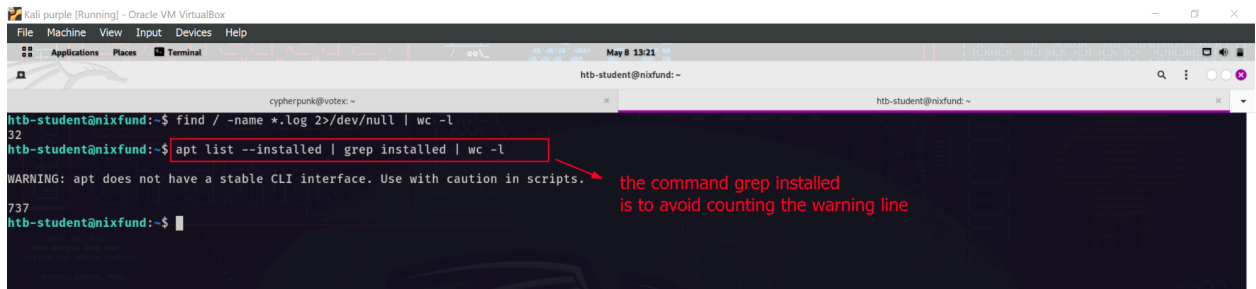
File descriptors

This section focused on using pipes to redirect STDOUT from one program to be processed by another.

a. How many files exist on the system that have the ".log" file extension?

The command `find / -name *.log 2>/dev/null | wc -l` displays the count all all log files within the system. The first part of the command before the pipe will display all files with a **.log** extension and the rest part of the command counts the lines.

b. How many total packages are installed on the target system?



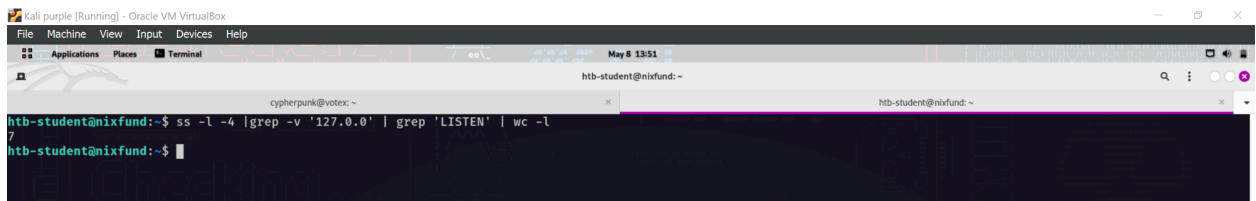
```
htb-student@nixfund:~$ find / -name *.log 2>/dev/null | wc -l
32
htb-student@nixfund:~$ apt list --installed | grep installed | wc -l
WARNING: apt does not have a stable CLI interface. Use with caution in scripts.
737
htb-student@nixfund:~$
```

Filter contents

This section aimed to teach how to use pagers like **less** and **more** to read files interactively and to filter specific contents from files using **grep**.

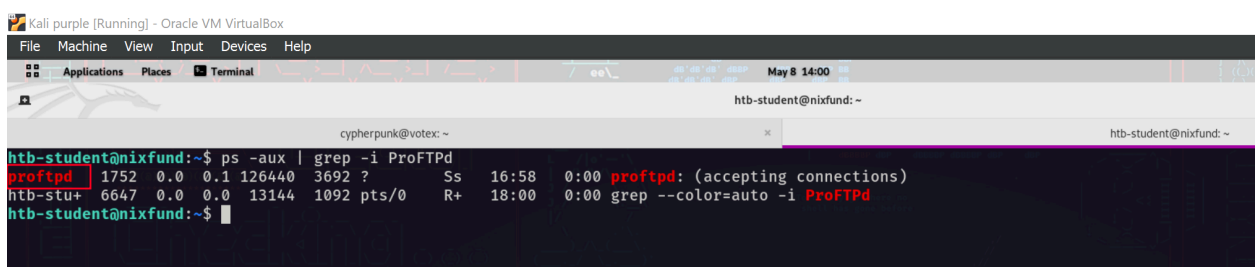
a. How many services are listening on the target system on all interfaces? (Not on localhost and IPv4 only)

