Practice Lab-1
Ubuntu User Configuration commands

Step-1: Create a new user using the command:

- sudo adduser temp-user-1

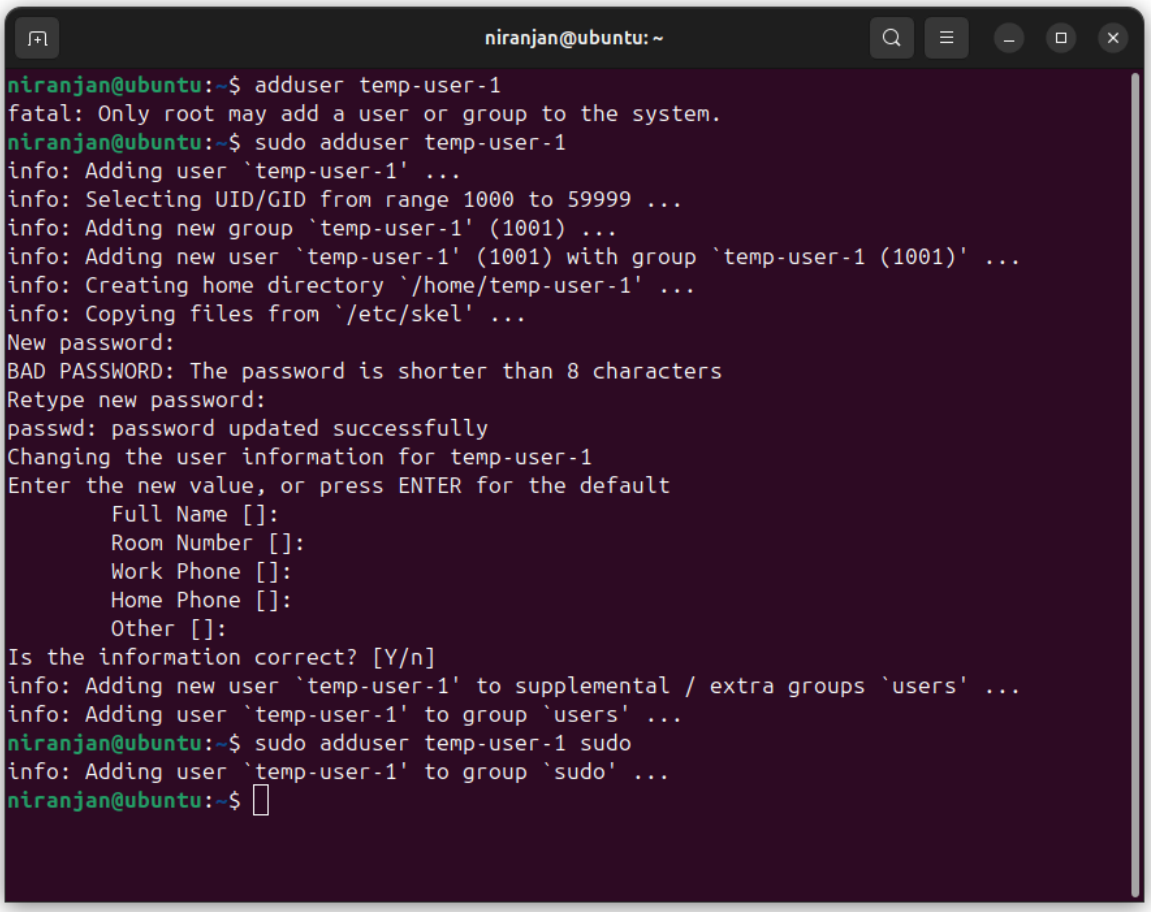
Step-2: Add the user to the Sudo group by using either of the commands:

- sudo adduser temp-user-1 sudo
- sudo usermod -aG sudo temp-user-1

Step-3: Create another user with sudo privileges using any of the below commands.

- sudo adduser temp-user-2

- sudo adduser temp-user-2 sudo



- sudo usermod -aG sudo temp-user-2

Step-4: Verify whether the users got the sudo privileges.

