

1. Check the current working directory command, then get a list of all files & folders including hidden file as well as file-size of each file and folder.

pwd – Check the current working directory

ls -sh – list of all files,folders including hidden file(human readable format)

du -h – file-size of each file and folder.

```
rahul.rajput@RSPL-501:~/Documents$ pwd
/home/ad.rapidops.com/rahul.rajput/Documents
rahul.rajput@RSPL-501:~/Documents$ ls -al
total 36
drwxr-xr-x  4 rahul.rajput domain users  4 Jan 17 16:28 .
drwx----- 18 rahul.rajput domain users 25 Jan 17 15:19 ..
drwxr-xr-x  2 rahul.rajput domain users  2 Jan 17 16:14 file1.text
drwxr-xr-x  2 rahul.rajput domain users  2 Jan 17 16:14 file2.text
rahul.rajput@RSPL-501:~/Documents$ ls -sh
total 18K
9.0K file1.text  9.0K file2.text
rahul.rajput@RSPL-501:~/Documents$ du -h
9.0K    ./file1.text
9.0K    ./file2.text
27K     .
rahul.rajput@RSPL-501:~/Documents$
```

2. Then create two folders named as '**intern-2021**' & '**rapidops-2021**',

mkdir- for creating folders

```
rahul.rajput@RSPL-501:~/Documents$ mkdir intern-2021 rapidops-2021
rahul.rajput@RSPL-501:~/Documents$
```

3. Then create two files within '**intern-2021**' folder, names are '**dev.txt**' & '**helloworld.txt**',

cd- for change a directory

touch- for creating files

```
rahul.rajput@RSPL-501:~/Documents$ cd intern-2021/
rahul.rajput@RSPL-501:~/Documents/intern-2021$ touch dev.txt helloworld.txt
rahul.rajput@RSPL-501:~/Documents/intern-2021$
```

4. Then open the '**dev.txt**' file and write something in it, and in '**helloworld.txt**' file write '**helloworld**' using echo command,

cat- for writing text in file

echo

```
rahul.rajput@RSPL-501:~/Documents/intern-2021$ cat > dev.txt
Hello Everyone
^C
rahul.rajput@RSPL-501:~/Documents/intern-2021$ echo "helloworld" | cat >> helloworld.txt
rahul.rajput@RSPL-501:~/Documents/intern-2021$ cat dev.txt helloworld.txt
Hello Everyone
helloworld
rahul.rajput@RSPL-501:~/Documents/intern-2021$
```

5. Now copy 'dev.txt' and 'helloworld.txt' into **rapidops-2021** folder,

cp- for copying files

```
rahul.rajput@RSPL-501:~/Documents$ cp ./intern-2021/dev.txt ./rapidops-2021
rahul.rajput@RSPL-501:~/Documents$ cp ./intern-2021/helloworld.txt ./rapidops-2021
rahul.rajput@RSPL-501:~/Documents$ cd rapidops-2021/
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$ ls
dev.txt  helloworld.txt
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$
```

6. Now go to the **rapidops-2021** folder and rename those two (dev.txt, helloworld.txt) files.

mv- we can rename using this command

```
rahul.rajput@RSPL-501:~/Documents$ cd rapidops-2021/
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$ ls
dev.txt  helloworld.txt
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$ mv dev.txt newdev.txt
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$ mv helloworld.txt newhelloworld.txt
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$ ls
newdev.txt  newhelloworld.txt
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$
```

7. In the same directory path, give 'read only' permission to **dev.txt** for file's owner, and for **helloworld.txt** give 'read-write-execute' permission to it's owner & 'read-write' permission to it's group.

```
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$ chmod u=r-- newdev.txt
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$ chmod u=rwx newhelloworld.txt
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$ chmod u=rw- newhelloworld.txt
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$ ls -l
total 10
-r--r--r-- 1 rahul.rajput domain users 15 Jan 17 17:24 newdev.txt
-rw-r--r-- 1 rahul.rajput domain users 11 Jan 17 17:25 newhelloworld.txt
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$
```

8. Now create archive file within same directory and shift into **intern-2021** directory.

tar- tape archive file command used for compressing files

```
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$ tar cvf archive.tar newdev.txt newhelloworld.txt
newdev.txt
newhelloworld.txt
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$ ls
archive.tar  newdev.txt  newhelloworld.txt
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$ cd ..
rahul.rajput@RSPL-501:~/Documents$ cd intern-2021/
rahul.rajput@RSPL-501:~/Documents/intern-2021$
```