The command `ss` is used to investigate sockets, which are bound connections of IP addresses with their port number. The option `-4` displays only IPv4 addresses. `grep -v` then performs an invert match of localhost addresses. `grep 'LISTEN'` finally matches all listening services.



```
htb-student@nixfund:~$ ss -l -4 | grep -v '127.0.0.' | grep 'LISTEN' | wc -l
7
htb-student@nixfund:~$
```

b. Determine what user the ProFTPD server is running under. Submit the username as the answer.



```
htb-student@nixfund:~$ ps -aux | grep -i ProFTPD
proftpd 1752 0.0 0.1 126440 3692 ? Ss 16:58 0:00 proftpd: (accepting connections)
htb-stu+ 6647 0.0 0.0 13144 1092 pts/0 R+ 18:00 0:00 grep --color=auto -i ProFTPD
htb-student@nixfund:~$
```

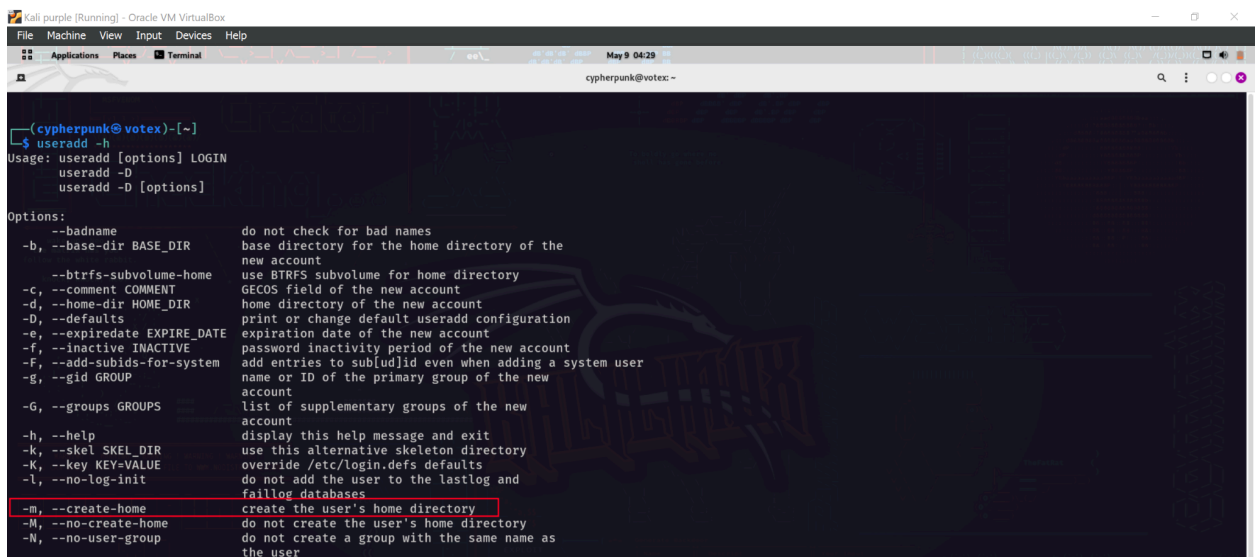
- c. Use cURL from your Pwnbox (not the target machine) to obtain the source code of the "https://www.inlanefreight.com" website and filter all unique paths of that domain. Submit the number of these paths as the answer.

With the command `curl https://www.inlanefreight.com/ | grep Eo "https:\\\\.{0,3}\\inlanefreight\\.com[^\\"\\"]*" | sort -u | wc -l` I retrieved the count for all unique paths of that domain to be 34.

User Management

User management is essential for Linux administration. Creating new users and adding users to specific groups are important for access control.

- a. Which option needs to be set to create a home directory for a new user using "useradd" command?

