Muhammad Raffay Asif

Bsefa17a517

OS lab 2

Task 01

a)new user jamil:

```
raffay@hp:~$ sudo adduser jamil
[sudo] password for raffay:
Adding user `jamil' ...
Adding new group `jamil' (1004) ...
Adding new user `jamil' (1003) with group `jamil' ...
The home directory `/home/jamil' already exists.  Not copying from `/etc/skel'.
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for jamil
Enter the new value, or press ENTER for the default
        Full Name []: jamil
        Room Number []: 21
        Work Phone []: 21
        Home Phone []: 21
        Other []: 21
Is the information correct? [Y/n] y
raffay@hp:~$
```

b)/etc/passwd:

```
raffay@hp:~$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nolog
in
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd/netif:/usr
/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd/resolve:/usr/sbin/no
login
syslog:x:102:106::/home/syslog:/usr/sbin/nologin
messagebus:x:103:107::/nonexistent:/usr/sbin/nologin
```

b)/etc/shadow:

```
raffay@hp:~$ sudo cat /etc/shadow
root:$6$hWg7rpEc$TD1E1wOJ9skUQ6tN2AtLq1oBMNRh9TpxO6jKWNuRPxqz/5tmfIZJ/.pYKtQywD
50KJZ0WMjT/gcdSDyl7b59g0:17961:0:99999:7:::
daemon:*:17937:0:99999:7:::
bin:*:17937:0:99999:7:::
sys:*:17937:0:99999:7:::
sync:*:17937:0:99999:7:::
games:*:17937:0:99999:7:::
man:*:17937:0:99999:7:::
lp:*:17937:0:99999:7:::
mail:*:17937:0:99999:7:::
news:*:17937:0:99999:7:::
uucp:*:17937:0:99999:7:::
proxy:*:17937:0:99999:7:::
www-data:*:17937:0:99999:7:::
backup:*:17937:0:99999:7:::
list:*:17937:0:99999:7:::
irc:*:17937:0:99999:7:::
gnats:*:17937:0:99999:7:::
nobody:*:17937:0:99999:7:::
systemd-network:*:17937:0:99999:7:::
systemd-resolve:*:17937:0:99999:7:::
syslog:*:17937:0:99999:7:::
messagebus:*:17937:0:99999:7:::
_apt:*:17937:0:99999:7:::
uuidd:*:17937:0:99999:7:::
avahi-autoipd:*:17937:0:99999:7:::
```

c)password assigning:

```
raffay@hp:~$ sudo passwd jamil
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
raffay@hp:~$
```

d)/cat/passwd:

```
raffay@hp:~$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nolog
in
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd/netif:/usr
/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd/resolve:/usr/sbin/no
login
syslog:x:102:106::/home/syslog:/usr/sbin/nologin
messagebus:x:103:107::/nonexistent:/usr/sbin/nologin
 apt:x:104:65534::/nonexistent:/usr/sbin/nologin
```

/cat/shadow:

```
raffay@hp:~$ sudo cat /etc/shadow
[sudo] password for raffay:
root:$6$hWg7rpEc$TD1E1wOJ9skUQ6tN2AtLq1oBMNRh9TpxO6jKWNuRPxqz/5tmfIZJ/.pYKtQywD
50KJZ0WMjT/gcdSDyl7b59g0:17961:0:99999:7:::
daemon:*:17937:0:99999:7:::
bin:*:17937:0:99999:7:::
sys:*:17937:0:99999:7:::
sync:*:17937:0:99999:7:::
games:*:17937:0:99999:7:::
man:*:17937:0:99999:7:::
lp:*:17937:0:99999:7:::
mail:*:17937:0:99999:7:::
news:*:17937:0:99999:7:::
uucp:*:17937:0:99999:7:::
proxy:*:17937:0:99999:7:::
www-data:*:17937:0:99999:7:::
backup:*:17937:0:99999:7:::
list:*:17937:0:99999:7:::
irc:*:17937:0:99999:7:::
gnats:*:17937:0:99999:7:::
nobody:*:17937:0:99999:7:::
systemd-network:*:17937:0:99999:7:::
systemd-resolve:*:17937:0:99999:7:::
syslog:*:17937:0:99999:7:::
messagebus:*:17937:0:99999:7:::
_apt:*:17937:0:99999:7:::
uuidd:*:17937:0:99999:7:::
avahi-autoipd:*:17937:0:99999:7:::
usbmux:*:17937:0:99999:7:::
```

