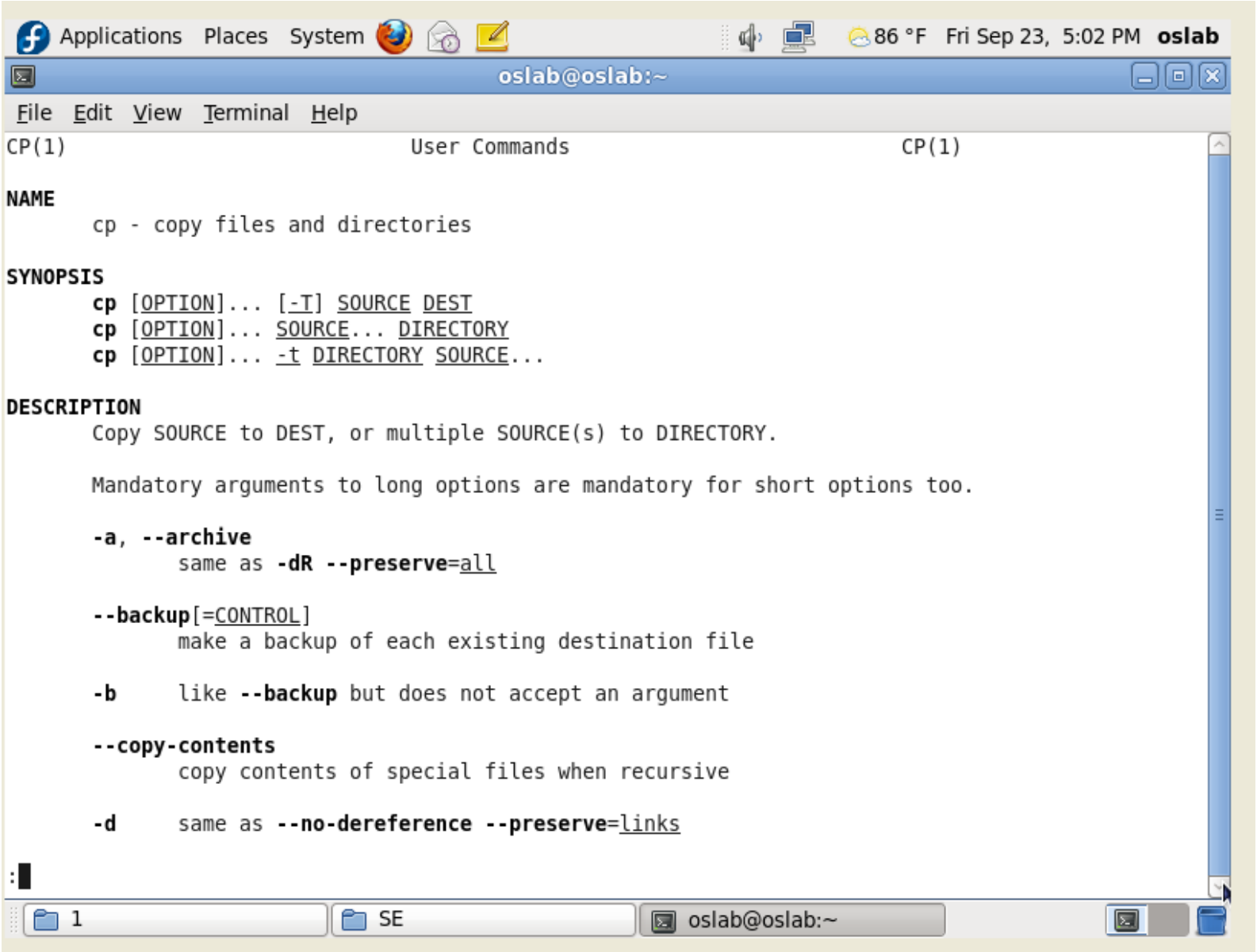
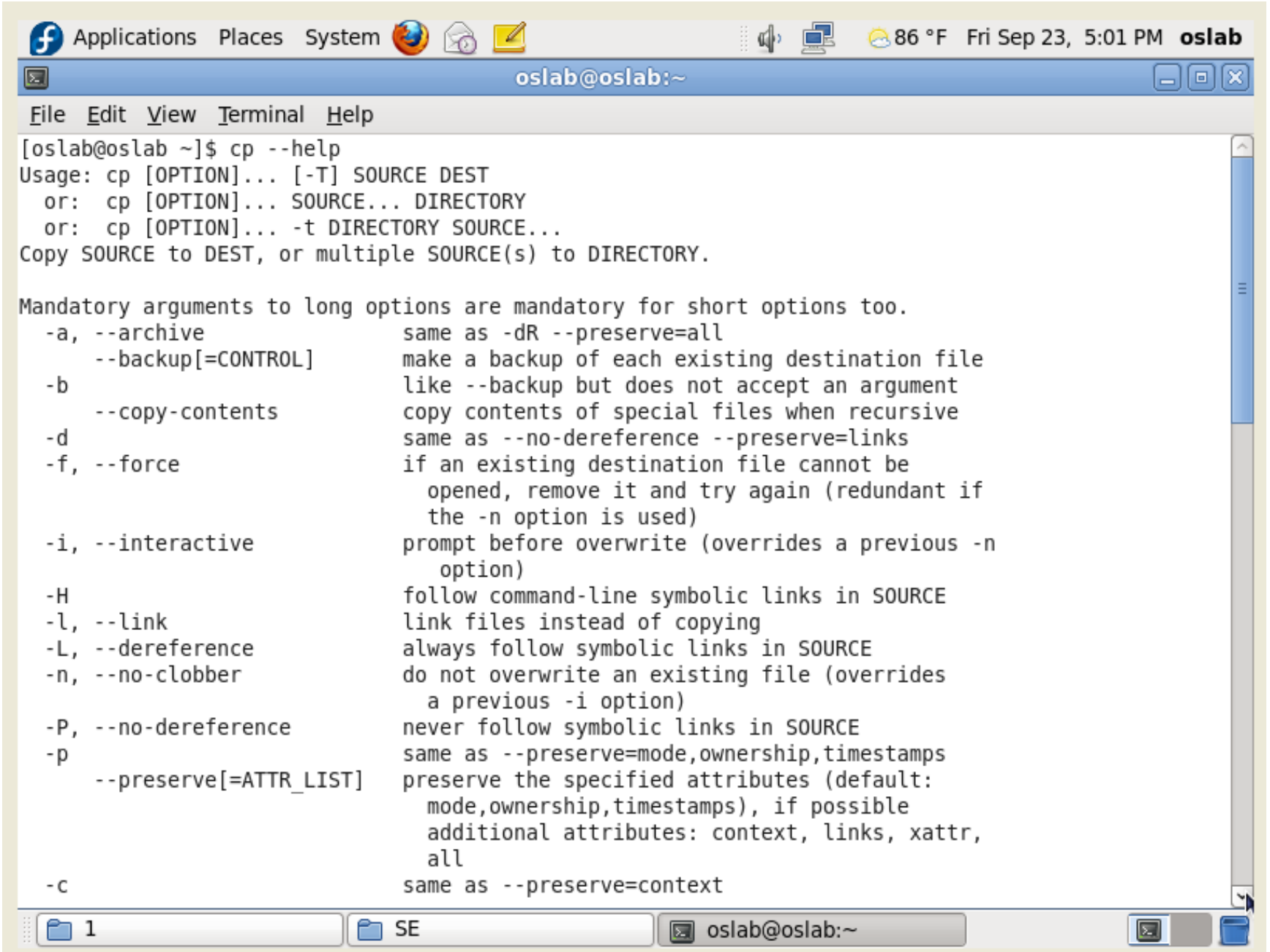
OS LAB -4

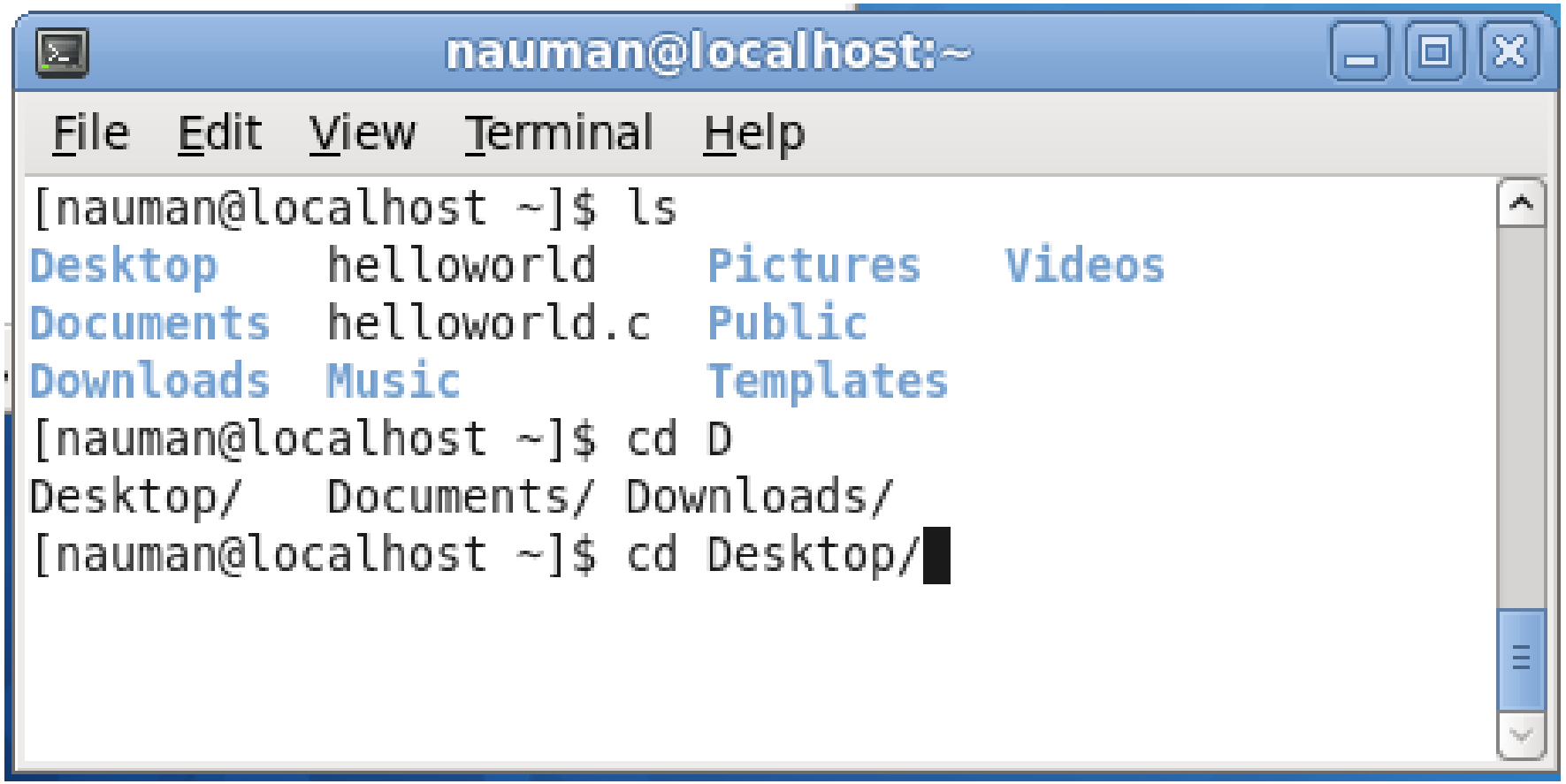
Engr. Nauman