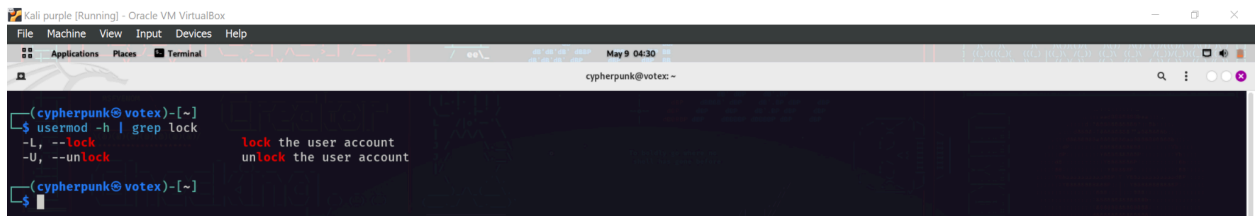


```
Kali purple [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places Terminal
May 9 04:29
cypherpunk@votex: ~

(cypherpunk@votex)-[~]
$ useradd -h
Usage: useradd [options] LOGIN
       useradd -D
       useradd -D [options]

Options:
  --badname           do not check for bad names
  -b, --base-dir BASE_DIR  base directory for the home directory of the
                          new account
  --btrfs-subvolume-home  use BTRFS subvolume for home directory
  -c, --comment COMMENT  GECOS field of the new account
  -d, --home-dir HOME_DIR  home directory of the new account
  -D, --defaults         print or change default useradd configuration
  -e, --expiredate EXPIRE_DATE  expiration date of the new account
  -f, --inactive INACTIVE  password inactivity period of the new account
  -F, --add-subids-for-system  add entries to subuidid even when adding a system user
  -g, --gid GROUP         name or ID of the primary group of the new
                          account
  -G, --groups GROUPS     list of supplementary groups of the new
                          account
  -h, --help             display this help message and exit
  -k, --skel SKEL_DIR     use this alternative skeleton directory
  -K, --key KEY=VALUE     override /etc/login.defs defaults
  -l, --no-log-init       do not add the user to the lastlog and
                          faillog databases
  -m, --create-home       create the user's home directory
  -M, --no-create-home    do not create the user's home directory
  -N, --no-user-group      do not create a group with the same name as
                          the user
```

- b. Which option needs to be set to lock a user account using the "usermod" command? (long version of the option)

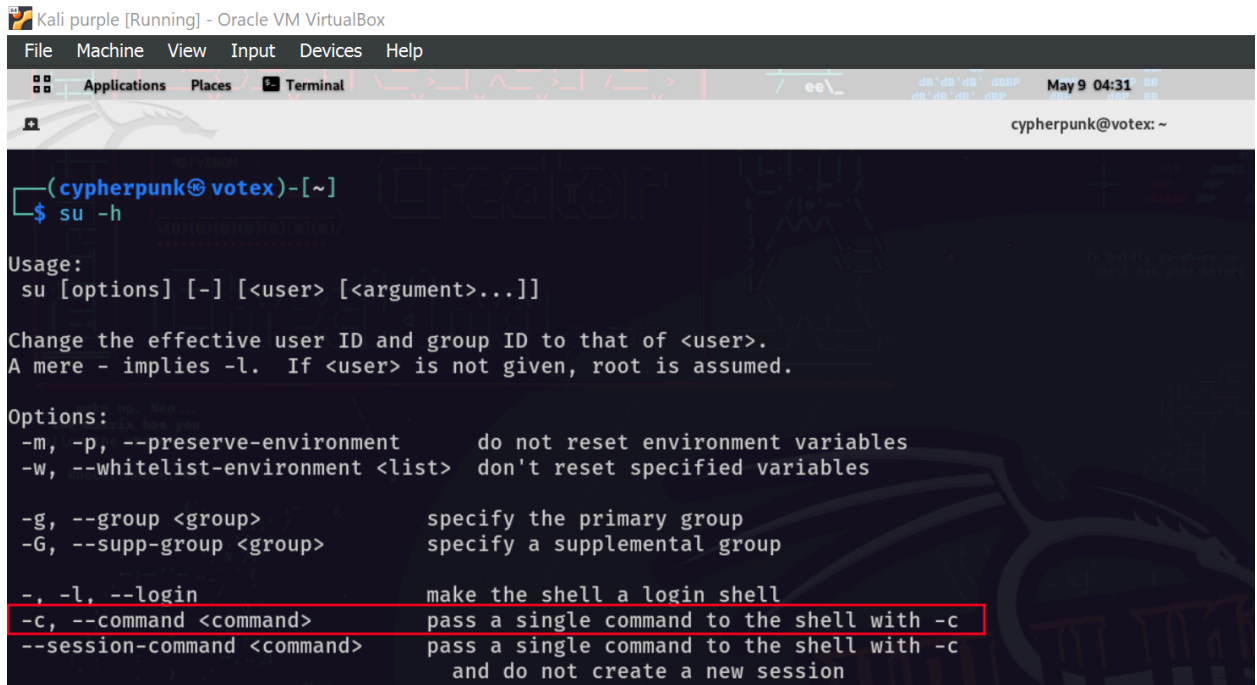


```
Kali purple [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places Terminal
May 9 04:30
cypherpunk@votex: ~

(cypherpunk@votex)-[~]
$ usermod -h | grep lock
-L, --lock      lock the user account
-U, --unlock    unlock the user account

(cypherpunk@votex)-[~]
$
```

