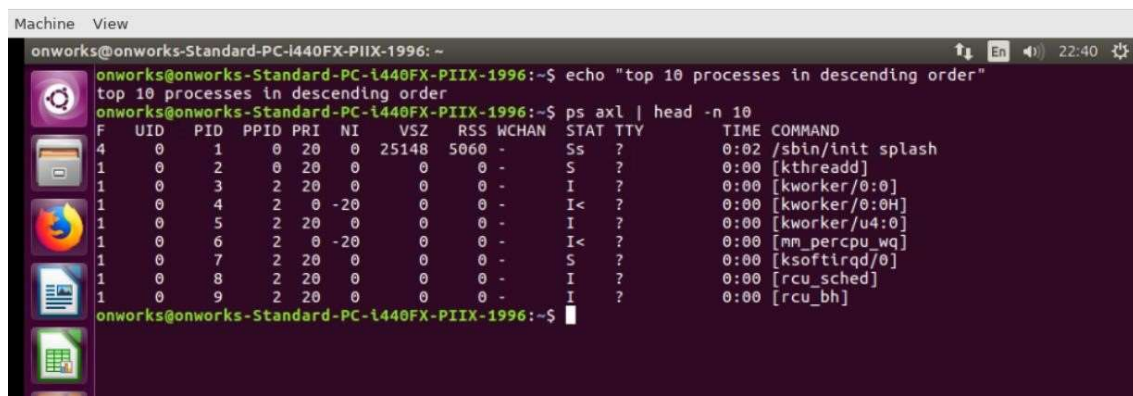# OPERATING SYSTEMS

EXPERIMENT – 1

Ayush Jain | 60004200132 | SE – B2

AIM: Explore the internal commands of linux and Write shell scripts to do the following:

1. **Display top 10 processes in descending order**

onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ echo "top 10 processes in descending order" top 10 processes in descending order onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ ps axl | head -n 10
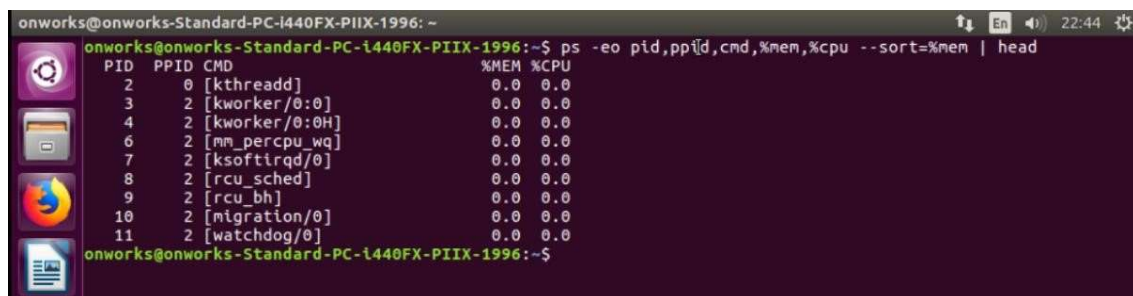

ps

2. **Display processes with highest memory usage.**

onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ ps -eo pid,ppid,cmd,%mem,%cpu --sort=%mem |head

Display current logged in user and no. of users onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ who –u onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ who -u | wc -l

Display current shell, home directory, operating system type, current working directory.

onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ whoami

onworks onworks@onworks-Standard-PC-i440FX-PIIX-

1996:~$ uname Linux onworks@onworks-Standard-PC-

i440FX-PIIX-1996:~$ pwd

/home/onworks onworks@onworks-Standard-PC-i440FX-PIIX-

1996:~$ uname Linux

Display OS version, release number. onworks@onworks-Standard-PC-i440FX-

PIIX-1996:~$ uname -a

Linux onworks-Standard-PC-i440FX-PIIX-1996 4.15.0-50-generic

#54~16.04.1Ubuntu SMP Wed May 8 15:50:20 UTC 2019 i686 i686 i686

GNU/Linux onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ uname -r

4.15.0-50-generic

Illustrate the use of sort, grep, awk, etc onworks@onworks-

Standard-PC-i440FX-PIIX-1996:~$ cat > abc orage kiwi grapes

mangoes

onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ ls abc

Documents examples.desktop Pictures Templates

Desktop Downloads Music   Public   Videos

onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ sort abc

grapes kiwi mangoes orage

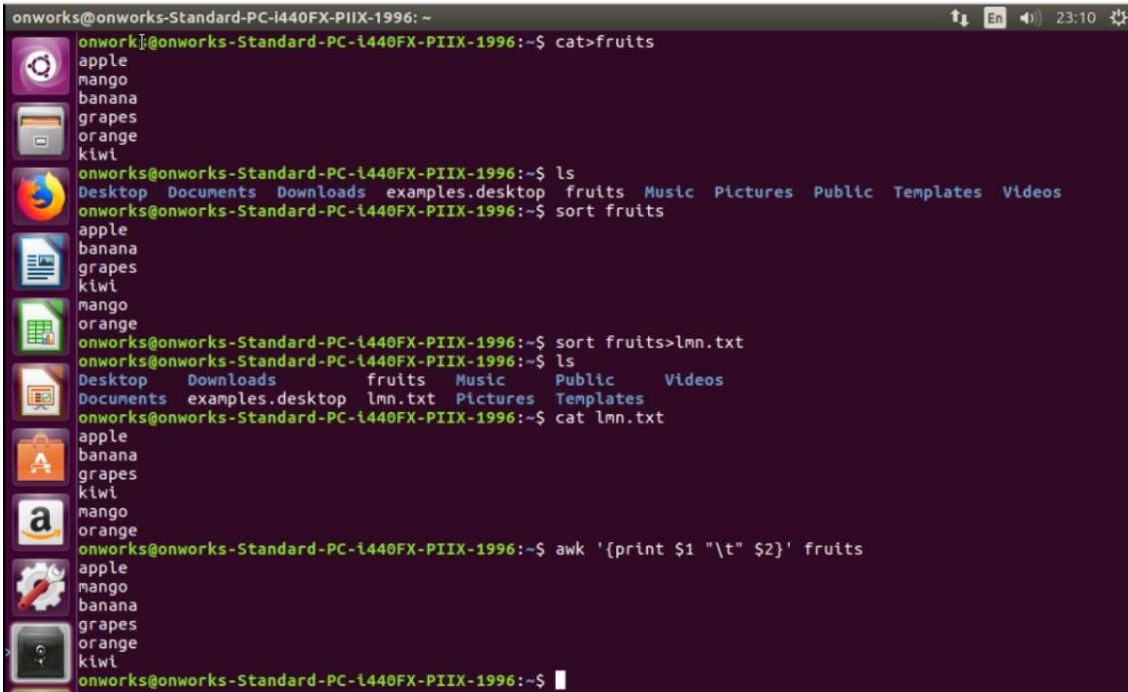onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ sort abc>lmn.txt

onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ ls abc

Documents examples.desktop Music   Public   Videos

Desktop Downloads lmn.txt   Pictures Templates

onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ cat lmn.txt

grapes kiwi mangoes orage

onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ awk '{print $1 "\t" $2}' abc
orage kiwi grapes
mangoes