

# Assignment – User Management

1) Create user "nikhil" with home directory set as "/home/nikhil"

a) nikhil user should have "/bin/sh" shell for his environment

b) His password should expire in 9 days and 2 days before password expiry, he should get warning. User account must expire in 1 month from creation date

Sol) a) `sudo useradd -m -s /bin/sh nikhil`

b) `sudo chage -M 9 -W 2 -E 2024-12-17 nikhil`

```
ubuntu@ip-172-31-12-145:~$ sudo useradd -m -s /bin/sh nikhil
ubuntu@ip-172-31-12-145:~$ sudo cat /etc/passwd | grep nikhil
nikhil:x:1017:1027::/home/nikhil:/bin/sh
ubuntu@ip-172-31-12-145:~$ sudo chage -M 9 -W 2 -E 2024-12-17 nikhil
ubuntu@ip-172-31-12-145:~$ sudo chage -l nikhil
Last password change                : Nov 17, 2024
Password expires                    : Nov 26, 2024
Password inactive                   : never
Account expires                     : Dec 17, 2024
Minimum number of days between password change : 0
Maximum number of days between password change : 9
Number of days of warning before password expires : 2
ubuntu@ip-172-31-12-145:~$
```

c) Give him root privileges to start/stop cron daemon.

Sudo visudo

Inside **sudoers** file, which is a configuration file,

=> `ALL=(ALL) NOPASSWD: /bin/systemctl start cron, /bin/systemctl stop cron`

ALL = The user can execute the command from any host.

NOPASSWD = user wont require password

(ALL)= The user can execute the command as any user , root

We can verify this by `sudo -l -U nikhil`

```
ubuntu@ip-172-31-12-145:~$ sudo visudo
ubuntu@ip-172-31-12-145:~$ sudo -l -U nikhil
Matching Defaults entries for nikhil on ip-172-31-12-145:
  env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin, use_pty

User nikhil may run the following commands on ip-172-31-12-145:
  (ALL) NOPASSWD: /bin/systemctl start cron, /bin/systemctl stop cron
ubuntu@ip-172-31-12-145:~$
```

2) Inside folder "/", create new home directory as "nikhil" (/nikhil) and setup this folder as a home directory for user "nikhil"

`sudo mkdir /nikhil`

`sudo usermod -d /nikhil -m nikhil`

-d mentions target directory -m moving the files from the past directory to new target directory

```
ubuntu@ip-172-31-12-145:~$ sudo mkdir /nikhil
ubuntu@ip-172-31-12-145:~$ sudo usermod -m -d /nikhil nikhil
usermod: directory /nikhil exists
ubuntu@ip-172-31-12-145:~$ sudo usermod -d /nikhil nikhil
usermod: no changes
ubuntu@ip-172-31-12-145:~$ sudo usermod -d /nikhil -m nikhil
```

`sudo cat /etc/passwd | grep nikhil`

```
ubuntu@ip-172-31-12-145:~$ sudo cat /etc/passwd | grep nikhil
nikhil:x:1017:1027::/nikhil:/bin/sh
ubuntu@ip-172-31-12-145:~$
```

