| Basic Linux Commands |

<Mina Magdy>

LINUX ADMINISTRATION
OSCP,SSCP,CEH,CRTP

\<Linux Environment\> \<env\>

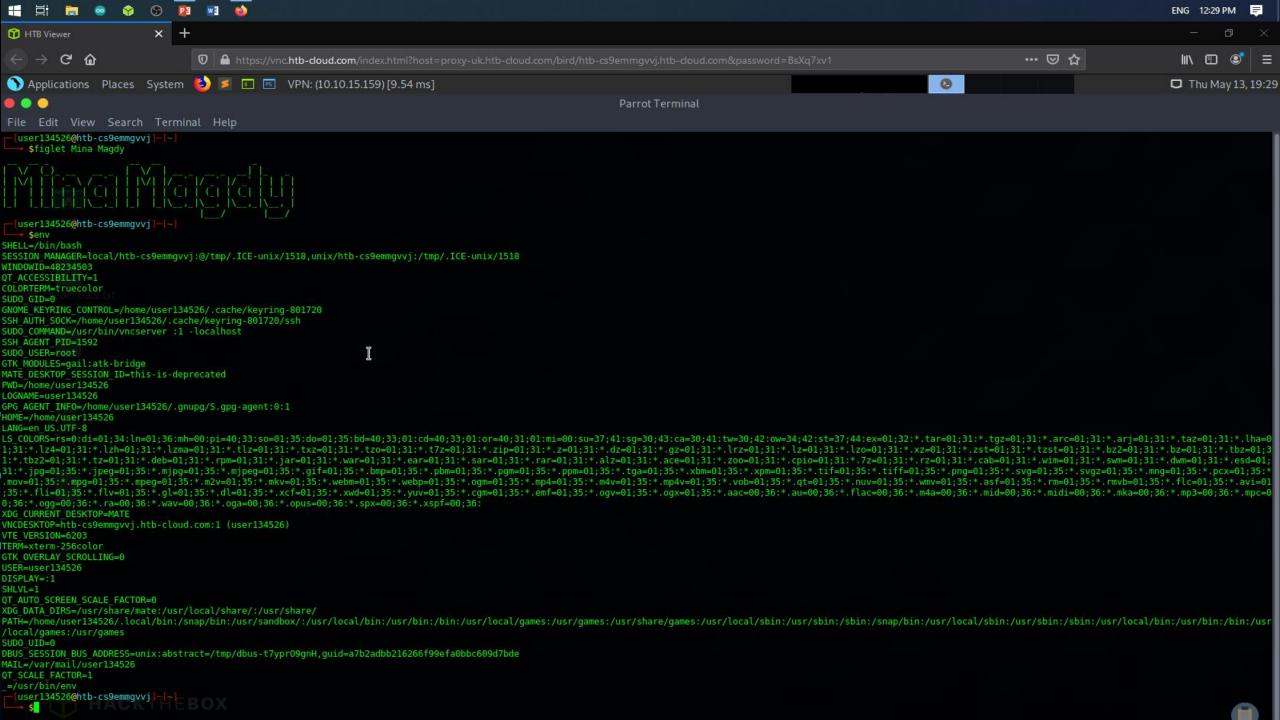- Linux Environment >>> Variables

    Ex1 a = 1 Ex2 b = 2 print (a+b) = 3

- All In memory "Ram"

- U Can Access To all With shell "Terminal"

- Let's Try with "ls"

- Try "which whoami"

- echo $PATH

```
https://vnc.htb-cloud.com/index.html?host=proxy-uk.htb-cloud.com/bird/htb-cs9emmgvvj.htb-cloud.com&password=BsXq7xv1
```

Applications   Places   System   VPN: (10.10.15.159) [9.54 ms]   Thu May 13, 19:29

