CYBERSECURITY TRAINING

(WEEK 1 – Day3)

1.Linux Fundamentals

1.1. Overview to Linux Distributions

Ubuntu

- User-friendly and widely used.

- Based on Debian.

- Ideal for beginners, desktops, and servers.

CentOS (Now part of CentOS Stream)

- Stable and secure, derived from Red Hat Enterprise Linux (RHEL).

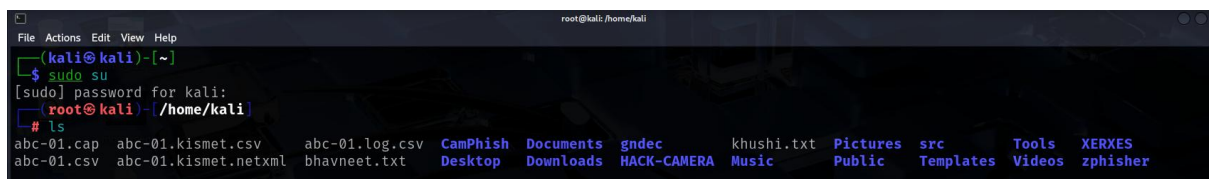- Used mainly in enterprise and server environments.

Kali Linux

- A Debian-based distribution focused on penetration testing and ethical hacking.

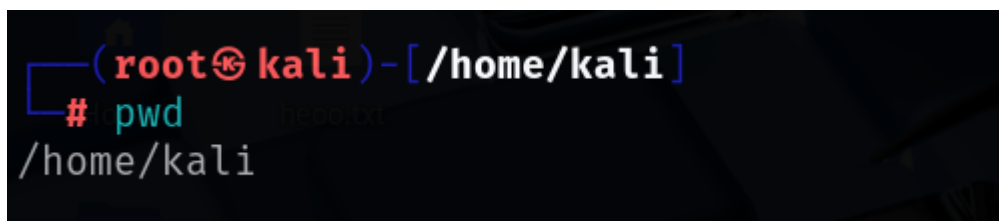- Comes preloaded with security tools (e.g., Wireshark, Nmap).
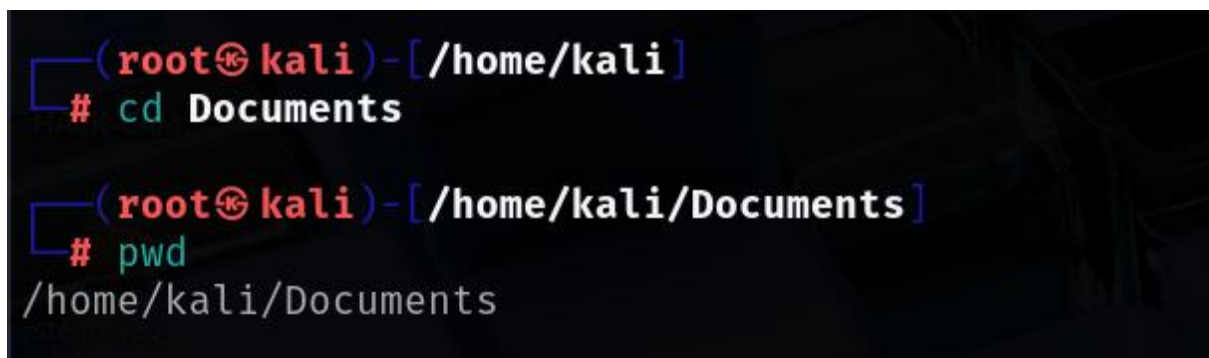
2.Basic Linux Commands