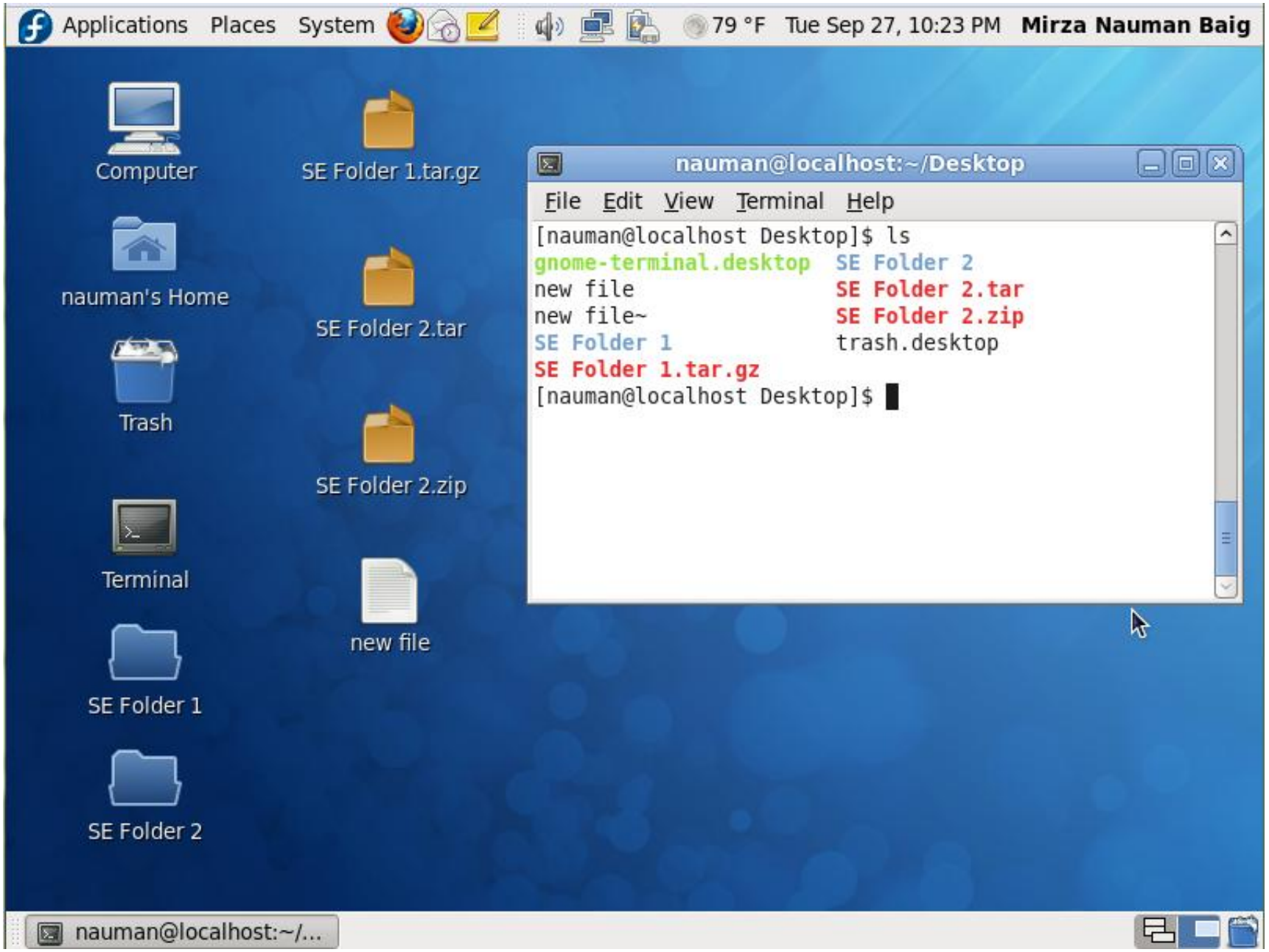
For Help man [command]




Applications Places System
86 °F Fri Sep 23, 5:01 PM oslab
oslab@oslab:~
File Edit View Terminal Help
[oslab@oslab ~]$ cp --help
Usage: cp [OPTION]... [-T] SOURCE DEST
or: cp [OPTION]... SOURCE... DIRECTORY
or: cp [OPTION]... -t DIRECTORY SOURCE...
Copy SOURCE to DEST, or multiple SOURCE(s) to DIRECTORY.
Mandatory arguments to long options are mandatory for short options too.
