

Riphah International University Islamabad



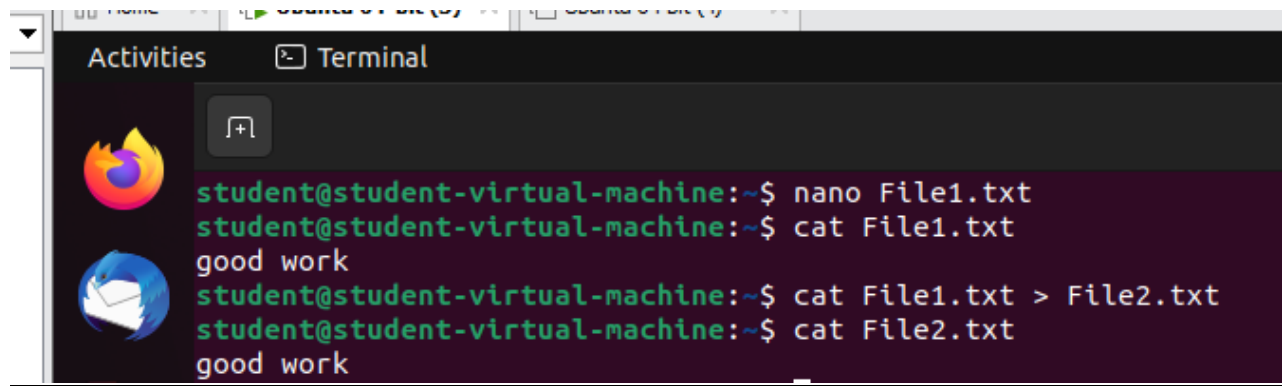
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55503 (CS-5)

Operating System

OS Lab # 07

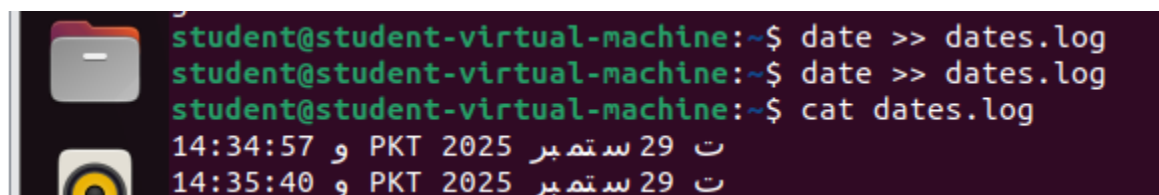
Task # 01



A terminal window titled 'Terminal' is shown. It contains the following commands and output:

```
student@student-virtual-machine:~$ nano File1.txt
student@student-virtual-machine:~$ cat File1.txt
good work
student@student-virtual-machine:~$ cat File1.txt > File2.txt
student@student-virtual-machine:~$ cat File2.txt
good work
```