9. Now copy that archive file in this directory location and remove that older archive file.

cp-

```
rahul.rajput@RSPL-501:~/Documents/rapidops-2021$ cd ..
rahul.rajput@RSPL-501:~/Documents$ cd intern-2021/
rahul.rajput@RSPL-501:~/Documents/intern-2021$ cp ../rapidops-2021/archive.tar ./
rahul.rajput@RSPL-501:~/Documents/intern-2021$ ls
archive.tar  dev.txt  helloworld.txt
rahul.rajput@RSPL-501:~/Documents/intern-2021$
```

10. Using the command find out the **dev.txt** file.

find- for searching files in system

```
rahul.rajput@RSPL-501:~/Documents/intern-2021$ find ./ -name dev.txt
./dev.txt
rahul.rajput@RSPL-501:~/Documents/intern-2021$
```

11. Check the CPU, memory usage using CLI.

Top- for check CPU, memory usage

```

rahul.rajput@RSPL-501:~/Documents/intern-2021$ top
top - 18:17:01 up 8:03, 1 user, load average: 0.64, 0.46, 0.43
Tasks: 470 total, 2 running, 467 sleeping, 0 stopped, 1 zombie
%Cpu(s): 4.7 us, 0.6 sy, 0.0 ni, 94.7 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 31827.2 total, 19879.9 free, 9678.6 used, 2268.7 buff/cache
MiB Swap: 2048.0 total, 2048.0 free, 0.0 used, 20882.0 avail Mem

  PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM    TIME+  COMMAND
197346 rahul.r+  20   0 1131.6g 194808 104012 R  30.2   0.6   0:55.62 chrome
59973 rahul.r+  20   0 562816 50440 36108 S   6.3   0.2   0:46.55 gnome-terminal-
5079 rahul.r+  20   0 6314256 283280 111220 S   5.0   0.9 16:59.21 gnome-shell
16090 rahul.r+  20   0 33.2g 234096 105948 S   2.7   0.7 13:53.71 chrome
2411 root      20   0 339716 67364 9008 S   0.7   0.2 3:22.50 qhdevx
198481 rahul.r+  20   0 22896 3740 2740 R   0.7   0.0 0:00.04 top
14 root      20   0 0 0 0 I   0.3   0.0 0:36.35 rcu_sched
2179 systemd+ 20   0 14828 4636 3852 S   0.3   0.0 0:29.72 systemd-oomd
16039 rahul.r+ 20   0 32.8g 363640 154564 S   0.3   1.1 11:56.39 chrome
182964 root      0 -20 0 0 0 I   0.3   0.0 0:04.56 kworker/u17:0-i915_flip
186463 root      20   0 0 0 0 I   0.3   0.0 0:02.10 kworker/0:1-events
1 root      20   0 168596 11480 5700 S   0.0   0.0 0:04.86 systemd
2 root      20   0 0 0 0 S   0.0   0.0 0:05.18 kthreadd
3 root      0 -20 0 0 0 I   0.0   0.0 0:00.00 rcu_gp
4 root      0 -20 0 0 0 I   0.0   0.0 0:00.00 rcu_par_gp
5 root      0 -20 0 0 0 I   0.0   0.0 0:00.00 netns
7 root      0 -20 0 0 0 I   0.0   0.0 0:00.00 kworker/0:0H-events_highpri
10 root     0 -20 0 0 0 I   0.0   0.0 0:00.00 mm_percpu_wq
11 root      20   0 0 0 0 S   0.0   0.0 0:00.00 rcu_tasks_rude_
12 root      20   0 0 0 0 S   0.0   0.0 0:00.00 rcu_tasks_trace
13 root      20   0 0 0 0 S   0.0   0.0 0:00.56 ksoftirqd/0
15 root      rt    0 0 0 0 S   0.0   0.0 0:00.12 migration/0
16 root     -51   0 0 0 0 S   0.0   0.0 0:00.00 idle_inject/0
17 root      20   0 0 0 0 S   0.0   0.0 0:00.00 cpuhp/0
18 root      20   0 0 0 0 S   0.0   0.0 0:00.00 cpuhp/1
19 root     -51   0 0 0 0 S   0.0   0.0 0:00.00 idle_inject/1
20 root      rt    0 0 0 0 S   0.0   0.0 0:00.27 migration/1
21 root      20   0 0 0 0 S   0.0   0.0 0:02.33 ksoftirqd/1
23 root      0 -20 0 0 0 I   0.0   0.0 0:00.00 kworker/1:0H-events_highpri
24 root      20   0 0 0 0 S   0.0   0.0 0:00.00 cpuhp/2
25 root     -51   0 0 0 0 S   0.0   0.0 0:00.00 idle_inject/2
26 root      rt    0 0 0 0 S   0.0   0.0 0:00.31 migration/2
27 root      20   0 0 0 0 S   0.0   0.0 0:00.17 ksoftirqd/2
29 root      0 -20 0 0 0 I   0.0   0.0 0:00.00 kworker/2:0H-events_highpri
30 root      20   0 0 0 0 S   0.0   0.0 0:00.00 cpuhp/3

