

# LAB5

Information Technology Institute

8. Identify the file types of the following: /etc/passwd, /dev/pts/0, /etc, /dev/sda 9.

```
mariam@mariam-Latitude-E6430:~$ file /etc/passwd
/etc/passwd: ASCII text
mariam@mariam-Latitude-E6430:~$ file /dev/pts/0
/dev/pts/0: character special (136/0)
mariam@mariam-Latitude-E6430:~$ file /etc
/etc: directory
mariam@mariam-Latitude-E6430:~$ file /dev/sda
/dev/sda: block special (8/0)
```

9-List the inode numbers of /, /etc, /etc/hosts.

```
mariam@mariam-Latitude-E6430:~$ ls -li /etc
8126602 adduser.conf          8126538 lvm
8126603 adduser.conf.dpkg-save 8126648 machine-id
8126472 alternatives           8126649 magic
```

```
mariam@mariam-Latitude-E6430:~$ ls -li /
 12 bin      1835009 home      11 lost+found 7864321 root      1 sys
1048577 boot    13 lib      786433 media      1 run      5111809 tmp
7733249 cdrom   14 lib32    4980737 mnt         17 sbin     3932161 usr
 1 dev      15 lib64    5505025 opt         4194305 snap    5767169 var
8126465 etc      16 libx32    1 proc         131073 srv
```

```
mariam@mariam-Latitude-E6430:~$ ls -li /etc/hosts
8126629 /etc/hosts
```

10. Copy /etc/passwd to your home directory, use the commands diff and cmp, and Edit in the file you copied, and then use these commands again, and check the output.

```
mariam@mariam-Latitude-E6430:~$ vi passwd
mariam@mariam-Latitude-E6430:~$ diff /etc/passwd passwd
1c1,3
< root:x:0:0:root:/root:/bin/bash
---
>
> test mariam zayed
> test root:x:0:0:root:/root:/bin/bash
mariam@mariam-Latitude-E6430:~$ cmp /etc/passwd passwd
/etc/passwd passwd differ: byte 1, line 1
```

11. Create a symbolic link of /etc/passwd in /boot.

```
mariam@mariam-Latitude-E6430:~$ sudo ln -s /etc/passwd /boot
mariam@mariam-Latitude-E6430:~$ ls /boot
config-5.19.0-21-generic      memtest86+.elf
config-5.19.0-26-generic      memtest86+_multiboot.bin
efi                          passwd
grub                         System.map-5.19.0-21-generic
initrd.img                  System.map-5.19.0-26-generic
initrd.img-5.19.0-21-generic  vmlinuz
initrd.img-5.19.0-26-generic  vmlinuz-5.19.0-21-generic
initrd.img.old              vmlinuz-5.19.0-26-generic
memtest86+.bin              vmlinuz.old
mariam@mariam-Latitude-E6430:~$
```

12. Create a hard link of /etc/passwd in /boot. Could you? Why?

```
mariam@mariam-Latitude-E6430:~$ sudo ln /etc/passwd /boot
mariam@mariam-Latitude-E6430:~$ ls /boot
config-5.19.0-21-generic      memtest86+.elf
config-5.19.0-26-generic      memtest86+_multiboot.bin
efi                          passwd
grub                         System.map-5.19.0-21-generic
initrd.img                  System.map-5.19.0-26-generic
initrd.img-5.19.0-21-generic  vmlinuz
initrd.img-5.19.0-26-generic  vmlinuz-5.19.0-21-generic
initrd.img.old              vmlinuz-5.19.0-26-generic
memtest86+.bin              vmlinuz.old
mariam@mariam-Latitude-E6430:~$
```

Made with  by  1