- sudo -l -U temp-user-1

Step-5: Switch between users and modify the privileges of temp-user-2 with temp-user-1

- su - temp-user-1
  Enter password..
- sudo deluser temp-user-2 sudo

Now, again check the privileges of temp-user-2

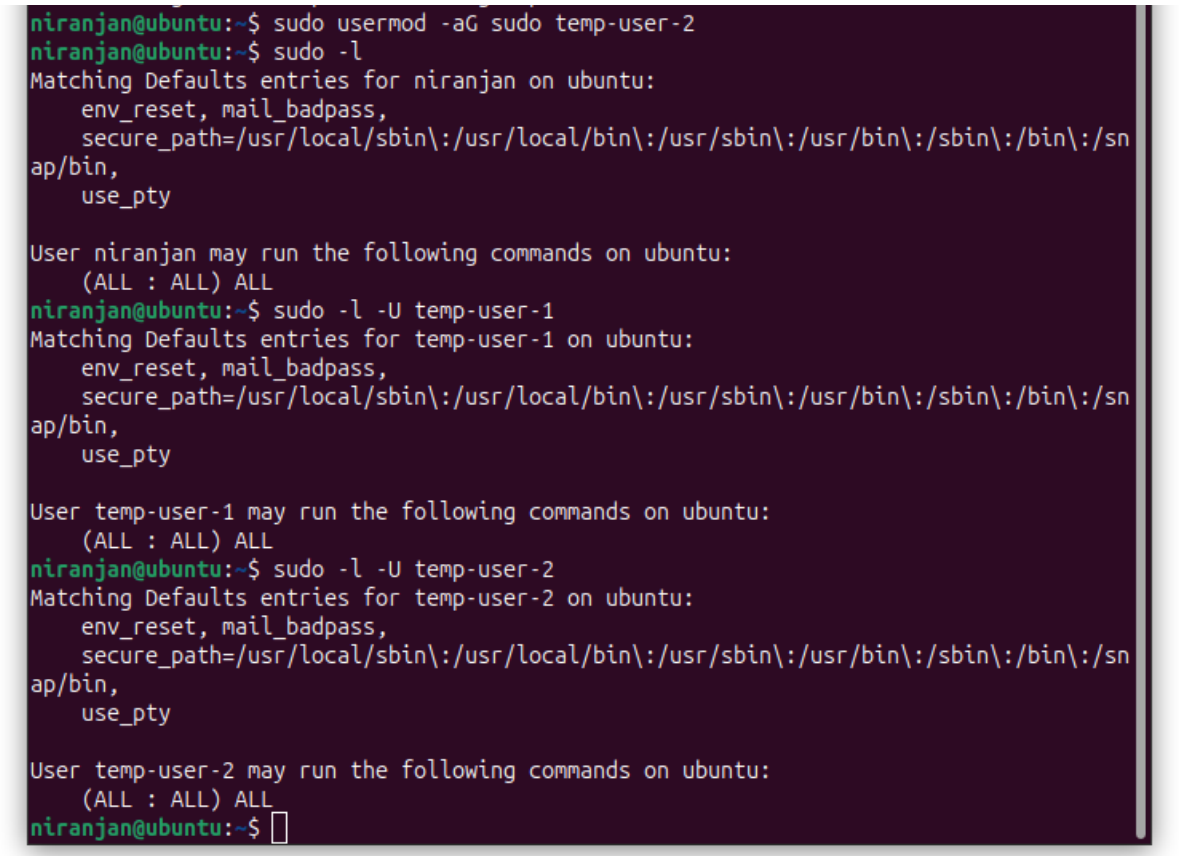
- sudo -l -U temp-user-2
  Output: User temp-user-2 is not allowed to run sudo on ubuntu.