```

12. Check the disk usage and free disk space using CLI.

```

rahul.rajput@RSPL-501:~/Documents/intern-2021$ df -h
Filesystem                Size      Used Avail Use% Mounted on
tmpfs                      3.2G    2.9M    3.2G   1% /run
/dev/mapper/keystore-rpool 437M    28K   404M   1% /run/keystore/rpool
rpool/ROOT/ubuntu_uy3izd 453G    6.5G   446G   2% /
tmpfs                      16G    130M    16G   1% /dev/shm
tmpfs                      5.0M    4.0K    5.0M   1% /run/lock
rpool/USERDATA/rapidadmin_206hzk 447G   411M   446G   1% /home/rapidadmin
rpool/USERDATA/root_206hzk 446G   640K   446G   1% /root
rpool/ROOT/ubuntu_uy3izd/srv 446G   256K   446G   1% /srv
rpool/ROOT/ubuntu_uy3izd/usr/local 446G    74M   446G   1% /usr/local
rpool/ROOT/ubuntu_uy3izd/var/games 446G   256K   446G   1% /var/games
rpool/ROOT/ubuntu_uy3izd/var/log 446G    18M   446G   1% /var/log
rpool/ROOT/ubuntu_uy3izd/var/lib 450G    4.0G   446G   1% /var/lib
rpool/ROOT/ubuntu_uy3izd/var/mail 446G   256K   446G   1% /var/mail
rpool/ROOT/ubuntu_uy3izd/var/snap 446G    2.7M   446G   1% /var/snap
rpool/ROOT/ubuntu_uy3izd/var/spool 446G   384K   446G   1% /var/spool
rpool/ROOT/ubuntu_uy3izd/var/www 446G   256K   446G   1% /var/www
rpool/ROOT/ubuntu_uy3izd/var/lib/AccountsService 446G   256K   446G   1% /var/lib/AccountsService
rpool/ROOT/ubuntu_uy3izd/var/lib/NetworkManager 446G   384K   446G   1% /var/lib/NetworkManager
rpool/ROOT/ubuntu_uy3izd/var/lib/apt 446G   115M   446G   1% /var/lib/apt
rpool/ROOT/ubuntu_uy3izd/var/lib/dpkg 446G    64M   446G   1% /var/lib/dpkg
bpool/B00T/ubuntu_uy3izd 1.8G   274M    1.5G  16% /boot
/dev/nvme0n1p1           511M    14M   498M   3% /boot/efi
tmpfs                      3.2G   148K    3.2G   1% /run/user/1124203187
rahul.rajput@RSPL-501:~/Documents/intern-2021$