Parrot Terminal

File   Edit   View   Search   Terminal   Help

```
┌─[user134526@htb-cs9emmgvvj]─[~]
└──➤ $figlet Mina Magdy
```

```
 __  __ _             __  __                 _       
|  \/  (_)_ __   __ _|  \/  | __ _  __ _  __| |_   _ 
| |\/| | | '_ \ / _` | |\/| |/ _` |/ _` |/ _` | | | |
| |  | | | | | | (_| | |  | | (_| | (_| | (_| | |_| |
|_|  |_|_|_| |_|\__,_|_|  |_|\__,_|\__, |\__,_|\__, |
                                   |___/       |___/ 
```

```
┌─[user134526@htb-cs9emmgvvj]─[~]
└──➤ $env
SHELL=/bin/bash
SESSION_MANAGER=local/htb-cs9emmgvvj:@/tmp/.ICE-unix/1518,unix/htb-cs9emmgvvj:/tmp/.ICE-unix/1518
WINDOWID=48234503
QT_ACCESSIBILITY=1
COLORTERM=truecolor
SUDO_GID=0
GNOME_KEYRING_CONTROL=/home/user134526/.cache/keyring-801720
SSH_AUTH_SOCK=/home/user134526/.cache/keyring-801720/ssh
SUDO_COMMAND=/usr/bin/vncserver :1 -localhost
SSH_AGENT_PID=1592
SUDO_USER=root
GTK_MODULES=gail:atk-bridge
MATE_DESKTOP_SESSION_ID=this-is-deprecated
PWD=/home/user134526
LOGNAME=user134526
GPG_AGENT_INFO=/home/user134526/.gnupg/S.gpg-agent:0:1
HOME=/home/user134526
LANG=en_US.UTF-8
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:*.taz=01;31:*.lha=0
1;31:*.lz4=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:*.dz=01;31:*.gz=01;31:*.lrz=01;31:*.lz=01;31:*.lzo=01;31:*.xz=01;31:*.zst=01;31:*.tzst=01;31:*.bz2=01;31:*.bz=01;31:*.tbz=01;3
1:*.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:*.webp=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=0
0;36:*.ogg=00;36:*.ra=00;36:*.wav=00;36:*.oga=00;36:*.opus=00;36:*.spx=00;36:*.xspf=00;36:
XDG_CURRENT_DESKTOP=MATE
VNCDESKTOP=htb-cs9emmgvvj.htb-cloud.com:1 (user134526)
VTE_VERSION=6203
TERM=xterm-256color
GTK_OVERLAY_SCROLLING=0
USER=user134526
DISPLAY=:1
SHLVL=1
QT_AUTO_SCREEN_SCALE_FACTOR=0
XDG_DATA_DIRS=/usr/share/mate:/usr/local/share/:/usr/share/
PATH=/home/user134526/.local/bin:/snap/bin:/usr/sandbox/:/usr/local/bin:/usr/bin:/bin:/usr/local/games:/usr/games:/usr/share/games:/usr/local/sbin:/usr/sbin:/sbin:/snap/bin:/usr/local/sbin:/usr/sbin:/sbin:/usr/local/bin:/usr/bin:/bin:/usr
/local/games:/usr/games
SUDO_UID=0
DBUS_SESSION_BUS_ADDRESS=unix:abstract=/tmp/dbus-t7yprO9gnH,guid=a7b2adbb216266f99efa0bbc609d7bde
MAIL=/var/mail/user134526
QT_SCALE_FACTOR=1
_=/usr/bin/env
```

```
┌─[user134526@htb-cs9emmgvvj]─[~]
└──➤ $
```

| Basic Linux Commands |
<Part 1>

LINUX UPDATEING

1. sudo apt update | Connect with Linux servers & show update

2. sudo apt upgrade | Switch the old bundle to the new one

3. sudo apt full-upgrade | upgradeing Thems & GUI & Icons

4. sudo apt apt update | sudo apt full-upgrade   1&2

5. sudo apt autoremove | Deletion of old files after updating

6. sudo apt search | earching for a specific package inside the Linux repositories

| Basic Linux Commands |
<Part 2>

FILES & NAVIGATING

1. ls | List Files

2. ls –l

3. ls –al

4. cd | To move between files | Change Directory

5. cd DIR NAME

6. cd ..

| Basic Linux Commands |
<Part 2>

FILES & NAVIGATING

1. pwd | print word directory

2. mkdir NEW FILE NAME | make directory

3. rm dir FILE NAME | delete file

4. rm –f | fore delete

5. rm –rf | delete directory file

6. manually Options

7. man ls

| Basic Linux Commands |

<Part 2>

FILES & NAVIGATING

1. tail | show top 10 lines

2. WC | 18 18 94 M3LOMAT.TXT

<GREP>

gerp, egrep, fgrep, rgrep – print lines that match

1. cat M3LOMAT.TXT | grep "WORD"

2. man grep

| Basic Linux Commands |
<Part 2>

FILES & NAVIGATING

1. cp | copy

2. cp   FILE1 To FILE2

3. mv | move

4. mv   FILE1 To FILE2 | To Move Files

5. mv   FILE1 To FILEE | To Rename File

6. touch | Create New text File

7. cat | To open Text File

| Basic Linux Commands |
<Part 3>

NETWORKING

1. ping HOST | ping host

2. whois DNS | get whois for domain

3. dig DNS | get DNS for domain

4. dig –x HOST | reserve lookup host

4. wget FILE | download file

5. wget -r URL | download file from url

| Basic Linux Commands |
<Part 4>

PROCESSES

1. ps

2. ps aux

3. PID

4. kill PID

5. Kill all proc

6. htop & top >> sudo apt install htop

7. tree >> sudo apt install tree

| Basic Linux Commands |

<Part 5>

SYSTEM INFO

1. date

2. uptime

3. whoami

4. cat /proc/cpuimfo

5. cat /proc/meminfo

6. free

7. du

8. du –sh

9. df

10. df -h

| Basic Linux Commands |

<Part 6>

<uname>

1. uname

2. uname -a | show kernel Version

3. uname -n | kali

4. uname -s | Linux

5. uname -m | x86_64

6. uname -r | 5.9.0-kali-amd64

7. man uname | to show more options

| Basic Linux Commands |
<Part 7>

PERMISSIONS

|Permissions|

- Every file and directory in your UNIX/Linux system has following 3 permissions defined for all the 3 owners discussed above.