- c. Which option needs to be set to execute a command as a different user using the "su" command? (long version of the option)



```
Kali purple [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places Terminal
May 9 04:31
cypherpunk@votex: ~

(cypherpunk@votex)-[~]
$ su -h

Usage:
su [options] [-] [<user> [<argument>...]]

Change the effective user ID and group ID to that of <user>.
A mere - implies -l. If <user> is not given, root is assumed.

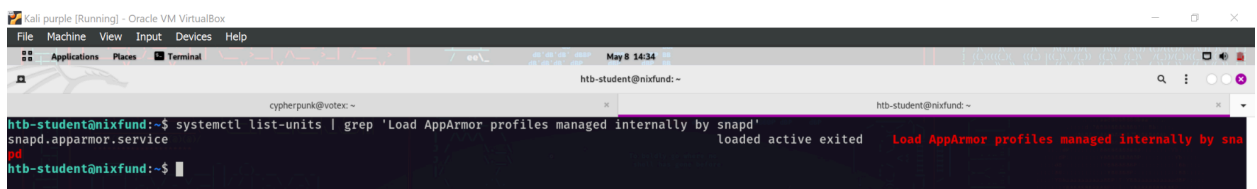
Options:
-m, -p, --preserve-environment    do not reset environment variables
-W, --whitelist-environment <list> don't reset specified variables

-g, --group <group>               specify the primary group
-G, --supp-group <group>          specify a supplemental group

-, -l, --login                    make the shell a login shell
-c, --command <command>          pass a single command to the shell with -c
--session-command <command>     pass a single command to the shell with -c
                                and do not create a new session
```

Service, Process Management and Task scheduling

- a. Use the "systemctl" command to list all units of services and submit the unit name with the description "Load AppArmor profiles managed internally by snapd" as the answer.



```
Kali purple [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places Terminal
May 9 14:34
htb-student@nixfund: ~

cypherpunk@votex: ~
htb-student@nixfund: ~

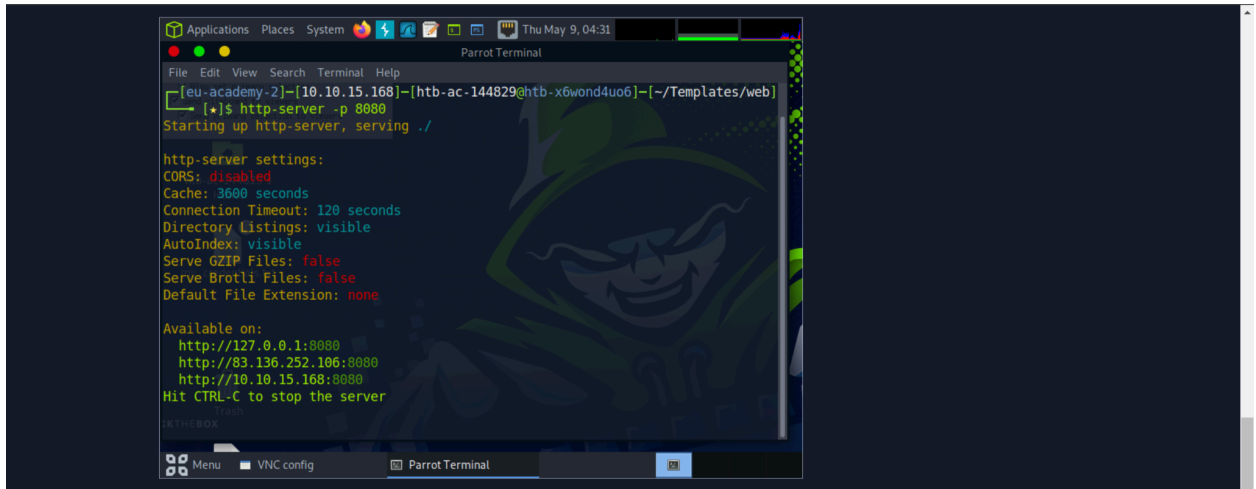
htb-student@nixfund:~$ systemctl list-units | grep 'Load AppArmor profiles managed internally by snapd'
snapd.apparmor.service loaded active exited Load AppArmor profiles managed internally by snapd
htb-student@nixfund:~$
```

- b. What is the type of the service of the "syslog.service"?

Web services

- a. Find a way to start a simple HTTP server inside Pwnbox or your local VM using "npm". Submit the command that starts the web server on port 8080 (use the short

argument to specify the port number).