```

13. Check the all system process and filter out any of one process service using CLI.

Ps aux


```
rahu1.rajp1ut@RSPL-501:~/Documents/intern-2021$ ps aux
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
root         1   0.0  0.0 168544 11460 ?        Ss   10:13   0:05 /sbin/init splash
root         2   0.0  0.0      0     0 ?        S    10:13   0:05 [kthreadd]
root         3   0.0  0.0      0     0 ?        I<   10:13   0:00 [rcu_gp]
root         4   0.0  0.0      0     0 ?        I<   10:13   0:00 [rcu_par_gp]
root         5   0.0  0.0      0     0 ?        I<   10:13   0:00 [netns]
root         7   0.0  0.0      0     0 ?        I<   10:13   0:00 [kworker/0:0H-events_highpri]
root        10   0.0  0.0      0     0 ?        I<   10:13   0:00 [mm_percpu_wq]
root        11   0.0  0.0      0     0 ?        S    10:13   0:00 [rcu_tasks_rude_]
root        12   0.0  0.0      0     0 ?        S    10:13   0:00 [rcu_tasks_trace]
root        13   0.0  0.0      0     0 ?        S    10:13   0:00 [ksoftirqd/0]
root        14   0.1  0.0      0     0 ?        I    10:13   0:37 [rcu_sched]
root        15   0.0  0.0      0     0 ?        S    10:13   0:00 [migration/0]
root        16   0.0  0.0      0     0 ?        S    10:13   0:00 [idle_inject/0]
root        17   0.0  0.0      0     0 ?        S    10:13   0:00 [cpuhp/0]
root        18   0.0  0.0      0     0 ?        S    10:13   0:00 [cpuhp/1]
root        19   0.0  0.0      0     0 ?        S    10:13   0:00 [idle_inject/1]
root        20   0.0  0.0      0     0 ?        S    10:13   0:00 [migration/1]
root        21   0.0  0.0      0     0 ?        S    10:13   0:02 [ksoftirqd/1]
root        23   0.0  0.0      0     0 ?        I<   10:13   0:00 [kworker/1:0H-events_highpri]
root        24   0.0  0.0      0     0 ?        S    10:13   0:00 [cpuhp/2]
root        25   0.0  0.0      0     0 ?        S    10:13   0:00 [idle_inject/2]
root        26   0.0  0.0      0     0 ?        S    10:13   0:00 [migration/2]
root        27   0.0  0.0      0     0 ?        S    10:13   0:00 [ksoftirqd/2]
root        29   0.0  0.0      0     0 ?        I<   10:13   0:00 [kworker/2:0H-events_highpri]
root        30   0.0  0.0      0     0 ?        S    10:13   0:00 [cpuhp/3]
root        31   0.0  0.0      0     0 ?        S    10:13   0:00 [idle_inject/3]
root        32   0.0  0.0      0     0 ?        S    10:13   0:00 [migration/3]
```

Ps aux | grep 550

```
root      205989  0.0  0.0      0     0 ?        S<   18:56   0:00 [z_wr_iss]
rahu1.r+  205995  0.0  0.0 22068 2968 pts/0    R+   18:56   0:00 ps aux
rahu1.rajp1ut@RSPL-501:~/Documents/intern-2021$ ps aux | grep 5500
rahu1.r+  206954  0.0  0.0  9076 1664 pts/0    S+   18:58   0:00 grep --color=auto 5500
rahu1.rajp1ut@RSPL-501:~/Documents/intern-2021$
```

14. Retrieve the content from web server using CLI. [Here Link](#)

```
rahu1.rajp1ut@RSPL-501:~/Documents/intern-2021$ wget https://releases.mattermost.com/desktop/4.3.2/mattermost-desktop-4.3.2-linux-i386.deb
--2024-01-17 18:55:21-- https://releases.mattermost.com/desktop/4.3.2/mattermost-desktop-4.3.2-linux-i386.deb
Resolving releases.mattermost.com (releases.mattermost.com)... 18.239.142.33, 18.239.142.53, 18.239.142.25, ...
Connecting to releases.mattermost.com (releases.mattermost.com)|18.239.142.33|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 74745386 (71M) [application/x-debian-package]
Saving to: 'mattermost-desktop-4.3.2-linux-i386.deb'

mattermost-desktop-4.3.2-linux-i386.deb      100%[=====]
2024-01-17 18:55:27 (14.9 MB/s) - 'mattermost-desktop-4.3.2-linux-i386.deb' saved [74745386/74745386]
rahu1.rajp1ut@RSPL-501:~/Documents/intern-2021$
```

15. Check your network interface information using CLI.

ifconfig

```
rahu1.rajp1ut@RSPL-501:~/Documents/intern-2021$ ifconfig
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 59990 bytes 10961703 (10.9 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 59990 bytes 10961703 (10.9 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

wlp9s0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.3.225 netmask 255.255.254.0 broadcast 192.168.3.255
    inet6 fe80::b2b3:82ab:92aa:26ec prefixlen 64 scopeid 0x20<link>
    ether f0:57:a6:84:e9:eb txqueuelen 1000 (Ethernet)
    RX packets 930014 bytes 809200672 (809.2 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 435784 bytes 134194563 (134.1 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

rahu1.rajp1ut@RSPL-501:~/Documents/intern-2021$
```

