Task1:Login as root create User and Provide sudo privilege

1.Create a new user for this assignment, Set password for the new user A.

```
[root@localhost ~]# groupadd pranay1
[root@localhost ~]# sudo useradd -c"my main area" -m -d/home/pranay -g pranay1 -s/bin/bash pranay
[root@localhost ~]# id pranay
uid=1002(pranay) gid=1006(pranay1) groups=1006(pranay1)
[root@localhost ~]# sudo passwd pranay
Changing password for user pranay.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
```

2.Provide sudo privilege for the user(You need to find the command)

A: Adding to sudo, root or wheel group gives user sudo privileges. So i have added a user into wheel group.

```
[root@localhost ~]# usermod -G wheel pranay
[root@localhost ~]# id pranay
uid=1002(pranay) gid=1006(pranay1) groups=1006(pranay1),10(wheel)
[root@localhost ~]#
```

3. Now logout of root user and login as new user A:

```
[root@localhost ~]# exit
logout
Connection to 192.168.56.101 closed.

C:\Users\model>ssh pranay@192.168.56.101
pranay@192.168.56.101's password:
Last login: Sun May 21 10:52:46 2023 from 192.168.56.1
[pranay@localhost ~]$ |
```

Task2: Managing users

1.Create users "webuser", "appuser", "dbuser"

```
[pranay@localhost ~]$ sudo useradd -c"new 1" -m -d /home/webuser -g pranay1 -s/bin/bash webuser

We trust you have received the usual lecture from the local System
Administrator. It usually boils down to these three things:

#1) Respect the privacy of others.

#2) Think before you type.

#3) With great power comes great responsibility.

[sudo] password for pranay:
[pranay@localhost ~]$ sudo useradd -c"new 1" -m -d /home/webuser -g pranay1 -s/bin/bash webuser
useradd: user 'webuser' already exists
[pranay@localhost ~]$ cd /home
[pranay@localhost home]$ ls

appdev1 pn pny pranay vagrant webuser
[pranay@localhost home]$ sudo useradd -c"new 2" -m -d /home/appuser -g pranay1 -s/bin/bash appuser
[pranay@localhost home]$ sudo useradd -c"new 3" -m -d /home/dbuser -g pranay1 -s/bin/bash dbuser
[pranay@localhost home]$ ls

appdev1 appuser dbuser pn pny pranay vagrant webuser
[pranay@localhost home]$
```

Users password creation

```
[pranay@localhost home]$ sudo passwd webuser
Changing password for user webuser.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[pranay@localhost home]$ sudo passwd appuser
Changing password for user appuser.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[pranay@localhost home]$ sudo passwd dbuser
Changing password for user dbuser.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[pranay@localhost home]$
```

2.Create groups "web", "app", "db"

```
[pranay@localhost ~]$ sudo groupadd web
[sudo] password for pranay:
[pranay@localhost ~]$ sudo groupadd web
groupadd: group 'web' already exists
[pranay@localhost ~]$ sudo groupadd app
[pranay@localhost ~]$ sudo groupadd db
[pranay@localhost ~]$
```

3.Add "webuser" to "web", "appuser" to "app", "dbuser" to "db" groups A:

```
[pranay@localhost ~]$ sudo usermod -G web webuser
[pranay@localhost ~]$ sudo usermod -G app appuser
[pranay@localhost ~]$ sudo usermod -G db dbuser
[pranay@localhost ~]$ id webuser
uid=1003(webuser) gid=1006(pranay1) groups=1006(pranay1),1011(web)
[pranay@localhost ~]$ id appuser
uid=1004(appuser) gid=1006(pranay1) groups=1006(pranay1),1012(app)
[pranay@localhost ~]$ id dbuser
uid=1005(dbuser) gid=1006(pranay1) groups=1006(pranay1),1013(db)
```

4.Set "sh" as the default shell for "webuser", "appuser", "dbuser"

A:

```
[pranay@localhost ~]$ sudo chsh -s /bin/sh webuser
[sudo] password for pranay:
Changing shell for webuser.
Shell changed.
[pranay@localhost ~]$ sudo chsh -s /bin/sh appuser
Changing shell for appuser.
Shell changed.
[pranay@localhost ~]$ sudo chsh -s /bin/sh dbuser
Changing shell for dbuser.
Shell changed.
[pranay@localhost ~]$
```

5.Set /tmp as default home directory for all the users A:

```
[pranay@localhost ~]$ sudo usermod -d /tmp webuser
[sudo] password for pranay:
[pranay@localhost ~]$ sudo usermod -d /tmp appuser
[pranay@localhost ~]$ sudo usermod -d /tmp dbuser
```

```
[pranay@localhost home]$ echo webuser
webuser
[pranay@localhost home]$ echo ~webuser
/tmp
[pranay@localhost home]$ echo ~appuser
/tmp
[pranay@localhost home]$ echo ~dbuser
/tmp
[pranay@localhost home]$
```

Task3:Providing permissions

1.Create Directory structure for the as /web/bin

A:

```
[pranay@localhost home]$ sudo mkdir -p /web/bin
[pranay@localhost home]$
```

2. Change the owner ship of the web directory to web user and change the group to webgroup

Α:

```
[pranay@localhost ~]$ sudo chown webuser:web /web
[pranay@localhost ~]$
```

3.Provide "rwx" permissions for webuser to, "rw" permissions to web group and "r" permission for others to /webdirectory

A:

```
[pranay@localhost web]$ sudo chmod 764 /web
[sudo] password for pranay:
```

```
[pranay@localhost home]$ ls -ld /web
drwxrw-r--. 3 webuser web 17 May 21 08:47 /web
```