

Thapar Institute of Engineering and Technology, Patiala
 Computer Science and Engineering
 Information Security Laboratory (UCT602)
Assignment:4

Do the following:

<u>Sr. No.</u>	<u>Query</u>	<u>Remarks</u>
<u>1</u>	Installing <i>adduser</i>	<i>Sudo apt install adduser</i>
<u>2</u>	Create required user accounts only (<i>adduser</i>)	Sudo adduser mater
<u>3</u>	To add a user with a different shell.	sudo useradd --shell /path/to/shell mater
<u>4</u>	To add a new user with a different configuration file.	Can't find anything directly in fedora
<u>5</u>	To add a user with different home directory	sudo useradd --home /path/to/home/directory mater
<u>6</u>	To get the version of the adduser command.	adduser --version
<u>7</u>	To display the help section of the adduser command	Adduser --help
<u>8</u>	Delete user in Linux (<i>deluser</i>)	Sudo deluser mater
<u>9</u>	Forcely Delete User in Linux	Sudo deluser -remove mater
<u>10</u>	Delete User in Linux with Home Directory	Sudo deluser --remove-all-files mater
<u>11</u>	Display (user delete) Help Message and Exit	Deluser -help

<u>1</u> <u>2</u>	Add group a) Add a new group (Try below options) b) -g GID, -gid GID c) -f, -force d) -o, -non-unique e) Sets an encrypted password for the group	(a) sudo groupadd testgroup (b) sudo groupadd -g 1001 testgroup2 (c) sudo groupadd -f testgroup (d) sudo groupadd -o testgroup3 (e) sudo gpasswd testgroup -p 'encrypted_pa ssword'
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Submit to: Dr. Surjit Singh, Assistant Professor, CSED, Thapar Institute of Engineering & Technology Patiala

	Delete group f) Delete a Group g) Forcefully Delete a Group h) Remove Group and Associated Files Exit values: This command exists with the following values. • 0: Success • 2: Invalid Command Syntax. • 6: Specified group doesn't exist. • 8: Can't remove users primary group. • 10: Can't update group file.	sudo groupdel -f testgroup sudo groupdel --remove testgroup
<u>1</u> <u>3</u>	Groups command: a) Display group membership for the current user b) Viewing Group Memberships <i>any</i> other user c) Passing root with groups command	(a) groups (b) Groups cars (c) Groups racer

<u>1</u> <u>4</u>	<p>Modify user: Change the properties of user (<i>usermod</i>)</p> <ul style="list-style-type: none"> <i>a) add a comment for a user</i> <i>b) change the home directory of a user</i> <i>c) change the expiry date of a user</i> <i>d) change the group of a user</i> <i>e) change user login name</i> <i>f) lock a user</i> <i>g) unlock a user</i> <i>h) set an unencrypted password for the user</i> <i>i) create a shell for the user</i> <i>j) change the user id of a user</i> 	<ul style="list-style-type: none"> <i>(a) sudo usermod -c "comment" cars</i> <i>(b) sudo usermod -d /home cars</i> <i>(c) sudo usermod -e YYYY-MM-DD mater</i> <i>(d) sudo usermod -g racer</i> <i>(e) sudo usermod -l doc</i> <i>(f) sudo usermod -L guido</i> <i>(g) sudo usermod -U guido</i> <i>(h) sudo passwd guido</i> <i>(i) sudo usermod -shell /path guido</i> <i>(j) sudo usermod -u 4555 guido</i>
<u>1</u> <u>5</u>	<p>Create user account and change password</p>	<p>sudo useradd doc sudo passwd doc</p>
<u>1</u> <u>6</u>	<p>Change password parameters: (reset to default after completion)</p> <ul style="list-style-type: none"> ○ Minimum number of days required between password change =5 ○ Maximum number of days the password is valid= 90 ○ The number of days before the password is to expire= 10 ○ The number of days after password expire that account is disabled =3 	<p>sudo useradd newuser</p> <p>sudo passwd newuser</p> <p>sudo chage -m 5 -M 90 -W 10 -I 3 newuser</p> <p>Sudo chage -l newuser</p>

<u>1</u> <u>7</u>	<p>Password aging: (may reset to default after completion)</p> <p>a) View the password aging</p> <p>b) How many days the password is active before it expires. c) How many days a password must be active before it can be changed by a user.</p> <p>d) The number of days a warning is issued to the user before an impending password expiry.</p> <p>e) Set configuration: Update max, min and warning days</p> <p>f) Update password expiry</p>	<p>(a) chage -l doc</p> <p>(b) chage -l doc grep "Password expires"</p> <p>(c) chage -l doc grep "Minimum number of days"</p> <p>(d) chage -l newuser grep "Minimum number of days"</p> <p>(e) sudo chage -m 5 -M 90 -W 10 -I 3 newuser</p> <p>(f) sudo chage -d 0 newuser</p>
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6. To get the version of the adduser command

```
isi@isi:~$ adduser --version
adduser version 3.116ubuntu1

Adds a user or group to the system.

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Copyright (C) 1995 Ian Murdock <imurdock@gnu.ai.mit.edu>,
                        Ted Hajek <tedhajek@boombox.micro.umn.edu>

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WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
General Public License, /usr/share/common-licenses/GPL, for more details.
isi@isi:~$
```