e)login from another console:

```
raffay@hp:~$ su jamil
Password:
jamil@hp:/home/raffay$
```

f)default settings:

```
jamil@hp:/home/raffay$ usermod -D
usermod: invalid option -- 'D'
Usage: usermod [options] LOGIN
```

g)contents of /etc/default/useradd:

```
jamil@hp:/home/raffay$ cat /etc/default/useradd
# Default values for useradd(8)
#
# The SHELL variable specifies the default login shell on your
# system.
# Similar to DHSELL in adduser. However, we use "sh" here because
# useradd is a low level utility and should be as general
# as possible
SHELL=/bin/sh
#
# The default group for users
# 100=users on Debian systems
# Same as USERS_GID in adduser
# This argument is used when the -n flag is specified.
# The default behavior (when -n and -g are not specified) is to create a
# primary user group with the same name as the user being added to the
# system.
# GROUP=100
#
# The default home directory. Same as DHOME for adduser
# HOME=/home
#
# The number of days after a password expires until the account
# is permanently disabled
# INACTIVE=-1
#
# The default expire date
# EXPIRE=
```

h)root changing password:

```
jamil@hp:/home/raffay$ su root
Password:
root@hp:/home/raffay# passwd jamil
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
root@hp:/home/raffay#
```

i)password changing from jamil:

```
jamil@hp:/home/raffay$ su root
Password:
root@hp:/home/raffay# passwd jamil
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
root@hp:/home/raffay# su jamil
jamil@hp:/home/raffay$ passwd jamil
Changing password for jamil.
(current) UNIX password:
Enter new UNIX password:
Retype new UNIX password:
Bad: new password is too simple
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
jamil@hp:/home/raffay$
```

j)change personal information using chfn as root:

```
root@hp:/home/raffay# chfn jamil
Changing the user information for jamil
Enter the new value, or press ENTER for the default
        Full Name [jamil]: jamil
        Room Number [21]: 12
        Work Phone [21]: 12
        Home Phone [21]: 12
        Other [21]: 12
root@hp:/home/raffay#
```

j)change personal information using chfn as jamil:

```
jamil@hp:/home/raffay$ chfn jamil
Password:
Changing the user information for jamil
Enter the new value, or press ENTER for the default
        Full Name: jamil
        Room Number [12]: 12
        Work Phone [12]: 12
        Home Phone [12]: 12
jamil@hp:/home/raffay$ 
```

k)view content of /etc/passwd:

```
jamil@hp:/home/raffay$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nolog
in
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd/netif:/usr
/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd/resolve:/usr/sbin/no
login
syslog:x:102:106::/home/syslog:/usr/sbin/nologin
messagebus:x:103:107::/nonexistent:/usr/sbin/nologin
apt:x:104:65534::/nonexistent:/usr/sbin/nologin
```

TASK 02

a)

```
raffay@hp:~$ cat /etc/passwd /etc/shadow /etc/group
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
```

b)

```
raffay@hp:~$ sudo usermod -U jamil
raffay@hp:~$ su jamil
Password:
jamil@hp:/home/raffay$ sudo cat /etc/shadow
[sudo] password for jamil:
jamil is not in the sudoers file.  This incident will be reported.
jamil@hp:/home/raffay$ █
```

c)

```
raffay@hp:~$ sudo userdel -r jamil
[sudo] password for raffay:
userdel: jamil mail spool (/var/mail/jamil) not found
raffay@hp:~$ su jamil
No passwd entry for user 'jamil'
raffay@hp:~$ █
```

d)

```
raffay@hp:~$ ls -l jamil
ls: cannot access 'jamil': No such file or directory
raffay@hp:~$
```

e)

```
raffay@hp:~$ cat /etc/passwd /etc/shadow /etc/group
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
```

f)

```
raffay@hp:~$ sudo usermod -l farhan jamil
raffay@hp:~$
```

g)

```
raffay@hp:~$ cat /etc/passwd /etc/shadow /etc/group
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
```

h)

```
farhan@hp:/home/raffay$ su root
Password:
root@hp:/home/raffay# pwd /home/jamil
/home/raffay
root@hp:/home/raffay# ls
d1        Documents  examples.desktop  Music     Public  Templates  ty
Desktop   Downloads  file                        Pictures  snap    tryit_now  Videos
root@hp:/home/raffay#
```

i)

```
farhan@hp:/home/raffay$ cat /etc/passwd /etc/shadow /etc/group
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
```

j)

```
raffay@hp:~$ sudo userdel -r farhan
[sudo] password for raffay:
userdel: farhan mail spool (/var/mail/farhan) not found
raffay@hp:~$
```

k)

```
raffay@hp:~$ cat /etc/passwd /etc/shadow /etc/group
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
```