2.1. ls

2.2. pwd

2.3. cd

2.4. ls -l

```
┌──(root㉿kali)-[/home/kali]
└─# ls -l
total 8072
-rw-r--r-- 1 root root 5328228 Jun 24 08:39 abc-01.cap
-rw-r--r-- 1 root root     585 Jun 24 08:39 abc-01.csv
-rw-r--r-- 1 root root     604 Jun 24 08:39 abc-01.kismet.csv
-rw-r--r-- 1 root root    3838 Jun 24 08:39 abc-01.kismet.netxml
-rw-r--r-- 1 root root 2848352 Jun 24 08:39 abc-01.log.csv
-rw-r--r-- 1 root root      25 Jun 11 08:20 bhavneet.txt
drwxrwxr-x 3 kali kali    4096 Jun 24 08:34 CamPhish
drwxr-xr-x 3 kali kali    4096 Jun 21 07:29 Desktop
drwxr-xr-x 2 kali kali    4096 Jun 10 08:07 Documents
drwxr-xr-x 2 kali kali    4096 Jun 10 08:07 Downloads
drwxr-xr-x 2 root root    4096 Jun 11 08:26 gndec
drwxr-xr-x 8 root root    4096 Jun 17 08:01 HACK-CAMERA
-rw-r--r-- 1 root root       0 Jun 11 08:10 khushi.txt
drwxr-xr-x 2 kali kali    4096 Jun 10 08:07 Music
drwxr-xr-x 2 kali kali    4096 Jun 24 13:22 Pictures
drwxr-xr-x 2 kali kali    4096 Jun 10 08:07 Public
drwxrwxr-x 3 kali kali    4096 Jun 24 07:31 src
drwxr-xr-x 2 kali kali    4096 Jun 10 08:07 Templates
drwxr-xr-x 3 root root    4096 Jun 17 08:23 Tools
drwxr-xr-x 2 kali kali    4096 Jun 10 08:07 Videos
drwxr-xr-x 3 root root    4096 Jun 18 07:42 XERXES
drwxr-xr-x 8 root root    4096 Jun 17 08:20 zphisher
```

2.5. ls -a(For displaying even the hidden files)


```
┌──(root㉿kali)-[/home/kali]
└─# ls -a
.                     .bash_logout      .config       gndec         .mozilla      .ssh                        XERXES
..                    .bashrc           Desktop       .gnupg        Music         .sudo_as_admin_successful   .xsession-errors
abc-01.cap            .bashrc.original  .dmrc         HACK-CAMERA   .ngrokfolder  Templates                   .xsession-errors.old
abc-01.csv            bhavneet.txt      Documents     .ICEauthority Pictures      Tools                       zphisher
abc-01.kismet.csv     .cache            Downloads     .java         .profile      Videos                      .zprofile
abc-01.kismet.netxml  CamPhish          .face         khushi.txt    Public        .wget-hsts                  .zsh_history
abc-01.log.csv        .cffolder         .face.icon    .local        src           .Xauthority                 .zshrc
```

2.6. touch(For creating Blank Files)


```
┌──(root㉿kali)-[/home/kali]
└─# touch prabnoor.txt

┌──(root㉿kali)-[/home/kali]
└─# ls
abc-01.cap            abc-01.kismet.netxml  CamPhish    Downloads    khushi.txt   prabnoor.txt   Templates   XERXES
abc-01.csv            abc-01.log.csv        Desktop     gndec        Music        Public         Tools       zphisher
abc-01.kismet.csv     bhavneet.txt          Documents   HACK-CAMERA  Pictures     src            Videos
```

2.7. cat > (for writing data into a file)

```
┌──(root💀kali)-[/home/kali]
└─# cat >prabnoor.txt
Hello Prabnoor
^C
```

2.8. cat (for reading data from a file)

```
┌──(root💀kali)-[/home/kali]
└─# cat prabnoor.txt
Hello Prabnoor
```

2.9. cat >> (for appending the data of a file)

```
┌──(root💀kali)-[/home/kali]
└─# cat >> prabnoor.txt
Welcome To Linux Terminal ... :)
^C

┌──(root💀kali)-[/home/kali]
└─# cat prabnoor.txt
Hello Prabnoor
Welcome To Linux Terminal ... :)
```