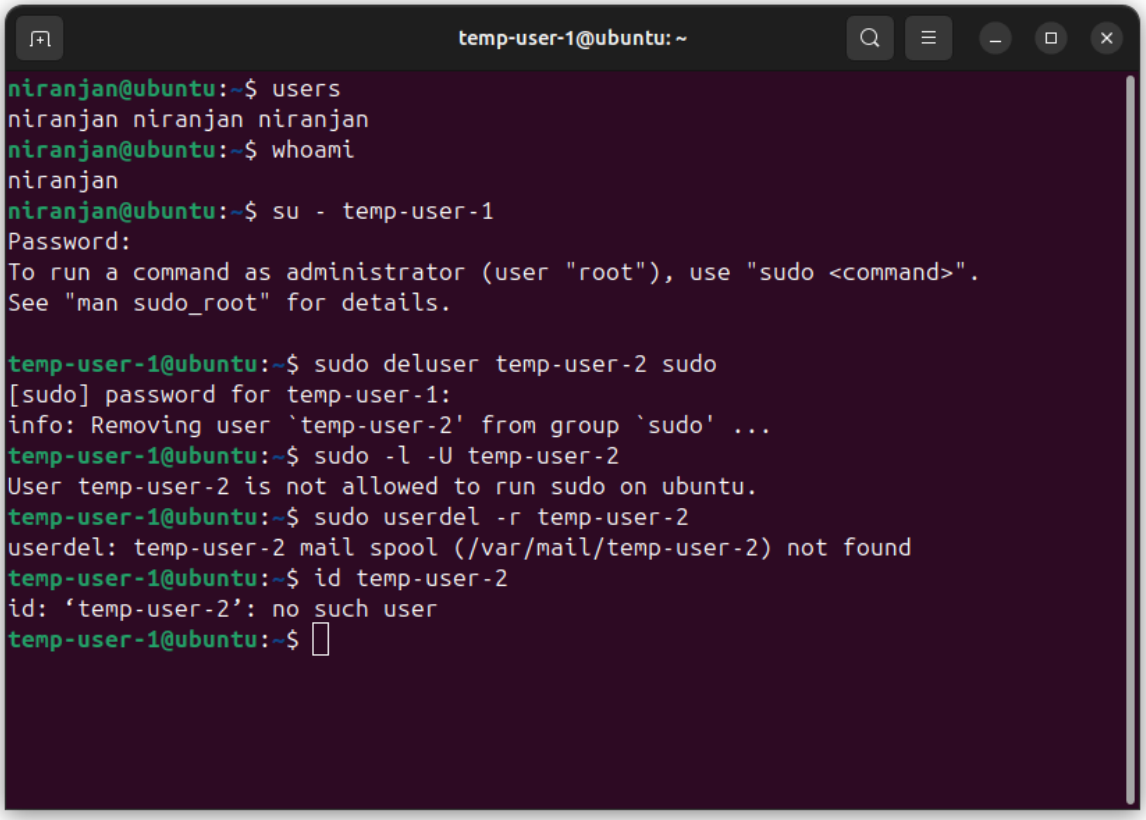
Now, delete the temp-user-2

- sudo userdel -r temp-user-2

Check whether the user still exists:

- id temp-user-2




temp-user-1@ubuntu: ~
niranjan@ubuntu:~$ users
niranjan niranjan niranjan
niranjan@ubuntu:~$ whoami
niranjan
niranjan@ubuntu:~$ su - temp-user-1
Password:
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
temp-user-1@ubuntu:~$ sudo deluser temp-user-2 sudo
[sudo] password for temp-user-1:
info: Removing user `temp-user-2' from group `sudo' ...
temp-user-1@ubuntu:~$ sudo -l -U temp-user-2
User temp-user-2 is not allowed to run sudo on ubuntu.
temp-user-1@ubuntu:~$ sudo userdel -r temp-user-2
userdel: temp-user-2 mail spool (/var/mail/temp-user-2) not found
temp-user-1@ubuntu:~$ id temp-user-2
id: ‘temp-user-2’: no such user
temp-user-1@ubuntu:~$

Docker Installation

Step-1: Update and upgrade all the packages on the machine

- sudo apt update && upgrade

Step-2: Setup docker's apt repository:

```
# Add Docker's official GPG key:
sudo apt-get update
sudo apt-get install ca-certificates curl
sudo install -m 0755 -d /etc/apt/keyrings
sudo curl -fsSL https://download.docker.com/linux/ubuntu/gpg -o /etc/apt/keyrings/docker.asc
sudo chmod a+r /etc/apt/keyrings/docker.asc

# Add the repository to Apt sources:

echo \
 "deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.asc]
https://download.docker.com/linux/ubuntu \
 $(. /etc/os-release && echo "${UBUNTU_CODENAME:-$VERSION_CODENAME}") stable"
| \
 sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
sudo apt-get update
```

Step-3: Install the latest version of Docker using the below command:

- sudo apt-get install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin

The Docker service starts automatically after installation. To verify that Docker is running, use:

- sudo systemctl status docker

Some systems may have this behavior disabled and will require a manual start:

- sudo systemctl start docker

Verify that the installation is successful by running the hello-world image:

- sudo docker run hello-world

```
niranjan@ubuntu:~$ sudo systemctl start docker
niranjan@ubuntu:~$ sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
17eec7bbc9d7: Pull complete
Digest: sha256:6dc565aa630927052111f823c303948cf83670a3903ffa3849f1488ab517f891
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
 $ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
 https://hub.docker.com/

For more examples and ideas, visit:
 https://docs.docker.com/get-started/

niranjan@ubuntu:~$
```