TASK 03

a)

```
raffay@hp:~$ sudo adduser jamil
Adding user `jamil' ...
Adding new group `jamil' (1004) ...
Adding new user `jamil' (1004) with group `jamil' ...
Creating home directory `/home/jamil' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
Sorry, passwords do not match
passwd: Authentication token manipulation error
passwd: password unchanged
Try again? [y/N] y
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for jamil
Enter the new value, or press ENTER for the default
        Full Name []: jamil
        Room Number []: 1
        Work Phone []: 1
        Home Phone []: 1
        Other []: 1
Is the information correct? [Y/n] y
raffay@hp:~$ ▮
```

b)

```
raffay@hp:~$ sudo adduser mansoor
adduser: The user `mansoor' already exists.
raffay@hp:~$ ▮
```

d)

```
raffay@hp:~$ cat /etc/login.defs
#
# /etc/login.defs - Configuration control definitions for the login package.
#
# Three items must be defined:  MAIL_DIR, ENV_SUPATH, and ENV_PATH.
```

e)

```
raffay@hp:~$ sudo adduser jamil
Adding user `jamil' ...
Adding new group `jamil' (1004) ...
Adding new user `jamil' (1004) with group `jamil' ...
Creating home directory `/home/jamil' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
Sorry, passwords do not match
passwd: Authentication token manipulation error
passwd: password unchanged
Try again? [y/N] y
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for jamil
Enter the new value, or press ENTER for the default
        Full Name []: jamil
        Room Number []: 1
        Work Phone []: 1
        Home Phone []: 1
        Other []: 1
Is the information correct? [Y/n] y
raffay@hp:~$ █
```

TASK 04

a)

```
raffay@hp:~$ sudo addgroup sales
Adding group `sales' (GID 1006) ...
Done.
raffay@hp:~$ cat /etc/group
root:x:0:
daemon:x:1:
bin:x:2:
```

b)

```
raffay@hp:~$ sudo groupmod -n marketing sales
raffay@hp:~$ cat /etc/group
root:x:0:
daemon:x:1:
bin:x:2:
```

c)

```
raffay@hp:~$ sudo groupdel marketing
raffay@hp:~$ cat /etc/group
root:x:0:
daemon:x:1:
```

d)

```
raffay@hp:~$ sudo adduser user1
Adding user `user1' ...
Adding new group `user1' (1006) ...
Adding new user `user1' (1005) with group `user1' ...
The home directory `/home/user1' already exists.  Not copying from `/etc/skel'.
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for user1
Enter the new value, or press ENTER for the default
        Full Name []: user1
        Room Number []: 1
        Work Phone []: 1
        Home Phone []: 1
        Other []: 1
Is the information correct? [Y/n] y
raffay@hp:~$
```

e)

```
raffay@hp:~$ groupdel user1
groupdel: cannot remove the primary group of user 'user1'
raffay@hp:~$
```

f)

```
raffay@hp:~$ sudo addgroup technology
Adding group `technology' (GID 1007) ...
Done.
raffay@hp:~$ cat /etc/group
root:x:0:
daemon:x:1:
```

g)

```
raffay@hp:~$ sudo adduser hadeed
Adding user `hadeed' ...
Adding new group `hadeed' (1008) ...
Adding new user `hadeed' (1006) with group `hadeed' ...
Creating home directory `/home/hadeed' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for hadeed
Enter the new value, or press ENTER for the default
        Full Name []: hadeed
        Room Number []: 1
        Work Phone []: 1
        Home Phone []: 1
        Other []: 1
Is the information correct? [Y/n] y
raffay@hp:~$ id hadeed
uid=1006(hadeed) gid=1008(hadeed) groups=1008(hadeed)
raffay@hp:~$
```

h)

```
raffay@hp:~$ sudo usermod -aG technology hadeed
raffay@hp:~$ cat /etc/group
root:x:0:
daemon:x:1:
bin:x:2:
sys:x:3:
adm:x:4:syslog,raffay
tty:x:5:
```