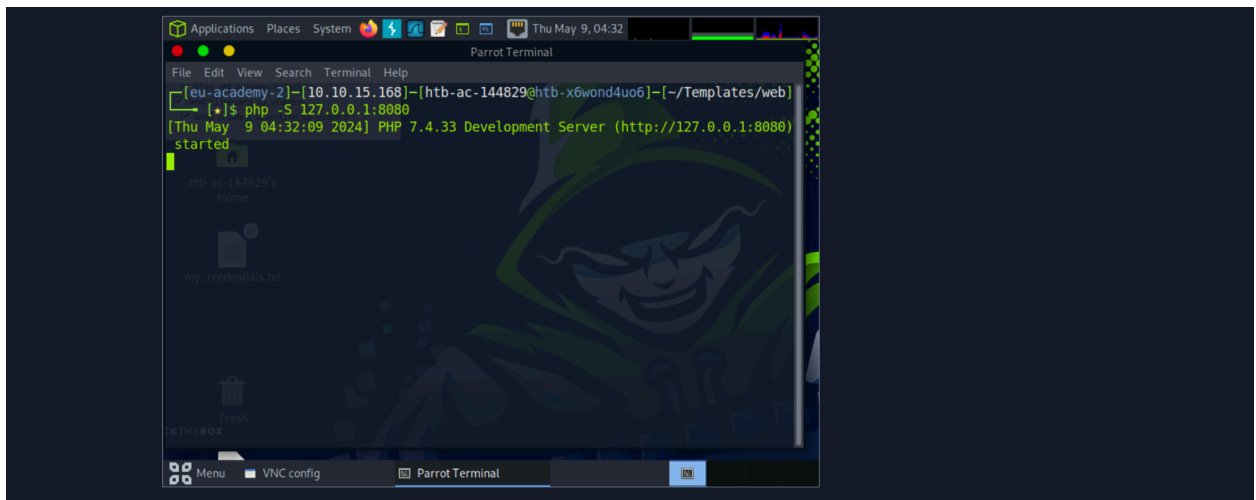


```
File Edit View Search Terminal Help
[eu-academy-2]-[10.10.15.168]-[htb-ac-144829@htb-x6wond4uo6]-[~/Templates/web]
[*]$ http-server -p 8080
Starting up http-server, serving ./

http-server settings:
CORS: disabled
Cache: 3600 seconds
Connection Timeout: 120 seconds
Directory Listings: visible
AutoIndex: visible
Serve GZIP Files: false
Serve Brotli Files: false
Default File Extension: none

Available on:
http://127.0.0.1:8080
http://83.136.252.106:8080
http://10.10.15.168:8080
Hit CTRL-C to stop the server
```

- b. Find a way to start a simple HTTP server inside Pwnbox or your local VM using "php". Submit the command that starts the web server on the localhost (127.0.0.1) on port 8080.

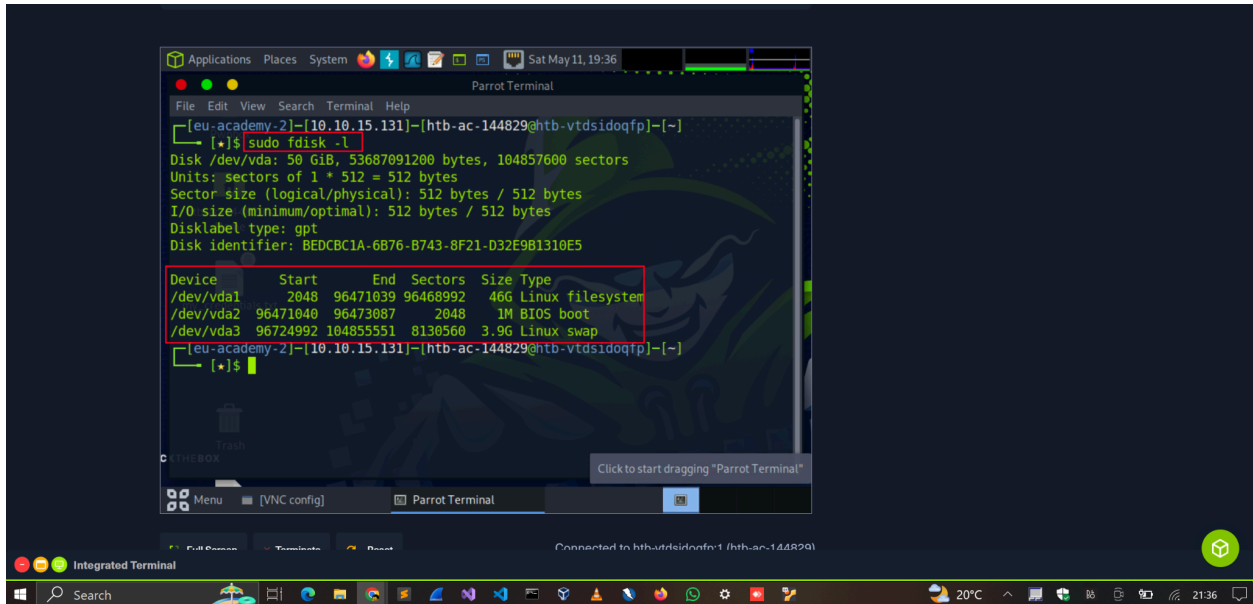


```
File Edit View Search Terminal Help
[eu-academy-2]-[10.10.15.168]-[htb-ac-144829@htb-x6wond4uo6]-[~/Templates/web]
[*]$ php -S 127.0.0.1:8080
[Thu May 9 04:32:09 2024] PHP 7.4.33 Development Server (http://127.0.0.1:8080)
started
```