1. Read   -r
2. Write   -w
3. Execute   -x

| Basic Linux Commands |
<Part 7>

PERMISSIONS

1. r = read permission

2. w = write permission

3. x = execute permission

4. - = no permission

| Basic Linux Commands |
<Part 7>

|Permissions|

1. chmod +rwx filename
to add permissions.

2. chmod -rwx directoryname
to remove permissions.

3. chmod +x filename
to allow executable permissions.

**4. chmod -wx
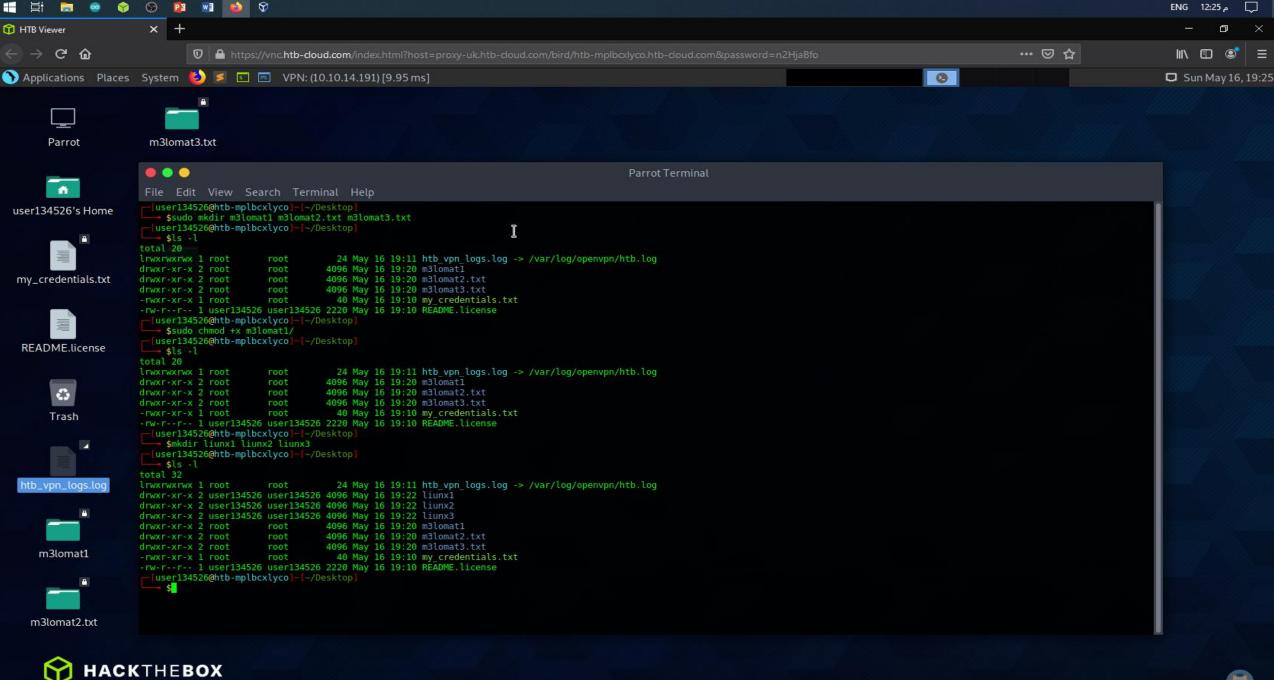filename** to take out write and executable permissions.

| Basic Linux Commands |
\<Part 7\>

PERMISSIONS

|User Denotations|

u   user/owner

g   group

o   other

a   all

| Basic Linux Commands |

User   **Group**   **Others**

https://vnc.htb-cloud.com/index.html?host=proxy-uk.htb-cloud.com/bird/htb-mplbcxlyco.htb-cloud.com&password=n2HjaBfo

Applications   Places   System   VPN: (10.10.14.191) [9.95 ms]   Sun May 16, 19:25

