



Operating System

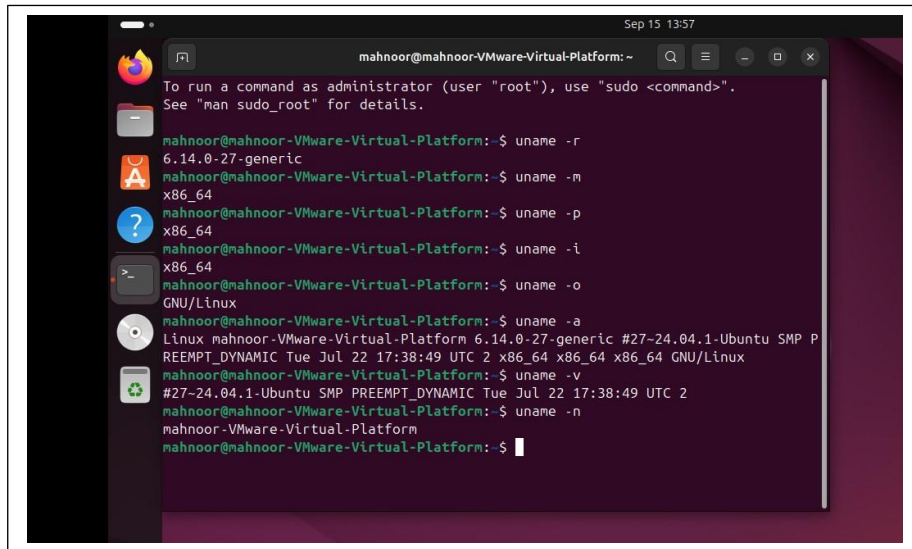
Lab #5

Submitted By:

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BSCS-5

Task 1:



The screenshot shows a terminal window titled 'mahnoor@mahnoor-VMware-Virtual-Platform: ~' with a search bar and window controls. A message at the top states: 'To run a command as administrator (user "root"), use "sudo <command>". See "man sudo_root" for details.' The terminal displays the following commands and their outputs:

```
mahnoor@mahnoor-VMware-Virtual-Platform:~$ uname -r
6.14.0-27-generic
mahnoor@mahnoor-VMware-Virtual-Platform:~$ uname -m
x86_64
mahnoor@mahnoor-VMware-Virtual-Platform:~$ uname -p
x86_64
mahnoor@mahnoor-VMware-Virtual-Platform:~$ uname -i
x86_64
mahnoor@mahnoor-VMware-Virtual-Platform:~$ uname -o
GNU/Linux
mahnoor@mahnoor-VMware-Virtual-Platform:~$ uname -a
Linux mahnoor-VMware-Virtual-Platform 6.14.0-27-generic #27-24.04.1-Ubuntu SMP P
REEMPT_DYNAMIC Tue Jul 22 17:38:49 UTC 2 x86_64 x86_64 x86_64 GNU/Linux
mahnoor@mahnoor-VMware-Virtual-Platform:~$ uname -v
#27-24.04.1-Ubuntu SMP PREEMPT_DYNAMIC Tue Jul 22 17:38:49 UTC 2
mahnoor@mahnoor-VMware-Virtual-Platform:~$ uname -n
mahnoor-VMware-Virtual-Platform
mahnoor@mahnoor-VMware-Virtual-Platform:~$
```

Definitions:

- r It shows the kernel version (information)
- m It gives you computer architecture
- p It shows what kind of processor it is or prints unknown
- i It shows the hardware platform
- o Displays the name of the Operating System
- a It shows everything all together
- v gives more detail about the kernel
- n gives you the computer name

Task 2:

```
mahnoor@mahnoor-VMware-Virtual-Platform:~$ pico labSort
mahnoor@mahnoor-VMware-Virtual-Platform:~$ cat labSort
End of file
6 apples
file to be sorted
apple on the table
23 years old
File To be sorted
78 apples
Class
3 bananas
99 sort files
```

sort labSort:

```
mahnoor@mahnoor-VMware-Virtual-Platform:~$ sort labSort
23 years old
3 bananas
6 apples
78 apples
99 sort files
apple on the table
Class
End of file
file to be sorted
File To be sorted
mahnoor@mahnoor-VMware-Virtual-Platform:~$
```

sort -r:

```
mahnoor@mahnoor-VMware-Virtual-Platform:~$ sort -r labSort
File To be sorted
file to be sorted
End of file
Class
apple on the table
99 sort files
78 apples
6 apples
3 bananas
23 years old
mahnoor@mahnoor-VMware-Virtual-Platform:~$
```

sort -b:

```
mahnoor@mahnoor-VMware-Virtual-Platform:~$ sort -b labSort
23 years old
3 bananas
6 apples
78 apples
99 sort files
apple on the table
Class
End of file
file to be sorted
File To be sorted
mahnoor@mahnoor-VMware-Virtual-Platform:~$
```

sort -f:

```
mahnoor@mahnoor-VMware-Virtual-Platform:~$ sort -f labSort
23 years old
3 bananas
6 apples
78 apples
99 sort files
apple on the table
Class
End of file
file to be sorted
File To be sorted
mahnoor@mahnoor-VMware-Virtual-Platform:~$
```

sort -k:

```
99 sort files
mahnoor@mahnoor-VMware-Virtual-Platform:~$ sort -k1 labSort
23 years old
3 bananas
6 apples
78 apples
99 sort files
apple on the table
Class
End of file
file to be sorted
File To be sorted
mahnoor@mahnoor-VMware-Virtual-Platform:~$
```

sort -n:

```
mahnoor@mahnoor-VMware-Virtual-Platform:~$ sort -n labSort
apple on the table
Class
End of file
file to be sorted
File To be sorted
3 bananas
6 apples
23 years old
78 apples
99 sort files
```

Task 3:

sort :

```
mahnoor@mahnoor-VMware-Virtual-Platform:~$ sort SortLabNumeric

12 Online classes
13 People of Pakistan
14 Hacking stories
6 Network security
7 Tom and jerry
mahnoor@mahnoor-VMware-Virtual-Platform:~$
```

sort-r :

```
mahnoor@mahnoor-VMware-Virtual-Platform:~$ sort -r SortLabNumeric
7 Tom and jerry
6 Network security
14 Hacking stories
13 People of Pakistan
12 Online classes
```

sort-k1 :

```
mahnoor@mahnoor-VMware-Virtual-Platform:~$ sort -k1 SortLabNumeric
12 Online classes
13 People of Pakistan
14 Hacking stories
6 Network security
7 Tom and jerry
mahnoor@mahnoor-VMware-Virtual-Platform:~$
```

sort-k2 :

```
sort: cannot read: SortLabNumeric: no such file or directory
mahnoor@mahnoor-VMware-Virtual-Platform:~$ sort -k2 SortLabNumeric
14 Hacking stories
6 Network security
12 Online classes
13 People of Pakistan
7 Tom and jerry
mahnoor@mahnoor-VMware-Virtual-Platform:~$
```

sort-n :

```
7 Tom and jerry
mahnoor@mahnoor-VMware-Virtual-Platform:~$ sort -n SortLabNumeric
6 Network security
7 Tom and jerry
12 Online classes
13 People of Pakistan
14 Hacking stories
mahnoor@mahnoor-VMware-Virtual-Platform:~$
```