-a, --archive same as -dR --preserve=all
--backup[=CONTROL] make a backup of each existing destination file
-b like --backup but does not accept an argument
--copy-contents copy contents of special files when recursive
-d same as --no-dereference --preserve=links
-f, --force if an existing destination file cannot be
opened, remove it and try again (redundant if
the -n option is used)
-i, --interactive prompt before overwrite (overrides a previous -n
option)
-H follow command-line symbolic links in SOURCE
-l, --link link files instead of copying
-L, --dereference always follow symbolic links in SOURCE
-n, --no-clobber do not overwrite an existing file (overrides
a previous -i option)
-P, --no-dereference never follow symbolic links in SOURCE
-p same as --preserve=mode,ownership,timestamps
--preserve[=ATTR_LIST] preserve the specified attributes (default:
mode,ownership,timestamps), if possible
additional attributes: context, links, xattr,
all
-c same as --preserve=context
1
SE
oslab@oslab:~

Press TAB

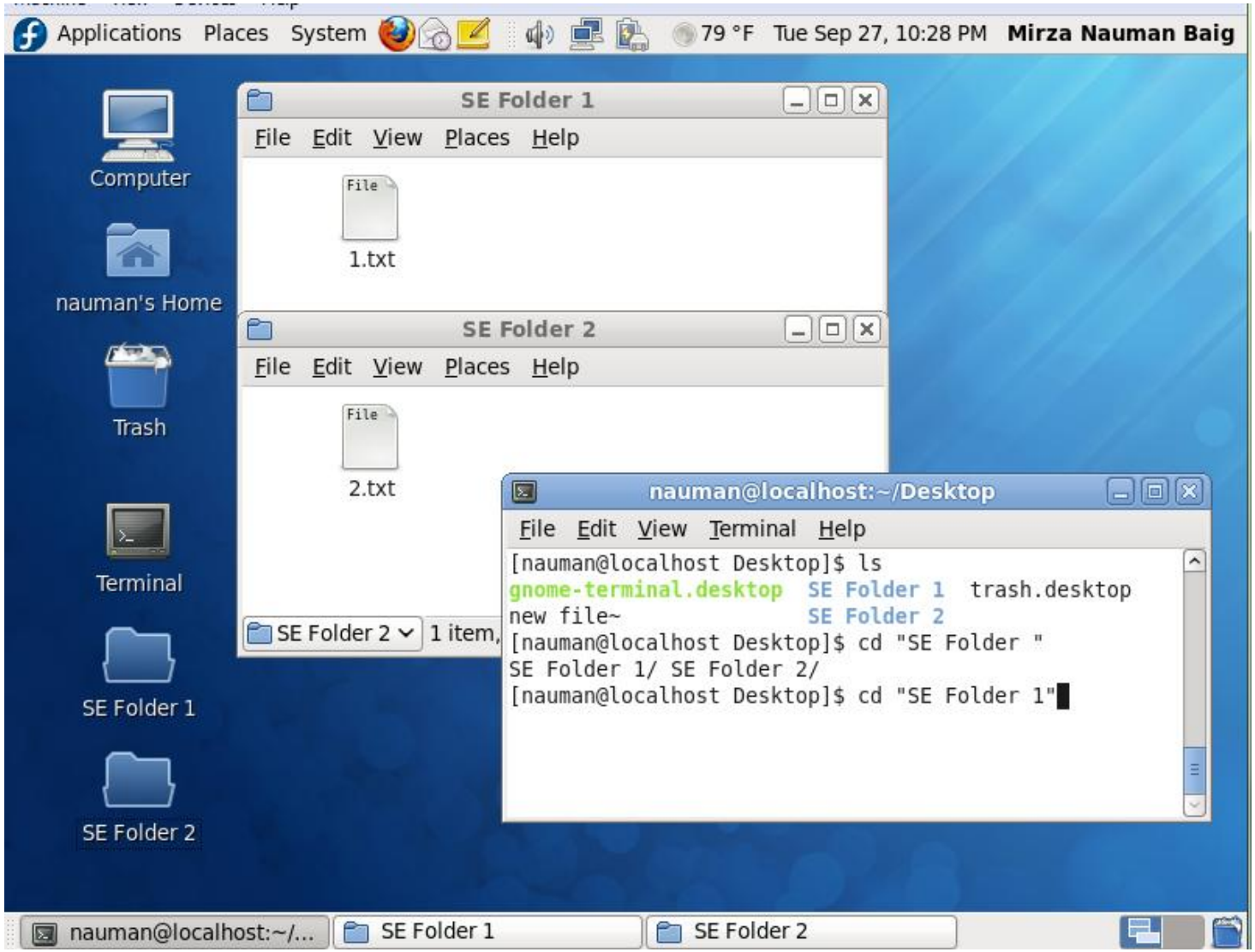

nauman@localhost:~
File Edit View Terminal Help
[nauman@localhost ~]$ ls
Desktop helloworld Pictures Videos
Documents helloworld.c Public
Downloads Music Templates
[nauman@localhost ~]$ cd D
Desktop/ Documents/ Downloads/
[nauman@localhost ~]$ cd Desktop/


Applications
Places
System
79 °F
Tue Sep 27, 10:23 PM
Mirza Nauman Baig
Computer
SE Folder 1.tar.gz
nauman's Home
SE Folder 2.tar
Trash
SE Folder 2.zip
Terminal
new file
SE Folder 1
SE Folder 2
nauman@localhost:~/Desktop
File Edit View Terminal Help
[nauman@localhost Desktop]$ ls
gnome-terminal.desktop
new file
new file~
SE Folder 1
SE Folder 1.tar.gz
SE Folder 2
SE Folder 2.tar
SE Folder 2.zip
trash.desktop
[nauman@localhost Desktop]$
nauman@localhost:~/...

