

Paste the command that you require to achieve steps mentioned below and paste the screenshot whenever needed.

(You can save a copy of this file and modify it directly!)

- 1) Make a directory on desktop named "Demo"

```
[x]~[dev@parrot]~[~]
$ls
Desktop Documents Downloads Music Pictures Public Templates Videos
[dev@parrot]~[~]
$cd Desktop/
[dev@parrot]~[~/Desktop]
$mkdir Demo
[dev@parrot]~[~/Desktop]
$ls
Demo README.license vs_code
```

- 2) Make 10 files demo1,demo2,demo3,...,demo10 inside Demo directory.

```
[dev@parrot]~[~/Desktop/Demo]
$touch demo{1..10}.txt
[dev@parrot]~[~/Desktop/Demo]
$ls
demo10.txt demo2.txt demo4.txt demo6.txt demo8.txt
demo1.txt demo3.txt demo5.txt demo7.txt demo9.txt
```

- 3) Add new user named "testuser"

```
[dev@parrot]~[~]
$sudo adduser testuser
[sudo] password for dev:
Sorry, try again.
[sudo] password for dev:
Adding user `testuser' ...
Adding new group `testuser' (1005) ...
Adding new user `testuser' (1002) with group `testuser' ...
Creating home directory `/home/testuser' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
Sorry, passwords do not match.
passwd: Authentication token manipulation error
passwd: password unchanged
Try again? [y/N] Y
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for testuser
Enter the new value, or press ENTER for the default
  Full Name []: testuser
    Room Number []: pass1234
      Work Phone []:
      Home Phone []:
        Other []:
Is the information correct? [Y/n] Y
```

- 4) Verify that user has been added or not? Mention the steps that you have followed to verify!

```
[x]--[dev@parrot]--[~]
$cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
iodine:x:129:65534::/run/iodine:/usr/sbin/nologin
miredo:x:130:65534::/var/run/miredo:/usr/sbin/nologin
redis:x:131:137::/var/lib/redis:/usr/sbin/nologin
inetsim:x:132:138::/var/lib/inetsim:/usr/sbin/nologin
gvm:x:133:140::/var/lib/openvas:/usr/sbin/nologin
beef-xss:x:134:141::/var/lib/beef-xss:/usr/sbin/nologin
dev:x:1000:1003:dev:/home/dev:/bin/bash
u1:x:1001:1004:u1,,90908998,888,88:/home/u1:/bin/bash
testuser:x:1002:1005:testuser,pass1234,,:/home/testuser:/bin/bash
```

- 5) Login as testuser

```
[dev@parrot]--[~]
$su testuser
Password:
[testuser@parrot]--[~/home/dev]
$cd Demo
```

- 6)

Create new file named "testuserfile" inside Demo directory.

```
[dev@parrot]--[~/Desktop]
$sudo chmod o+w Demo
[dev@parrot]--[~/Desktop]
$ls -l
total 2504
drwxr-xrwx 1 dev dev 182 Jun 14 00:08 Demo
-rwxr-xr-x 1 dev dev 12084 Feb 15 2020 mate-screenshot.desktop
-rwxr-xr-x 1 dev dev 2068 May 2 2022 README.license
-rw-r--r-- 1 dev dev 583829 Jun 14 00:10 'Screenshot at 2024-06-14 00-10-51.png'
-rw-r--r-- 1 dev dev 581004 Jun 14 00:17 'Screenshot at 2024-06-14 00-17-51.png'
-rw-r--r-- 1 dev dev 701643 Jun 14 00:18 'Screenshot at 2024-06-14 00-18-08.png'
-rw-r--r-- 1 dev dev 644007 Jun 14 00:18 'Screenshot at 2024-06-14 00-18-15.png'
-rw-r--r-- 1 dev dev 24691 Jun 14 01:45 'Screenshot at 2024-06-14 01-45-28.png'
drwxr-xr-x 1 dev dev 14 Jun 6 18:18 vs_code
```

```
[x]--[dev@parrot]--[~/Desktop]
$su testuser
Password:
[testuser@parrot]--[~/home/dev/Desktop]
$ls -l
total 2504
drwxr-xrwx 1 dev dev 182 Jun 14 00:08 Demo
-rwxr-xr-x 1 dev dev 12084 Feb 15 2020 mate-screenshot.desktop
-rwxr-xr-x 1 dev dev 2068 May 2 2022 README.license
-rw-r--r-- 1 dev dev 583829 Jun 14 00:10 'Screenshot at 2024-06-14 00-10-51.png'
-rw-r--r-- 1 dev dev 581004 Jun 14 00:17 'Screenshot at 2024-06-14 00-17-51.png'
-rw-r--r-- 1 dev dev 701643 Jun 14 00:18 'Screenshot at 2024-06-14 00-18-08.png'
-rw-r--r-- 1 dev dev 644007 Jun 14 00:18 'Screenshot at 2024-06-14 00-18-15.png'
-rw-r--r-- 1 dev dev 24691 Jun 14 01:45 'Screenshot at 2024-06-14 01-45-28.png'
drwxr-xr-x 1 dev dev 14 Jun 6 18:18 vs_code
[testuser@parrot]--[~/home/dev/Desktop]
$cd Demo/
[testuser@parrot]--[~/home/dev/Desktop/Demo]
$touch testuserfile
[testuser@parrot]--[~/home/dev/Desktop/Demo]
$ls -l
total 0
-rw-r--r-- 1 dev dev 0 Jun 14 00:08 demo10.txt
-rw-r--r-- 1 dev dev 0 Jun 14 00:08 demo1.txt
-rw-r--r-- 1 dev dev 0 Jun 14 00:08 demo2.txt
-rw-r--r-- 1 dev dev 0 Jun 14 00:08 demo3.txt
-rw-r--r-- 1 dev dev 0 Jun 14 00:08 demo4.txt
-rw-r--r-- 1 dev dev 0 Jun 14 00:08 demo5.txt
-rw-r--r-- 1 dev dev 0 Jun 14 00:08 demo6.txt
-rw-r--r-- 1 dev dev 0 Jun 14 00:08 demo7.txt
-rw-r--r-- 1 dev dev 0 Jun 14 00:08 demo8.txt
-rw-r--r-- 1 dev dev 0 Jun 14 00:08 demo9.txt
-rw-r--r-- 1 testuser testuser 0 Jun 14 02:02 testuserfile
```

