Practice Lab-1
Ubuntu User Configuration commands

Step-1: Create a new user using the command:
- sudo adduser chandu

Step-2: Add the user to the Sudo group by using either of the commands:
- sudo adduser chandu sudo
- sudo usermod -aG sudo chandu

Step-3: Create another user with sudo privileges using any of the below commands.
- sudo adduser chandu-2
- sudo adduser chandu-2 sudo

```
chandanr@ubuntu:~$ ^C
chandanr@ubuntu:~$ sudo adduser chandu
info: Adding user `chandu' ...
info: Selecting UID/GID from range 1000 to 59999 ...
info: Adding new group `chandu' (1001) ...
info: Adding new user `chandu' (1001) with group `chandu (1001)' ...
info: Creating home directory `/home/chandu' ...
info: Copying files from `/etc/skel' ...
New password:
BAD PASSWORD: The password contains the user name in some form
Retype new password:
Sorry, passwords do not match.
New password:
BAD PASSWORD: The password contains the user name in some form
Retype new password:
Sorry, passwords do not match.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
Sorry, passwords do not match.
passwd: Have exhausted maximum number of retries for service
passwd: password unchanged
Try again? [y/N] y
New password:
BAD PASSWORD: The password contains the user name in some form
Retype new password:
Sorry, passwords do not match.
New password:
BAD PASSWORD: The password contains the user name in some form
Retype new password:
passwd: password updated successfully
Changing the user information for chandu
Enter the new value, or press ENTER for the default
        Full Name []:
        Room Number []:
        Work Phone []:
        Home Phone []:
        Other []:
Is the information correct? [Y/n] y
info: Adding new user `chandu' to supplemental / extra groups `users' ...
info: Adding user `chandu' to group `users' ...
chandanr@ubuntu:~$
```

Step-4: Verify whether the users got the sudo privileges.
● sudo -l -U chandu

Step-5: Switch between users and modify the privileges of temp-user-2 with temp-user-1
● su - temp chandu
Enter password..

● sudo deluser chandu-2 sudo
Now, again check the privileges of temp-user-2

● sudo -l -U chandu-2
Output: User chandu-2 is not allowed to run sudo on ubuntu.
Now, delete the chandu-2

● sudo userdel -r chandu-2
Check whether the user still exists:
● id chandu-2

```
Is the information correct? [Y/n]
info: Adding new user `chandu-2' to supplemental / extra groups `users' ...
info: Adding user `chandu-2' to group `users' ...
chandanr@ubuntu:~$ sudo adduser chandu-2 sudo
info: Adding user `chandu-2' to group `sudo' ...
chandanr@ubuntu:~$ sudo -l -U chandu-2
Matching Defaults entries for chandu-2 on ubuntu:
    env_reset, mail_badpass,
    secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bi
n,
    use_pty

User chandu-2 may run the following commands on ubuntu:
    (ALL : ALL) ALL
chandanr@ubuntu:~$ sudo -l -U chandu
Matching Defaults entries for chandu on ubuntu:
    env_reset, mail_badpass,
    secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bi
n,
    use_pty

User chandu may run the following commands on ubuntu:
    (ALL : ALL) ALL
chandanr@ubuntu:~$ su chandu
Password:
su: Authentication failure
chandanr@ubuntu:~$ su chandu
Password:
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

chandu@ubuntu:/home/chandanr$ cd ..
chandu@ubuntu:/home$ cd ..
chandu@ubuntu:/$ sudo deluser chandu-2 sudo
[sudo] password for chandu:
info: Removing user `chandu-2' from group `sudo' ...
chandu@ubuntu:/$ sudo -l -U chandu-2
User chandu-2 is not allowed to run sudo on ubuntu.
chandu@ubuntu:/$ sudo userdel chandu-2
chandu@ubuntu:/$ id chandu-2
id: ‘chandu-2’: no such user
chandu@ubuntu:/$
```

```
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/

chandu@ubuntu:~$ sudo docker run hello-world

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```

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