7. To display the help section of the adduser command

```

General Public License, /usr/share/common-licenses/GPL, for more details.
isi@isi:~$ adduser --help
adduser [--home DIR] [--shell SHELL] [--no-create-home] [--uid ID]
[--firstuid ID] [--lastuid ID] [--gecos GECOS] [--ingroup GROUP | --gid ID]
[--disabled-password] [--disabled-login] [--add_extra_groups]
[--encrypt-home] USER
    Add a normal user

adduser --system [--home DIR] [--shell SHELL] [--no-create-home] [--uid ID]
[--gecos GECOS] [--group | --ingroup GROUP | --gid ID] [--disabled-password]
[--disabled-login] [--add_extra_groups] USER
    Add a system user

adduser --group [--gid ID] GROUP
addgroup [--gid ID] GROUP
    Add a user group

addgroup --system [--gid ID] GROUP
    Add a system group

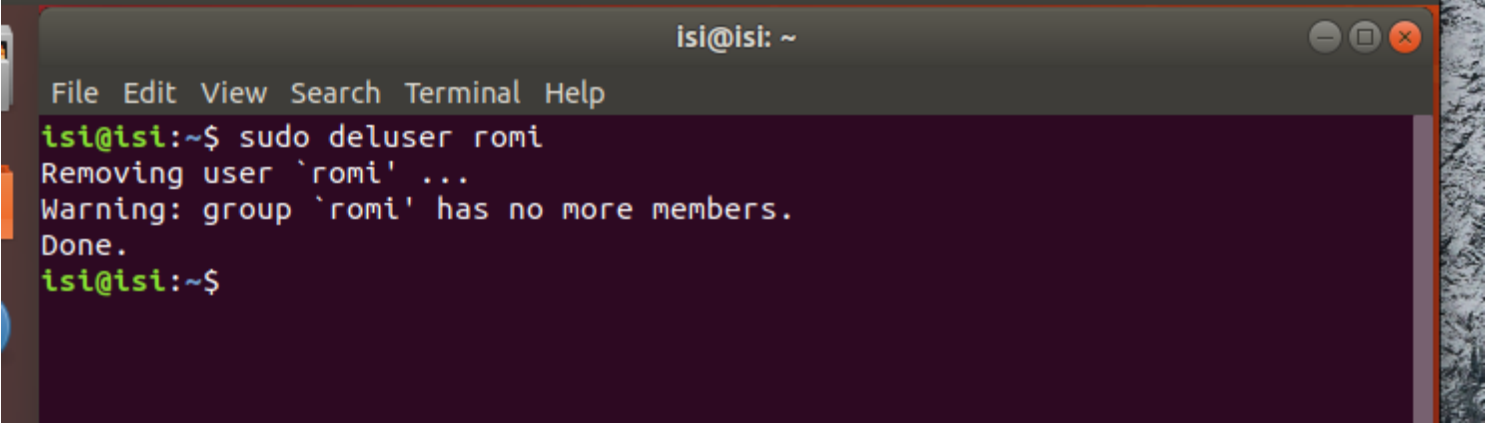
adduser USER GROUP
    Add an existing user to an existing group

general options:
  --quiet | -q          don't give process information to stdout
  --force-badname       allow usernames which do not match the
                        NAME_REGEX[_SYSTEM] configuration variable
  --extrausers          uses extra users as the database
  --help | -h           usage message
  --version | -v        version number and copyright
  --conf | -c FILE     use FILE as configuration file

isi@isi:~$

```

8. Delete user in Linux (*deluser*)



```

isi@isi: ~
File Edit View Search Terminal Help
isi@isi:~$ sudo deluser romi
Removing user `romi' ...
Warning: group `romi' has no more members.
Done.
isi@isi:~$

```

9. Forcely Delete User in Linux

```
isi@isi:~$ userdel --help
Usage: userdel [options] LOGIN

Options:
  -f, --force           force removal of files,
                        even if not owned by user
  -h, --help           display this help message and exit
  -r, --remove         remove home directory and mail spool
  -R, --root CHROOT_DIR
                        directory to chroot into
                        --extrausers    Use the extra users database
  -Z, --selinux-user   remove any SELinux user mapping for the user

isi@isi:~$ sudo userdel --force romi
isi@isi:~$
```