- 7) Exit from testuser

```
[testuser@parrot]-[/home/dev/Desktop/Demo]
└─$ exit
exit
[dev@parrot]-[~/Desktop]
└─$
```

- 8) Change ownership of first 5 files (demo1, demo2, ... demo5) to testuser

```
[dev@parrot]-[~/Desktop/Demo]
└─$ sudo chown testuser demo[1.2..3.4.5].txt
[dev@parrot]-[~/Desktop/Demo]
└─$ ls -l
total 0
-rw-r--r-- 1 dev      dev      0 Jun 14 00:08 demo10.txt
-rw-r--r-- 1 testuser dev      0 Jun 14 00:08 demo1.txt
-rw-r--r-- 1 testuser dev      0 Jun 14 00:08 demo2.txt
-rw-r--r-- 1 testuser dev      0 Jun 14 00:08 demo3.txt
-rw-r--r-- 1 testuser dev      0 Jun 14 00:08 demo4.txt
-rw-r--r-- 1 testuser dev      0 Jun 14 00:08 demo5.txt
-rw-r--r-- 1 dev      dev      0 Jun 14 00:08 demo6.txt
-rw-r--r-- 1 dev      dev      0 Jun 14 00:08 demo7.txt
-rw-r--r-- 1 dev      dev      0 Jun 14 00:08 demo8.txt
-rw-r--r-- 1 dev      dev      0 Jun 14 00:08 demo9.txt
-rw-r--r-- 1 testuser testuser 0 Jun 14 02:02 testuserfile
[dev@parrot]-[~/Desktop/Demo]
└─$
```

- 9) Create group named "HR"

```
[dev@parrot]-[~/Desktop/Demo]
└─$ sudo groupadd HR
groupadd: group 'HR' already exists
[x]-[dev@parrot]-[~/Desktop/Demo]
└─$ cat /etc/group | grep HR
HR:x:1006:
[dev@parrot]-[~/Desktop/Demo]
└─$
```


10) Add testuser and your current user to this group ("HR")

```
[dev@parrot]~[~/Desktop/Demo]
$ sudo usermod -aG HR dev

[dev@parrot]~[~/Desktop/Demo]
$
[dev@parrot]~[~/Desktop/Demo]
$ sudo usermod -aG HR testuser
[dev@parrot]~[~/Desktop/Demo]
$ groups testuser
testuser : testuser HR
[dev@parrot]~[~/Desktop/Demo]
$ groups dev
dev : dev cdrom floppy sudo audio dip video plugdev netdev bluetooth lpadmin scanner docker HR
[dev@parrot]~[~/Desktop/Demo]
$
```

11) Remove read permission from all groups for last five files inside Demo directory (demo6, demo7, ... , demo10)

```
[x]-[dev@parrot]~[~/Desktop/Demo]
$ sudo chmod go-r demo[6.7.8.9.10].txt
[dev@parrot]~[~/Desktop/Demo]
$ ls -l
total 0
-rw-r--r-- 1 dev dev 0 Jun 14 00:08 demo10.txt
-rw----- 1 testuser dev 0 Jun 14 00:08 demo1.txt
-rw-r--r-- 1 testuser dev 0 Jun 14 00:08 demo2.txt
-rw-r--r-- 1 testuser dev 0 Jun 14 00:08 demo3.txt
-rw-r--r-- 1 testuser dev 0 Jun 14 00:08 demo4.txt
-rw-r--r-- 1 testuser dev 0 Jun 14 00:08 demo5.txt
-rw----- 1 dev dev 0 Jun 14 00:08 demo6.txt
-rw----- 1 dev dev 0 Jun 14 00:08 demo7.txt
-rw----- 1 dev dev 0 Jun 14 00:08 demo8.txt
-rw----- 1 dev dev 0 Jun 14 00:08 demo9.txt
-rw-r--r-- 1 testuser testuser 0 Jun 14 02:02 testuserfile
[dev@parrot]~[~/Desktop/Demo]
$
```