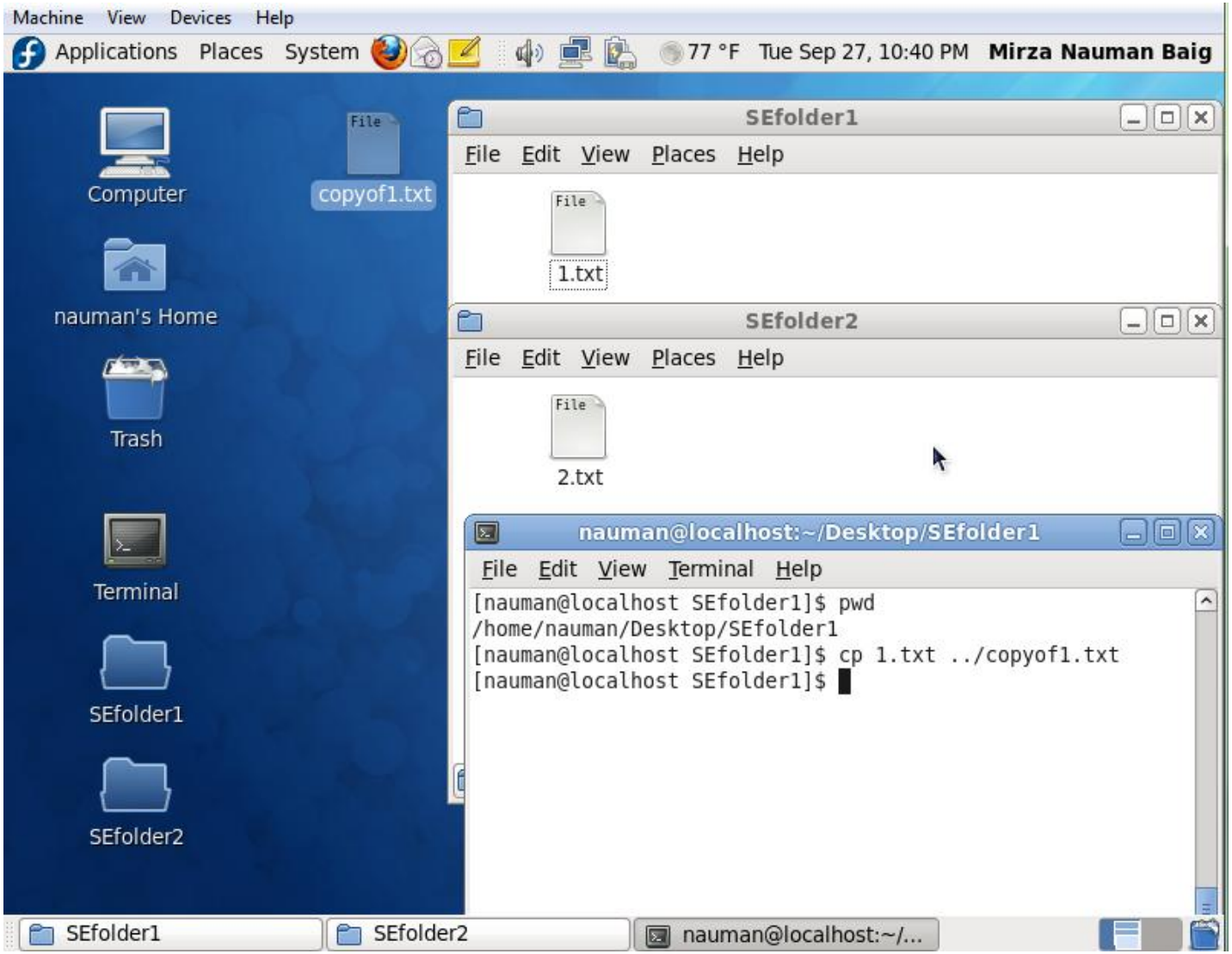
Issues in last LAB

- Who to set system Date Time
- date -s "2 OCT 2011 18:00:00"
  OR