File system Management

- a. How many partitions exist in our Pwnbox? (Format: 0)

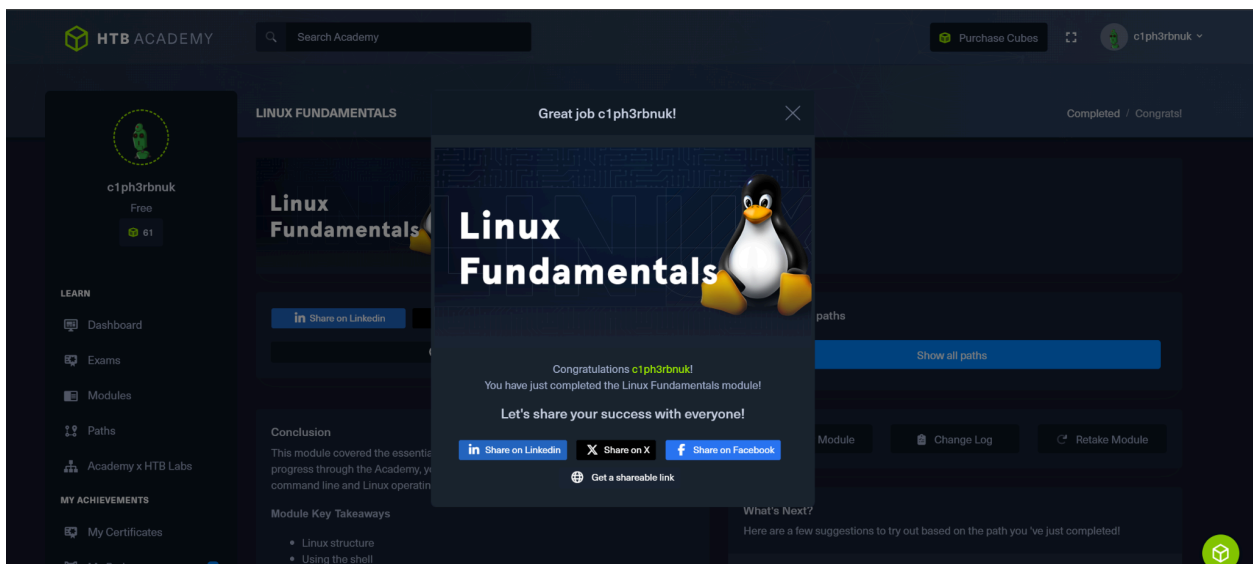
There are only 3 partitions, /dev/vda1, /dev/vda2, /dev/vda3 as shown below.



3. MODULE COMPLETION

The following is a sharable link to the badge I earned after completing the module.

<https://academy.hackthebox.com/achievement/144829/18>



4. CONCLUSION

To summarise, this module provided great insights and an overview of the Linux system. I have learned how to navigate around Linux with commands like **cd**, find and locate files using **find** **locate** commands, manipulate texts with **sed**, **cut** and **awk**, manage users, packages, and disks, backup files, schedule tasks, harden the security of the system and many more.

It was fun and enjoyable to explore Linux. I look forward to practising more and hopefully using the techniques that I have learned during the later chapters of the course.