12) Delete first 5 files from demo directory with minimal number of commands.

```
[dev@parrot]--[~/Desktop/Demo]
$rm -f demo{1..5}.txt
[dev@parrot]--[~/Desktop/Demo]
$ls
total 0
-rw-r--r-- 1 dev dev 0 Jun 14 00:08 demo10.txt
-rw----- 1 dev dev 0 Jun 14 00:08 demo6.txt
-rw----- 1 dev dev 0 Jun 14 00:08 demo7.txt
-rw----- 1 dev dev 0 Jun 14 00:08 demo8.txt
-rw----- 1 dev dev 0 Jun 14 00:08 demo9.txt
-rw-r--r-- 1 testuser testuser 0 Jun 14 02:02 testuserfile
[dev@parrot]--[~/Desktop/Demo]
$
```

13) Remove group "HR" and verify it.

```
[dev@parrot]--[~/Desktop/Demo]
$sudo groupdel HR
[dev@parrot]--[~/Desktop/Demo]
$cat /etc/group | HR
bash: HR: command not found
[x]--[dev@parrot]--[~/Desktop/Demo]
$cat /etc/group | grep HR
[x]--[dev@parrot]--[~/Desktop/Demo]
$
```

14) Remove "testuser"

```
[dev@parrot]--[~/Desktop/Demo]
$sudo userdel testuser
[sudo] password for dev:
Sorry, try again.
[sudo] password for dev:
[dev@parrot]--[~/Desktop/Demo]
$cat /etc/user | grep testuser
cat: /etc/user: No such file or directory
[x]--[dev@parrot]--[~/Desktop/Demo]
$cat /etc/passwd | grep testuser
[x]--[dev@parrot]--[~/Desktop/Demo]
$
```

15) Remove Demo directory.

```
bash: rem: command not found
[dev@parrot]~[~/Desktop]
$rm -r -f Demo
[dev@parrot]~[~/Desktop] at 2024-
$ls -l
total 3540
-rwxr-xr-x 1 dev dev 12084 Feb 15 2020 mate-screenshot.desktop
-rwxr-xr-x 1 dev dev 2068 May 2 2022 README.license
-rw-r--r-- 1 dev dev 583829 Jun 14 00:10 'Screenshot at 2024-06-14 00-10-51.png'
-rw-r--r-- 1 dev dev 581004 Jun 14 00:17 'Screenshot at 2024-06-14 00-17-51.png'
-rw-r--r-- 1 dev dev 701643 Jun 14 00:18 'Screenshot at 2024-06-14 00-18-08.png'
-rw-r--r-- 1 dev dev 644007 Jun 14 00:18 'Screenshot at 2024-06-14 00-18-15.png'
-rw-r--r-- 1 dev dev 24691 Jun 14 01:45 'Screenshot at 2024-06-14 01-45-28.png'
-rw-r--r-- 1 dev dev 137534 Jun 14 02:04 'Screenshot at 2024-06-14 02-04-14.png'
-rw-r--r-- 1 dev dev 282897 Jun 14 02:04 'Screenshot at 2024-06-14 02-04-34.png'
-rw-r--r-- 1 dev dev 20126 Jun 14 02:04 'Screenshot at 2024-06-14 02-04-45.png'
-rw-r--r-- 1 dev dev 103433 Jun 14 02:10 'Screenshot at 2024-06-14 02-10-47.png'
-rw-r--r-- 1 dev dev 41845 Jun 14 02:14 'Screenshot at 2024-06-14 02-14-21.png'
-rw-r--r-- 1 dev dev 142436 Jun 14 02:17 'Screenshot at 2024-06-14 02-17-22.png'
-rw-r--r-- 1 dev dev 123716 Jun 14 02:19 'Screenshot at 2024-06-14 02-19-20.png'
-rw-r--r-- 1 dev dev 75646 Jun 14 02:20 'Screenshot at 2024-06-14 02-20-17.png'
-rw-r--r-- 1 dev dev 46877 Jun 14 02:21 'Screenshot at 2024-06-14 02-21-50.png'
-rw-r--r-- 1 dev dev 62692 Jun 14 02:25 'Screenshot at 2024-06-14 02-25-31.png'
drwxr-xr-x 1 dev dev 14 Jun 6 18:18 vs_code
[dev@parrot]~[~/Desktop]
$
```

Paste your cheat sheet here:

File Operations:

- ls: List directory contents.
- cd: Change directory.
- pwd: Print working directory.
- mkdir: Create a directory.
- touch: Create an empty file.
- rm: Remove files or directories.
- chmod: Change file permissions.
- chown: Change file owner and group.

System Information:

- whoami: Print the current user.

User and Group Management:

- useradd: Add a new user.
- userdel: Delete a user.
- groupadd: Add a new group.
- groupdel: Delete a group.
- passwd: Change user password.
- su: Switch user.
- sudo: Execute a command as another user (often root)

Write conclusion in few lines for above activity and today's session:

In this practical I learn various command of linux which is responsible for basic operation.