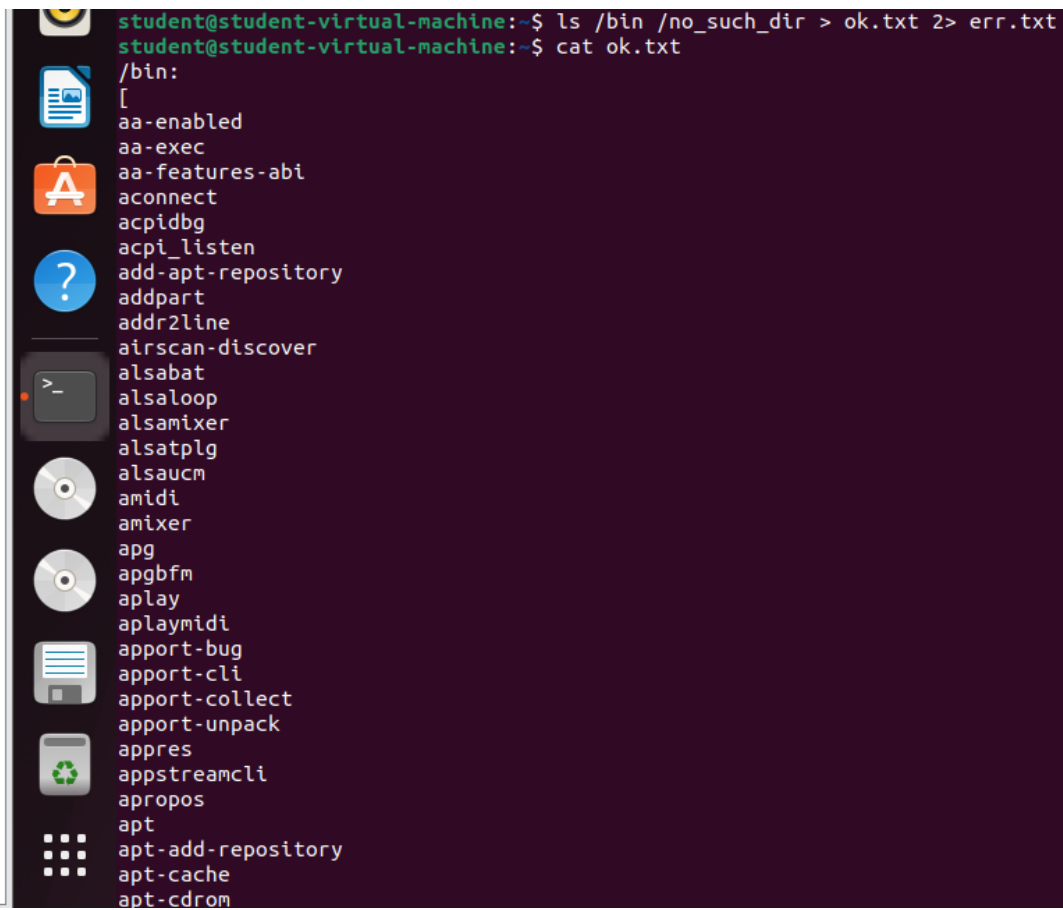
Task # 02



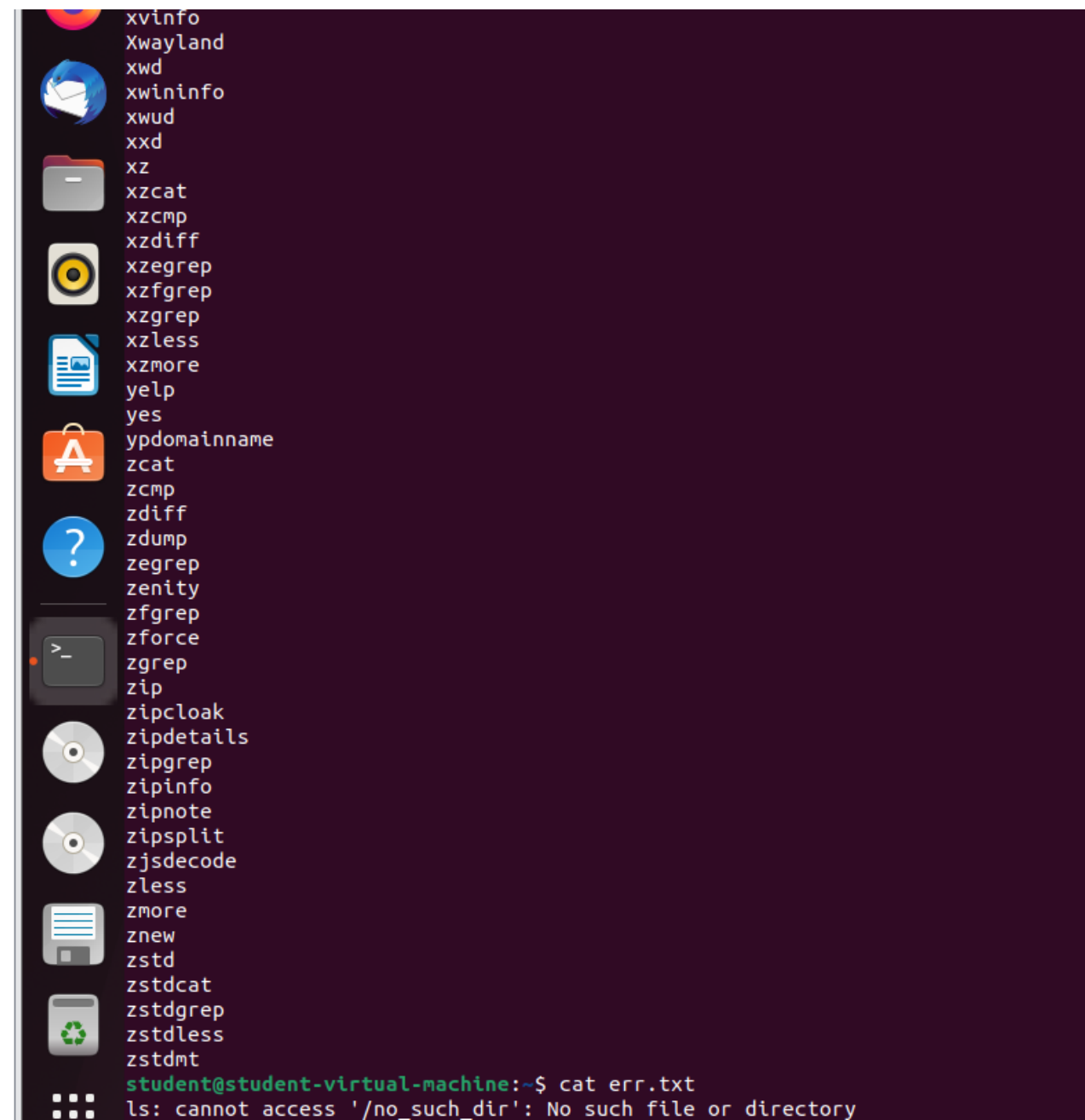
A terminal window showing the following commands and output:

```
student@student-virtual-machine:~$ date >> dates.log
student@student-virtual-machine:~$ date >> dates.log
student@student-virtual-machine:~$ cat dates.log
ت 29 ستمبر 2025 و 14:34:57 PKT
ت 29 ستمبر 2025 و 14:35:40 PKT
```

