



Ayesha Zamurd

49733

BSCS-5

OS Lab# 04

1. Run all switches with uname command.

-r, -m, -p, -l, -o, -a, -v, -n

And define in one line about these commands according to your understanding.

```
student@student-virtual-machine:~$ uname -n
student-virtual-machine
student@student-virtual-machine:~$ uname -v
#49-22.04.1-Ubuntu SMP PREEMPT_DYNAMIC Wed Nov 6 17:42:15 UTC 2
student@student-virtual-machine:~$ uname -m
x86_64
student@student-virtual-machine:~$ uname -o
GNU/Linux
student@student-virtual-machine:~$ uname -a
Linux student-virtual-machine 6.8.0-49-generic #49-22.04.1-Ubuntu SMP PREEMPT_DYNAMIC Wed Nov 6 17:42:15 UTC 2 x86_64 x86_64 x86_64 GNU/Linux
student@student-virtual-machine:~$ uname -r
6.8.0-49-generic
student@student-virtual-machine:~$ uname -p
x86_64
student@student-virtual-machine:~$ uname -l
x86_64
```

2. Create new file named labSort and insert following text

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

```
student@student-virtual-machine:~$ pico labSort
```

```
student@student-virtual-machine:~$ cat labSort
End of File
6 apples
file to be sorted
apples on the table
23 years old
File To be Sorted
78 apples
Class
3 bananas
99 sort files
student@student-virtual-machine:~$ sort labSort
23 years old
3 bananas
6 apples
78 apples
99 sort files
apples on the table
Class
End of File
file to be sorted
File To be Sorted
```

```
student@student-virtual-machine:~$ sort -b labSort
```

```
23 years old
3 bananas
6 apples
78 apples
99 sort files
apples on the table
Class
End of File
file to be sorted
File To be Sorted
```

```
student@student-virtual-machine:~$ sort -f labSort
```

```
23 years old
3 bananas
6 apples
78 apples
99 sort files
apples on the table
Class
End of File
file to be sorted
File To be Sorted
```

```
student@student-virtual-machine:~$ sort -r labSort
```

```
File To be Sorted
file to be sorted
End of File
Class
apples on the table
99 sort files
78 apples
6 apples
3 bananas
23 years old
```

```
student@student-virtual-machine:~$ sort -n labSort
```

```
apples 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
```

```
student@student-virtual-machine:~$ sort -k 1 labSort
23 years old
3 bananas
6 apples
78 apples
99 sort files
apples on the table
Class
End of File
file to be sorted
File To be Sorted
student@student-virtual-machine:~$ sort -k 2 labSort
Class
6 apples
78 apples
3 bananas
End of File
apples on the table
99 sort files
file to be sorted
File To be Sorted
23 years old
```

3. Create another file with name SortLabNumeric two columns in it.

- 12 Online classes
- 6 Network security
- 14 Hacking stories
- 7 Tom and jerry
- 13 People of Pakistan

```
student@student-virtual-machine:~$ pico SortLabNumeric
student@student-virtual-machine:~$ sort -k 1 SortLabNumeric
12  Online classes
13  People of pakistan
14  Hacking stories
6   Network security
7   Tom and jerry
student@student-virtual-machine:~$ sort -k 2 SortLabNumeric
14  Hacking stories
6   Network security
12  Online classes
13  People of pakistan
7   Tom and jerry
student@student-virtual-machine:~$ sort -n SortLabNumeric
6   Network security
7   Tom and jerry
12  Online classes
13  People of pakistan
14  Hacking stories
student@student-virtual-machine:~$ █
```

4. Explain the Linux 'cd' command options along with the description?

The cd (change directory) command in Linux is used to navigate between directories in the filesystem.

- cd = Takes to the home directory directory
- cd / =Takes to the root directory directly
- cd .. = Move to one directory back in other words it moves one directory backwards
- cd dir-name = It changes to any sub-directory under the current directory if it exists.