i)

```
raffay@hp:~$ sudo delgroup technology
Removing group `technology' ...
Done.
raffay@hp:~$
```

j)

```
raffay@hp:~$ sudo adduser maaz
Adding user `maaz' ...
Adding new group `maaz' (1007) ...
Adding new user `maaz' (1007) with group `maaz' ...
Creating home directory `/home/maaz' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for maaz
Enter the new value, or press ENTER for the default
        Full Name []: maaz
        Room Number []: 1
        Work Phone []: 1
        Home Phone []: 1
        Other []: 1
Is the information correct? [Y/n] y
raffay@hp:~$
```

k)

```
raffay@hp:~$ sudo usermod -g technology maaz
raffay@hp:~$ id maaz
uid=1007(maaz) gid=1009(technology) groups=1009(technology)
raffay@hp:~$
```

l)

```
raffay@hp:~$ sudo delgroup technology
/usr/sbin/delgroup: `maaz' still has `technology' as their primary group!
raffay@hp:~$
```

m)

```
raffay@hp:~$ sudo addgroup cs
Adding group `cs' (GID 1010) ...
Done.
raffay@hp:~$ sudo addgroup mkt
Adding group `mkt' (GID 1011) ...
Done.
raffay@hp:~$ sudo addgroup sales
Adding group `sales' (GID 1012) ...
Done.
raffay@hp:~$
```

n)

```
raffay@hp:~$ sudo adduser xyz
Adding user `xyz' ...
Adding new group `xyz' (1013) ...
Adding new user `xyz' (1008) with group `xyz' ...
Creating home directory `/home/xyz' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for xyz
Enter the new value, or press ENTER for the default
        Full Name []: xyz
        Room Number []: 1
        Work Phone []: 1
        Home Phone []: 1
        Other []: 1
Is the information correct? [Y/n] y
raffay@hp:~$
```

o)

```
raffay@hp:~$ id xyz
uid=1008(xyz) gid=1013(xyz) groups=1013(xyz)
raffay@hp:~$
```

P)

```
raffay@hp:~$ sudo usermod -aG cs xyz
raffay@hp:~$ sudo usermod -aG mkt xyz
raffay@hp:~$
```

q)

```
raffay@hp:~$ sudo usermod -g sales xyz
raffay@hp:~$ id xyz
uid=1008(xyz) gid=1012(sales) groups=1012(sales),1010(cs),1011(mkt)
raffay@hp:~$
```

TASK 05

a)

```
raffay@hp:~$ su root
Password:
root@hp:/home/raffay# adduser tariq
Adding user `tariq' ...
Adding new group `tariq' (1014) ...
Adding new user `tariq' (1009) with group `tariq' ...
Creating home directory `/home/tariq' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for tariq
Enter the new value, or press ENTER for the default
        Full Name []: tariq
        Room Number []: 1
        Work Phone []: 1
        Home Phone []: 1
        Other []: 1
Is the information correct? [Y/n] y
root@hp:/home/raffay# clear
```

```
root@hp:/home/raffay# adduser khan
Adding user `khan' ...
Adding new group `khan' (1015) ...
Adding new user `khan' (1010) with group `khan' ...
Creating home directory `/home/khan' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for khan
Enter the new value, or press ENTER for the default
        Full Name []: khan
        Room Number []: 1
        Work Phone []: 1
        Home Phone []: 1
        Other []: 1
Is the information correct? [Y/n] y
root@hp:/home/raffay#
```

```
root@hp:/home/raffay# adduser jamil
Adding user `jamil' ...
Adding new group `jamil' (1004) ...
Adding new user `jamil' (1004) with group `jamil' ...
The home directory `/home/jamil' already exists.  Not copying from `/etc/skel'.
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for jamil
Enter the new value, or press ENTER for the default
        Full Name []: jamil
        Room Number []: 1
        Work Phone []: 1
        Home Phone []: 1
        Other []: 1
Is the information correct? [Y/n] y
root@hp:/home/raffay#
```

b)

```
khan@hp:/home/raffay$ mkdir ~/dir1
khan@hp:/home/raffay$ touch ~/dir1/file1
khan@hp:/home/raffay$ ls -l ~/dir1/file1
-rw-rw-r-- 1 khan khan 0 مارچ 12 00:29 /home/khan/dir1/file1
khan@hp:/home/raffay$ █
```