  date --set="2 OCT 2011 18:00:00"

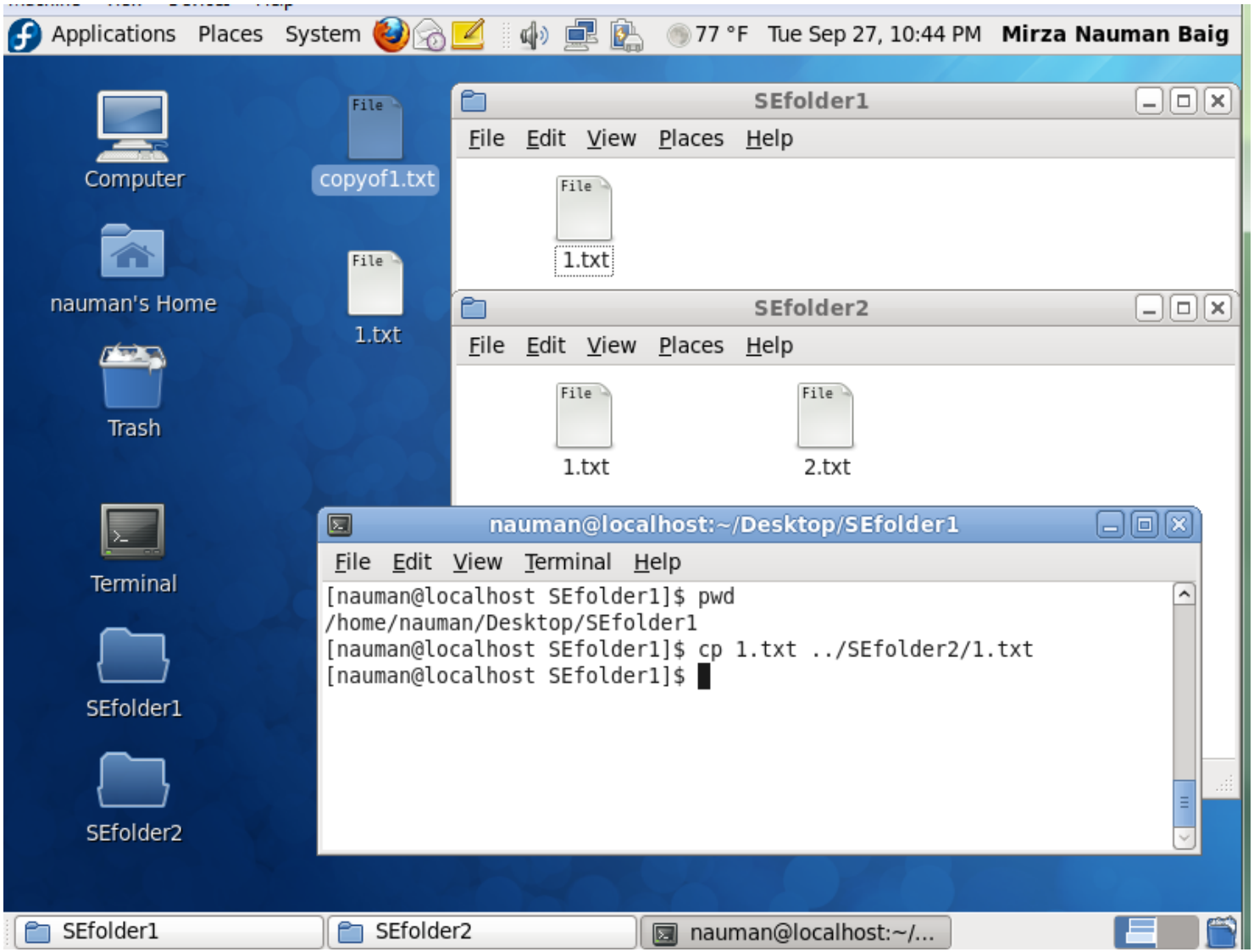
Use “ ” for folders having spaces in the name