Task # 03



```
student@student-virtual-machine:~$ ls /bin /no_such_dir > ok.txt 2> err.txt
student@student-virtual-machine:~$ cat ok.txt
/bin:
[
aa-enabled
aa-exec
aa-features-abi
aconnect
acpidbg
acpi_listen
add-apt-repository
addpart
addr2line
airscan-discover
alsabat
alsaaloop
alsamixer
alsatplg
alsaucm
amidi
amixer
apg
apgbfm
aplay
aplaymidi
apport-bug
apport-cli
apport-collect
apport-unpack
appres
appstreamcli
apropos
apt
apt-add-repository
apt-cache
apt-cdrom
```



A terminal window with a dark purple background. On the left side, there is a vertical column of application icons. In the center, a list of commands is displayed. At the bottom, the terminal prompt shows the user 'student' on a machine named 'student-virtual-machine', with the command 'cat err.txt' and its output.

```
xvinfo
Xwayland
xwd
xwininfo
xwud
xxd
xz
xzcat
xzcmp
xzdiff
xzegrep
xzfgrep
xzgrep
xzless
xzmore
yelp
yes
ypdomainname
zcat
zcmp
zdiff
zdump
zegrep
zenity
zfgrep
zforce
zgrep
zip
zipcloak
zipdetails
zipgrep
zipinfo
zipnote
zipsplit
zjsdecode
zless
zmore
znew
zstd
zstdcat
zstdgrep
zstdless
zstdmt
student@student-virtual-machine:~$ cat err.txt
ls: cannot access '/no such dir': No such file or directory
```