c)

```
khan@hp:/home/raffay$ su tariq
Password:
tariq@hp:/home/raffay$ cd /home/khan
tariq@hp:/home/khan$ █
```

d)

```
tariq@hp:/home/khan$ su khan
Password:
khan@hp:~$ mkdir /tmp/dir1
khan@hp:~$ touch/tmp/dir1/file1
bash: touch/tmp/dir1/file1: No such file or directory
khan@hp:~$ touch /tmp/dir1/file1
khan@hp:~$ ls -l /tmp/dir1/file1
-rw-rw-r-- 1 khan khan 0 مارچ 12 00:33 /tmp/dir1/file1
khan@hp:~$
```

e)

```
tariq@hp:/home/khan$ cd /tmp/dir1
tariq@hp:/tmp/dir1$ █
```

f)

```
tariq@hp:/tmp/dir1$ su root
Password:
root@hp:/tmp/dir1# addgroup sales
addgroup: The group `sales' already exists.
root@hp:/tmp/dir1# addgroup mkt
addgroup: The group `mkt' already exists.
root@hp:/tmp/dir1# sudo usermod -g sales tariq
root@hp:/tmp/dir1# sudo usermod -g sales khan
root@hp:/tmp/dir1# sudo usermod -aG mkt khan
root@hp:/tmp/dir1# sudo usermod -g mkt jamil
root@hp:/tmp/dir1# id tariq
uid=1009(tariq) gid=1012(sales) groups=1012(sales)
root@hp:/tmp/dir1# id jamil
uid=1004(jamil) gid=1011(mkt) groups=1011(mkt)
root@hp:/tmp/dir1# id khan
uid=1010(khan) gid=1012(sales) groups=1012(sales),1011(mkt)
root@hp:/tmp/dir1#
```

g)

```
root@hp:/tmp/dir1# su khan
khan@hp:/tmp/dir1$ ls -l /tmp/dir1/file1
-rw-rw-r-- 1 khan khan 0 حرام  12 00:33 /tmp/dir1/file1
khan@hp:/tmp/dir1$ chmod 640 /tmp/dir1/file1
khan@hp:/tmp/dir1$ ls -l /tmp/dir1/file1
-rw-r----- 1 khan khan 0 حرام  12 00:33 /tmp/dir1/file1
khan@hp:/tmp/dir1$
```

h)

```
tariq@hp:/tmp/dir1$ cd /tmp/dir1/file1
bash: cd: /tmp/dir1/file1: Not a directory
tariq@hp:/tmp/dir1$ ls -l /tmp/dir1/file1
-rw-r----- 1 khan khan 0 حرام  12 00:33 /tmp/dir1/file1
tariq@hp:/tmp/dir1$
```

i)

```
root@hp:/tmp/dir1# chown khan /tmp/dir1/file1
root@hp:/tmp/dir1# chgrp sales /tmp/dir1/file1
root@hp:/tmp/dir1# ls -l /tmp/dir1/file1
-rw-r----- 1 khan sales 0 حرام  12 00:33 /tmp/dir1/file1
root@hp:/tmp/dir1#
```

j)

```
root@hp:/tmp/dir1# su tariq
tariq@hp:/tmp/dir1$ gedit /tmp/dir1/file1
No protocol specified
Unable to init server: Could not connect: Connection refused

(gedit:2936): Gtk-WARNING **: 00:58:19.811: cannot open display: :0
tariq@hp:/tmp/dir1$
```

k)

```
jamil@hp:/tmp/dir1$ gedit /tmp/dir1/file1
No protocol specified
Unable to init server: Could not connect: Connection refused

(gedit:2951): Gtk-WARNING **: 01:00:26.637: cannot open display: :0
jamil@hp:/tmp/dir1$
```

l)

```
jamil@hp:/tmp/dir1$ su
Password:
root@hp:/tmp/dir1# usermod -aG sales jamil
root@hp:/tmp/dir1# su jamil
jamil@hp:/tmp/dir1$ cd /tmp/dir1/file1
bash: cd: /tmp/dir1/file1: Not a directory
jamil@hp:/tmp/dir1$ /tmp/dir1/file1
bash: /tmp/dir1/file1: Permission denied
jamil@hp:/tmp/dir1$
```