

Basic Linux Command Output

Create a user with user group

```
redts:x:129:138:!/var/lib/redts:/usr/sbin/nologin
fwupd-refresh:x:130:136:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
libvirt-qemu:x:64055:108:Libvirt Qemu,,,:/var/lib/libvirt:/usr/sbin/nologin
libvirt-dnsmasq:x:131:140:Libvirt Dnsmasq,,,:/var/lib/libvirt/dnsmasq:/usr/sbin/nologin
swtpm:x:132:142:virtual TPM software stack,,,:/var/lib/swtpm:/bin/false
linux:x:1001:1002:~/home/linux:/bin/sh
```

Create two directories & files

```
imran@imran-H410M-S2H-V2:~/devops/linux$ mkdir os-concepts
imran@imran-H410M-S2H-V2:~/devops/linux$ mkdir ubuntu-is-the-best
imran@imran-H410M-S2H-V2:~/devops/linux$ cd os-concepts/
imran@imran-H410M-S2H-V2:~/devops/linux/os-concepts$ touch file1.txt
imran@imran-H410M-S2H-V2:~/devops/linux/os-concepts$ touch file2.txt
imran@imran-H410M-S2H-V2:~/devops/linux/os-concepts$ cd .
imran@imran-H410M-S2H-V2:~/devops/linux/os-concepts$ cd ..
imran@imran-H410M-S2H-V2:~/devops/linux$ cd ubuntu-is-the-best/
imran@imran-H410M-S2H-V2:~/devops/linux/ubuntu-is-the-best$ touch file3.txt
imran@imran-H410M-S2H-V2:~/devops/linux/ubuntu-is-the-best$ touch file4.txt
```

List the files with detailed information (including file permission)

```
imran@imran-H410M-S2H-V2:~/devops/linux$ ls -l os-concepts
total 0
-rw-rw-r-- 1 imran imran 0 Oct  8 23:45 file1.txt
-rw-rw-r-- 1 imran imran 0 Oct  8 23:45 file2.txt
imran@imran-H410M-S2H-V2:~/devops/linux$ ls -l ubuntu-is-the-best
total 0
-rw-rw-r-- 1 imran imran 0 Oct  8 23:46 file3.txt
-rw-rw-r-- 1 imran imran 0 Oct  8 23:46 file4.txt
```

Update file permission so that owner can read,write and group can only read and others can not do anything

```
imran@imran-H410M-S2H-V2:~/devops/linux$ cd os-concepts/
imran@imran-H410M-S2H-V2:~/devops/linux/os-concepts$ chmod 640 file1.txt
imran@imran-H410M-S2H-V2:~/devops/linux/os-concepts$ chmod 640 file2.txt
imran@imran-H410M-S2H-V2:~/devops/linux/os-concepts$ cd ..
imran@imran-H410M-S2H-V2:~/devops/linux$ cd ubuntu-is-the-best/
imran@imran-H410M-S2H-V2:~/devops/linux/ubuntu-is-the-best$ chmod 640 file3.txt
imran@imran-H410M-S2H-V2:~/devops/linux/ubuntu-is-the-best$ chmod 640 file4.txt
```

Create another group & Update file ownership

```
imran@imran-H410M-S2H-V2:~/devops/linux/ubuntu-is-the-best$ sudo groupadd another_group
[sudo] password for imran:
imran@imran-H410M-S2H-V2:~/devops/linux/ubuntu-is-the-best$ sudo chown :another_group *.txt
```

Add the user to the new group

```
imran@imran-H410M-S2H-V2:~/devops/linux$ tail -3 /etc/group
docker:x:998:
linux:x:1001:
another_group:x:1002:
imran@imran-H410M-S2H-V2:~/devops/linux$ sudo usermod linux -g 1002
```

Create a file called [crash.in](#) & find the file

```
imran@imran-H410M-S2H-V2:~/devops/linux$ echo "crash" > ~/devops/linux/os-concepts/crash.in
imran@imran-H410M-S2H-V2:~/devops/linux$ find ~/devops/linux/os-concepts -name "crash.in"
/home/imran/devops/linux/os-concepts/crash.in
```

replace the lines with crash to broken

```
imran@imran-H410M-S2H-V2:~/devops/linux$ cd ~/devops/linux/os-concepts
imran@imran-H410M-S2H-V2:~/devops/linux/os-concepts$ sed -i 's/crash/broken/g' crash.in
imran@imran-H410M-S2H-V2:~/devops/linux/os-concepts$ cat crash.in
broken
```