11. Display (user delete) Help Message and Exit

```
isi@isi:~$ userdel --help
Usage: userdel [options] LOGIN

Options:
  -f, --force           force removal of files,
                        even if not owned by user
  -h, --help           display this help message and exit
  -r, --remove         remove home directory and mail spool
  -R, --root CHROOT_DIR
                        directory to chroot into
                        --extrausers    Use the extra users database
  -Z, --selinux-user   remove any SELinux user mapping for the user

isi@isi:~$ sudo userdel --force romi
isi@isi:~$
```

12. Add group

- Add a new group (Try below options)
- g GID, -gid GID
- f, -force
- o, -non-unique
- Sets an encrypted password for the group

```
isi@isi:~$ sudo groupadd alkaeda
isi@isi:~$ sudo groupadd -g 1001 alkaeda2
groupadd: GID '1001' already exists
isi@isi:~$ sudo groupadd -g 1002 alkaeda2
groupadd: GID '1002' already exists
isi@isi:~$ sudo groupadd -f alkaeda
[sudo] password for isi:
isi@isi:~$ sudo groupadd -o alkaeda3
Usage: groupadd [options] GROUP

Options:
  -f, --force                exit successfully if the group already exist
s,
                             and cancel -g if the GID is already used
  -g, --gid GID              use GID for the new group
  -h, --help                 display this help message and exit
  -K, --key KEY=VALUE        override /etc/login.defs defaults
  -o, --non-unique            allow to create groups with duplicate
                             (non-unique) GID
  -p, --password PASSWORD    use this encrypted password for the new grou
p
  -r, --system               create a system account
  -R, --root CHROOT_DIR      directory to chroot into
      --extrausers            Use the extra users database

isi@isi:~$ sudo gpasswd alkaeda -p 'encrypted_password'
gpasswd: invalid option -- 'p'
Usage: gpasswd [option] GROUP

Options:
  -a, --add USER             add USER to GROUP
  -d, --delete USER          remove USER from GROUP
  -h, --help                 display this help message and exit
  -Q, --root CHROOT_DIR      directory to chroot into
  -r, --remove-password       remove the GROUP's password
  -R, --restrict              restrict access to GROUP to its members
  -M, --members USER,...     set the list of members of GROUP
                             set the list of administrators for GROUP

Except for the -A and -M options, the options cannot be combined.
isi@isi:~$ sudo delgroup alkaeda
Removing group `alkaeda' ...
Done.
```

13. Groups command:

- Display group membership for the current user
- Viewing Group Memberships any other user
- Passing root with groups command


```
isi@isi:~$ groups
isi adm cdrom sudo dip plugdev lpadmin sambashare
isi@isi:~$ groups isi
isi : isi adm cdrom sudo dip plugdev lpadmin sambashare
isi@isi:~$ sudo groups
root
isi@isi:~$
```

16. Change password parameters: (reset to default after completion)

- o Minimum number of days required between password change = 5
- o Maximum number of days the password is valid = 90
- o The number of days before the password is to expire = 10
- o The number of days after password expire that account is disabled = 3

```
File Edit View Search Terminal Help
isi@isi:~$ sudo useradd hexa
isi@isi:~$ sudo passwd hexa
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
isi@isi:~$ sudo chage -m 5 -M 90 -W 10 -I 3 hexa
isi@isi:~$ sudo chage -l hexa
Last password change           : Feb 18, 2024
Password expires                : May 18, 2024
Password inactive              : May 21, 2024
Account expires                 : never
Minimum number of days between password change : 5
Maximum number of days between password change : 90
Number of days of warning before password expires : 10
isi@isi:~$
```

17. Password aging: (may reset to default after completion)

- a) View the password aging
- b) How many days the password is active before it expires.
- c) How many days a password must be active before it can be changed by a user.
- d) The number of days a warning is issued to the user before an impending password expiry.
- e) Set configuration: Update max, min and warning days
- f) Update password expiry

File Edit View Search Terminal Help

isi@isi:~\$ sudo useradd hexa

isi@isi:~\$ sudo passwd hexa

Enter new UNIX password:

Retype new UNIX password:

passwd: password updated successfully

isi@isi:~\$ sudo chage -m 5 -M 90 -W 10 -I 3 hexa

isi@isi:~\$ sudo chage -l hexa

Last password change : Feb 18, 2024

Password expires : May 18, 2024

Password inactive : May 21, 2024

Account expires : never

Minimum number of days between password change : 5

Maximum number of days between password change : 90

Number of days of warning before password expires : 10

isi@isi:~\$