



SHELL PROGRAMMING LAB

ASSIGNMENT -17

SUBMITTED BY:

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SAP ID - 500086400

Enrollment no - R200220083

B.C.A -I.O.T.

SUBMITTED TO:

Dr. Dhiviya Rose

EXPERIMENT – 17 & 18 in Manual
TITLE: System and Memory Administration

Activities:

1. Monitor the memory Usage

```
root@Ayush500086400:~/Desktop# df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            1.9G   0    1.9G   0% /dev
tmpfs           390M  1.9M  388M   1% /run
/dev/sda1       79G   13G   64G  17% /
tmpfs           2.0G   0    2.0G   0% /dev/shm
tmpfs           5.0M   0    5.0M   0% /run/lock
tmpfs           390M   64K  390M   1% /run/user/0
root@Ayush500086400:~/Desktop#
```

2. Monitor the free space

```
root@Ayush500086400:~/Desktop# df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            1.9G   0    1.9G   0% /dev
tmpfs           390M  1.9M  388M   1% /run
/dev/sda1       79G   13G   64G  17% /
tmpfs           2.0G   0    2.0G   0% /dev/shm
tmpfs           5.0M   0    5.0M   0% /run/lock
tmpfs           390M   64K  390M   1% /run/user/0
root@Ayush500086400:~/Desktop#
```

3. Monitor the speed

```
Linux 5.15.0-kali3-amd64 (Ayush500086400)      11/25/2022      _x86_64_      (2 CPU)

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
           0.59    0.01   0.34   0.01   0.00   99.05

Device            tps    kB_read/s    kB_wrtn/s    kB_dscd/s    kB_read    kB_wrtn    kB_dscd
sda                1.20       13.11         6.74         0.00      623775     320636         0
sr0                0.00         0.00         0.00         0.00         2         0         0
```

```
procs  -----memory-----  ---swap--  -----io-----  -system--  -----cpu-----
r  b    swpd   free   buff  cache    si   so    bi   bo    in   cs  us  sy  id  wa  st
0  0        0 2295672 153416 596052     0    0     7    3    33   63   1   0 99   0   0
```

4.Starting Up the system

```
root@Ayush500086400:~/Desktop# shutdown -r 10
Reboot scheduled for Fri 2022-11-25 11:36:15 CST, use 'shutdown -c' to cancel.
root@Ayush500086400:~/Desktop#
```

5.Shutting the system down

```
root@Ayush500086400:~/Desktop# shutdown --halt 11:59
Shutdown scheduled for Fri 2022-11-25 11:59:00 CST, use 'shutdown -c' to cancel.
root@Ayush500086400:~/Desktop#
```