Task # 04

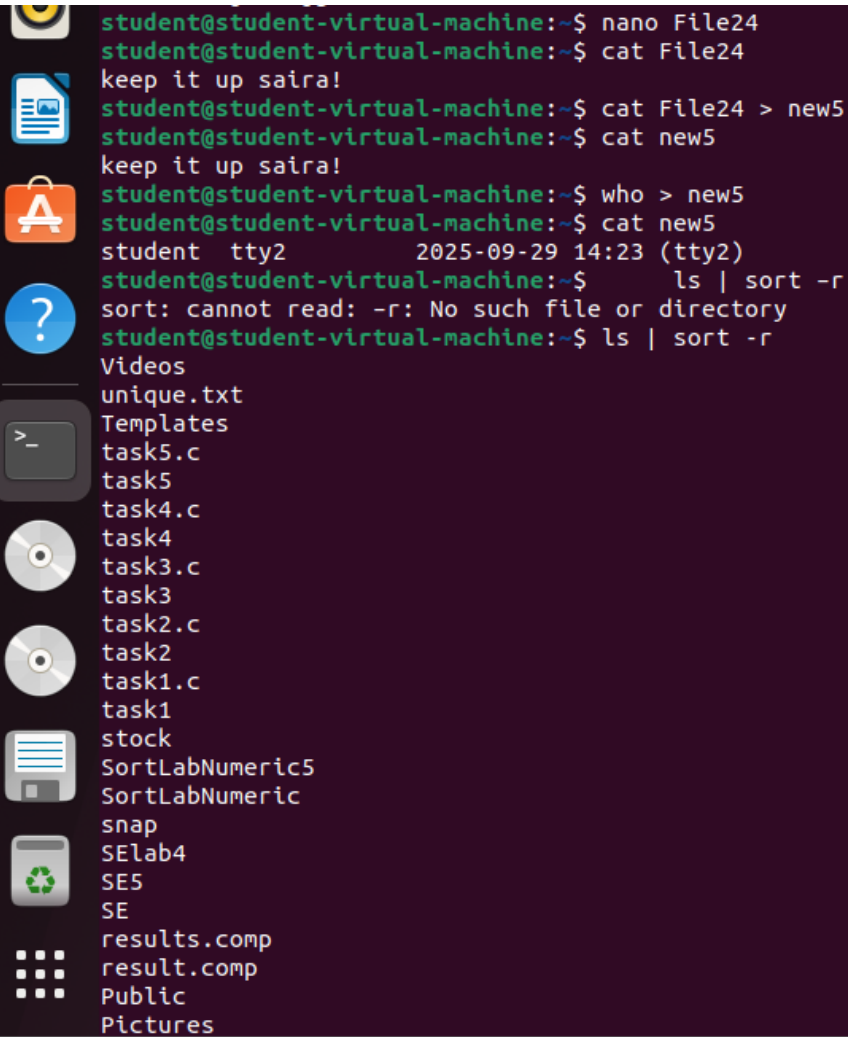
```
student@student-virtual-machine:~$ ls /bin /no_such_dir > all.log 2>&1
student@student-virtual-machine:~$ cat all.log
ls: cannot access '/no_such_dir': No such file or directory
/bin:
[
aa-enabled
aa-exec
aa-features-abi
aconnect
acpidbg
acpi_listen
add-apt-repository
addpart
addr2line
airscan-discover
alsabat
alsaloop
alsamixer
alsatplg
alsaucm
amidi
amixer
apg
apgbfm
aplay
aplaymidi
apport-bug
apport-cli
apport-collect
apport-unpack
appres
appstreamcli
apropos
apt
apt-add-repository
apt-cache
```

