# Operating System

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Task 1:

```
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

fata@fata-virtual-machine:~$ uname -r
6.8.0-78-generic
fata@fata-virtual-machine:~$ uname
Linux
fata@fata-virtual-machine:~$ uname -m
x86_64
fata@fata-virtual-machine:~$ uname -p
x86_64
fata@fata-virtual-machine:~$ uname -l
uname: invalid option -- 'l'
Try 'uname --help' for more information.
fata@fata-virtual-machine:~$ uname -o
GNU/Linux
fata@fata-virtual-machine:~$ uname -a
Linux fata-virtual-machine 6.8.0-78-generic #78~22.04.1-Ubuntu SMP PREEMPT_DYNAMIC Wed Aug 13 14:32:06 UTC 2 x86_64 x86_64 x86_64 GN
U/Linux
fata@fata-virtual-machine:~$ uname -v
#78~22.04.1-Ubuntu SMP PREEMPT_DYNAMIC Wed Aug 13 14:32:06 UTC 2
fata@fata-virtual-machine:~$ uname -n
fata-virtual-machine
```

-n  print the network node hostname

-r print the kernel release

-v print the kernel version

-m print the machine hardware name

-p print the processor type or "unknown"

-i print the hardware platform or "unknown"

-o print the operating system

-a print the complete information of operating system

Task 2:

```
fata@fata-virtual-machine:~$ pico LabSort
fata@fata-virtual-machine:~$ sort -r LabSort
File to be sorted
fie to be sorted
End of file
class
apple on the table
99 sort files
78 apples
6 apples
3 bananas
23 years old

fata@fata-virtual-machine:~$ sort -n LabSort

apple on the table
class
End of file
fie to be sorted
File to be sorted
3 bananas
6 apples
```

```
23 years old
78 apples
99 sort files
fata@fata-virtual-machine:~$ sort -k LabSort
sort: invalid number at field start: invalid count at start of 'LabSort'
fata@fata-virtual-machine:~$ sort -n LabSort.txt
sort: cannot read: LabSort.txt: No such file or directory
fata@fata-virtual-machine:~$ sort -b LabSort

23 years old
3 bananas
6 apples
78 apples
99 sort files
apple on the table
class
End of file
fie to be sorted
File to be sorted
fata@fata-virtual-machine:~$ sort -f LabSort

23 years old
3 bananas
6 apples
78 apples
99 sort files
apple on the table
class
```

```
End of file
fie to be sorted
File to be sorted
fata@fata-virtual-machine:~$ sort -k2 LabSort

class
6 apples
78 apples
3 bananas
End of file
apple on the table
99 sort files
fie to be sorted
File to be sorted
23 years old
```

```
fata@fata-virtual-machine:~$ sort -k2,2 LabSort

class
6 apples
78 apples
3 bananas
End of file
apple on the table
99 sort files
fie to be sorted
File to be sorted
23 years old
fata@fata-virtual-machine:~$ sort -k2 LabSort

class
6 apples
78 apples
3 bananas
End of file
apple on the table
99 sort files
fie to be sorted
File to be sorted
23 years old
fata@fata-virtual-machine:~$ sort -k3 LabSort

3 bananas
6 apples
class
```

```
78 apples
fie to be sorted
File to be sorted
End of file
99 sort files
23 years old
apple on the table
```

Task 3:

```
fata@fata-virtual-machine:~$ sort -k2 SortLabNumeric

14 Hacking stories
6 Network security
12 ONline Classes
13 People of Pakistan
7 Tom and Jerry
fata@fata-virtual-machine:~$ sort -k2,2 SortLabNumeric

14 Hacking stories
6 Network security
12 ONline Classes
13 People of Pakistan
7 Tom and Jerry
fata@fata-virtual-machine:~$ sort -k1,2 SortLabNumeric

12 ONline Classes
13 People of Pakistan
14 Hacking stories
6 Network security
7 Tom and Jerry
fata@fata-virtual-machine:~$ sort -k1,1n SortLabNumeric

6 Network security
7 Tom and Jerry
12 ONline Classes
13 People of Pakistan
```

```
fata@fata-virtual-machine:~$ sort -k1,1n SortLabNumeric

6 Network security
7 Tom and Jerry
12 ONline Classes
13 People of Pakistan
14 Hacking stories
fata@fata-virtual-machine:~$ sort -n SortLabNumeric

6 Network security
7 Tom and Jerry
12 ONline Classes
13 People of Pakistan
14 Hacking stories
fata@fata-virtual-machine:~$ sort -k2,2 Sort LabNumeric
sort: cannot read: Sort: No such file or directory
fata@fata-virtual-machine:~$ sort -k2,2 SortLabNumeric

14 Hacking stories
6 Network security
12 ONline Classes
13 People of Pakistan
7 Tom and Jerry
fata@fata-virtual-machine:~$ sort -n SortLabNumeric

6 Network security
7 Tom and Jerry
12 ONline Classes
13 People of Pakistan
14 Hacking stories
fata@fata-virtual-machine:~$
```