Parrot

m3lomat3.txt

user134526's Home

my_credentials.txt

README.license

Trash

htb_vpn_logs.log

m3lomat1

m3lomat2.txt

Parrot Terminal

File   Edit   View   Search   Terminal   Help

```
┌──[user134526@htb-mplbcxlyco]─[~/Desktop]
└──$sudo mkdir m3lomat1 m3lomat2.txt m3lomat3.txt
┌──[user134526@htb-mplbcxlyco]─[~/Desktop]
└──$ls -l
total 20
lrwxrwxrwx 1 root      root        24 May 16 19:11 htb_vpn_logs.log -> /var/log/openvpn/htb.log
drwxr-xr-x 2 root      root      4096 May 16 19:20 m3lomat1
drwxr-xr-x 2 root      root      4096 May 16 19:20 m3lomat2.txt
drwxr-xr-x 2 root      root      4096 May 16 19:20 m3lomat3.txt
-rwxr-xr-x 1 root      root        40 May 16 19:10 my_credentials.txt
-rw-r--r-- 1 user134526 user134526 2220 May 16 19:10 README.license
┌──[user134526@htb-mplbcxlyco]─[~/Desktop]
└──$sudo chmod +x m3lomat1/
┌──[user134526@htb-mplbcxlyco]─[~/Desktop]
└──$ls -l
total 20
lrwxrwxrwx 1 root      root        24 May 16 19:11 htb_vpn_logs.log -> /var/log/openvpn/htb.log
drwxr-xr-x 2 root      root      4096 May 16 19:20 m3lomat1
drwxr-xr-x 2 root      root      4096 May 16 19:20 m3lomat2.txt
drwxr-xr-x 2 root      root      4096 May 16 19:20 m3lomat3.txt
-rwxr-xr-x 1 root      root        40 May 16 19:10 my_credentials.txt
-rw-r--r-- 1 user134526 user134526 2220 May 16 19:10 README.license
┌──[user134526@htb-mplbcxlyco]─[~/Desktop]
└──$mkdir liunx1 liunx2 liunx3
┌──[user134526@htb-mplbcxlyco]─[~/Desktop]
└──$ls -l
total 32
lrwxrwxrwx 1 root      root        24 May 16 19:11 htb_vpn_logs.log -> /var/log/openvpn/htb.log
drwxr-xr-x 2 user134526 user134526 4096 May 16 19:22 liunx1
drwxr-xr-x 2 user134526 user134526 4096 May 16 19:22 liunx2
drwxr-xr-x 2 user134526 user134526 4096 May 16 19:22 liunx3
drwxr-xr-x 2 root      root      4096 May 16 19:20 m3lomat1
drwxr-xr-x 2 root      root      4096 May 16 19:20 m3lomat2.txt
drwxr-xr-x 2 root      root      4096 May 16 19:20 m3lomat3.txt
-rwxr-xr-x 1 root      root        40 May 16 19:10 my_credentials.txt
-rw-r--r-- 1 user134526 user134526 2220 May 16 19:10 README.license
┌──[user134526@htb-mplbcxlyco]─[~/Desktop]
└──$
```

HACKTHEBOX

Menu   [VNC config]   Parrot Terminal

| Basic Linux Commands |

<Part 8>

LIUNX SERVICES

|apatche2|

1. sudo service apatche2 start | to start apatche service

2. sudo service apatche2 stop | to stop apatche service

3. sudo service apatche2 restart| to restart apatche service

4. sudo service apatche2 statues | show apatche statues

5. To Downloading file http://192.168.1.5/m3lomat1.txt

| Basic Linux Commands |

<Part 8>

LIUNX SERVICES

|SSH|

1. ssh user@host | connect to host as user

2. ssh –p port user@host | connect using P

3. ssh –D user@host | connect & use bind P

| Basic Linux Commands |
<Part 8>

LIUNX SERVICES

|FTP|

1.   ftp DNS.com | Domain Name System

1.   ftp IP | Internet Protocol

2.   ftp USER@FTPDOMAIN.COM

FILES MANAGE

1.   cd DIR

2.   lcd /home/user/urdirectoryname|DOWNLOADING FILES WITH FTP

3.   get FILE | Download file

|Final Result|

- Linux "ENV"
- Part 1 | Linux Updating and differences on upgrading
- Part 2 | Files & Navigating
- Part 3 | Networking
- Part 4 | Process
- Part 5 | System info
- Part 7 | Permitions
- Part 8 | Linux Services

ASKING TIME ??

You can Ask Me ON ?

- Facebook : https://www.facebook.com/m3lomatthephone
- My YouTube Chanel : https://www.youtube.com/c/m3lomatthephone
- M3lomat the phone 2 : https://www.youtube.com/channel/UCixopZbFBzdYKk2qsZLsRCA
- M3lomat Electric : https://www.youtube.com/channel/UCGnXhX2E_MaGYOY8kyOowbQ
- Instagram : https://instagram.com/mena.m.rushdy?igshid=1xg5sxvjtek7i
- LinkedIn : https://www.linkedin.com/in/mina-magdy-38362b1b6/
- Facebook Group : https://www.facebook.com/groups/391033085092937