Task # 05

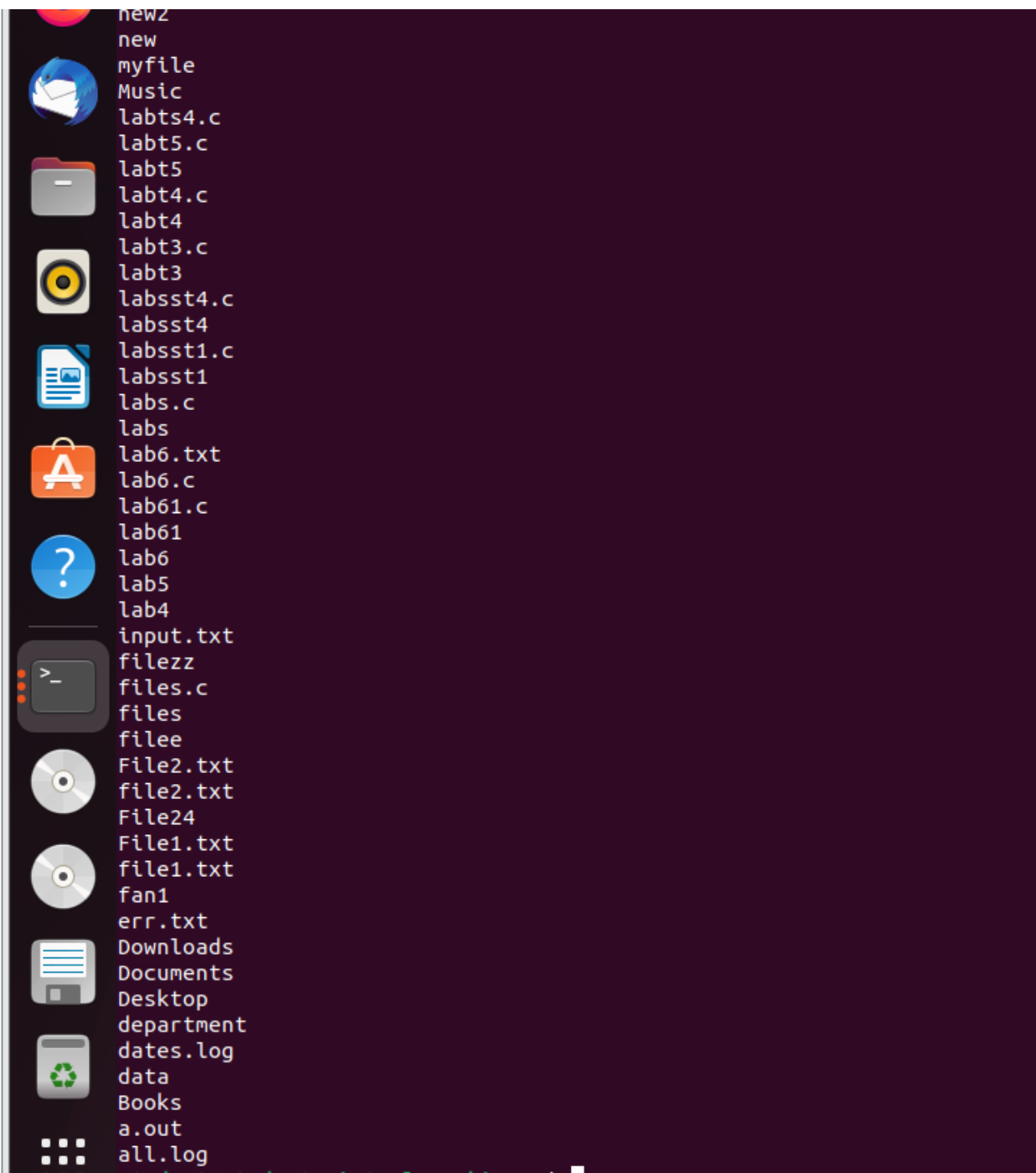
```
ch
bit
bit (2)
bit (3)
bit (4)

Activities Terminal 14:
student@student-virtual-machine:~$ nano input.txt
student@student-virtual-machine:~$ sort input.txt | uniq > unique.txt
student@student-virtual-machine:~$ cat unique.txt
apple
banana
mango
student@student-virtual-machine:~$ cat input.txt
apple
mango
apple
banana
student@student-virtual-machine:~$
```

Task # 06

A terminal window with a dark purple background. On the left is a vertical sidebar with various icons: a yellow circle with a black dot, a blue document icon, an orange shopping bag icon, a blue circle with a white question mark, a dark gray terminal icon, a CD icon, a floppy disk icon, a document icon, a green recycling icon, and a 3x3 grid of white dots. The terminal text shows a series of commands and their outputs.

```
student@student-virtual-machine:~$ nano File24
student@student-virtual-machine:~$ cat File24
keep it up saira!
student@student-virtual-machine:~$ cat File24 > new5
student@student-virtual-machine:~$ cat new5
keep it up saira!
student@student-virtual-machine:~$ who > new5
student@student-virtual-machine:~$ cat new5
student  tty2          2025-09-29 14:23 (tty2)
student@student-virtual-machine:~$ ls | sort -r
sort: cannot read: -r: No such file or directory
student@student-virtual-machine:~$ ls | sort -r
Videos
unique.txt
Templates
task5.c
task5
task4.c
task4
task3.c
task3
task2.c
task2
task1.c
task1
stock
SortLabNumeric5
SortLabNumeric
snap
SElab4
SE5
SE
results.comp
result.comp
Public
Pictures
```



```
student@student-virtual-machine:~$ ls | sort -r >> new
student@student-virtual-machine:~$ ls | sort -r >> new5
student@student-virtual-machine:~$ cat new5
student  tty2          2025-09-29 14:23 (tty2)
Videos
unique.txt
Templates
task5.c
task5
task4.c
task4
task3.c
task3
task2.c
task2
task1.c
task1
stock
SortLabNumeric5
SortLabNumeric
snap
SElab4
SE5
SE
results.comp
result.comp
Public
Pictures
```

Task # 07

```
student@student-virtual-machine:~$ nano fruits.txt
student@student-virtual-machine:~$ sort fruits.txt | grep "ap"
apple
grape
pineapple
student@student-virtual-machine:~$
```

ve the mouse pointer inside or press Ctrl+G.