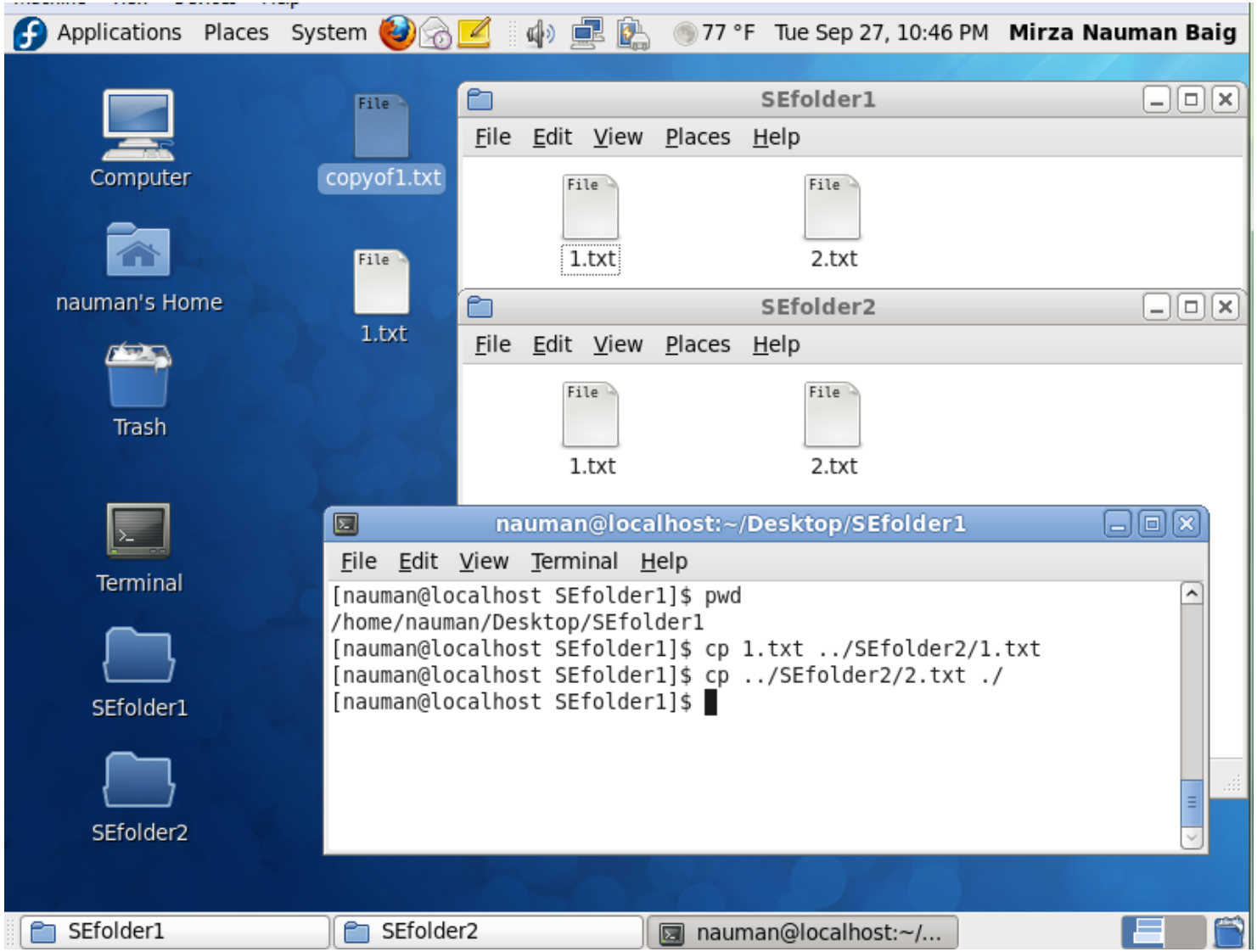
Copy in the parent folder ../
(in this case parent folder is Desktop)



Copy using relative path



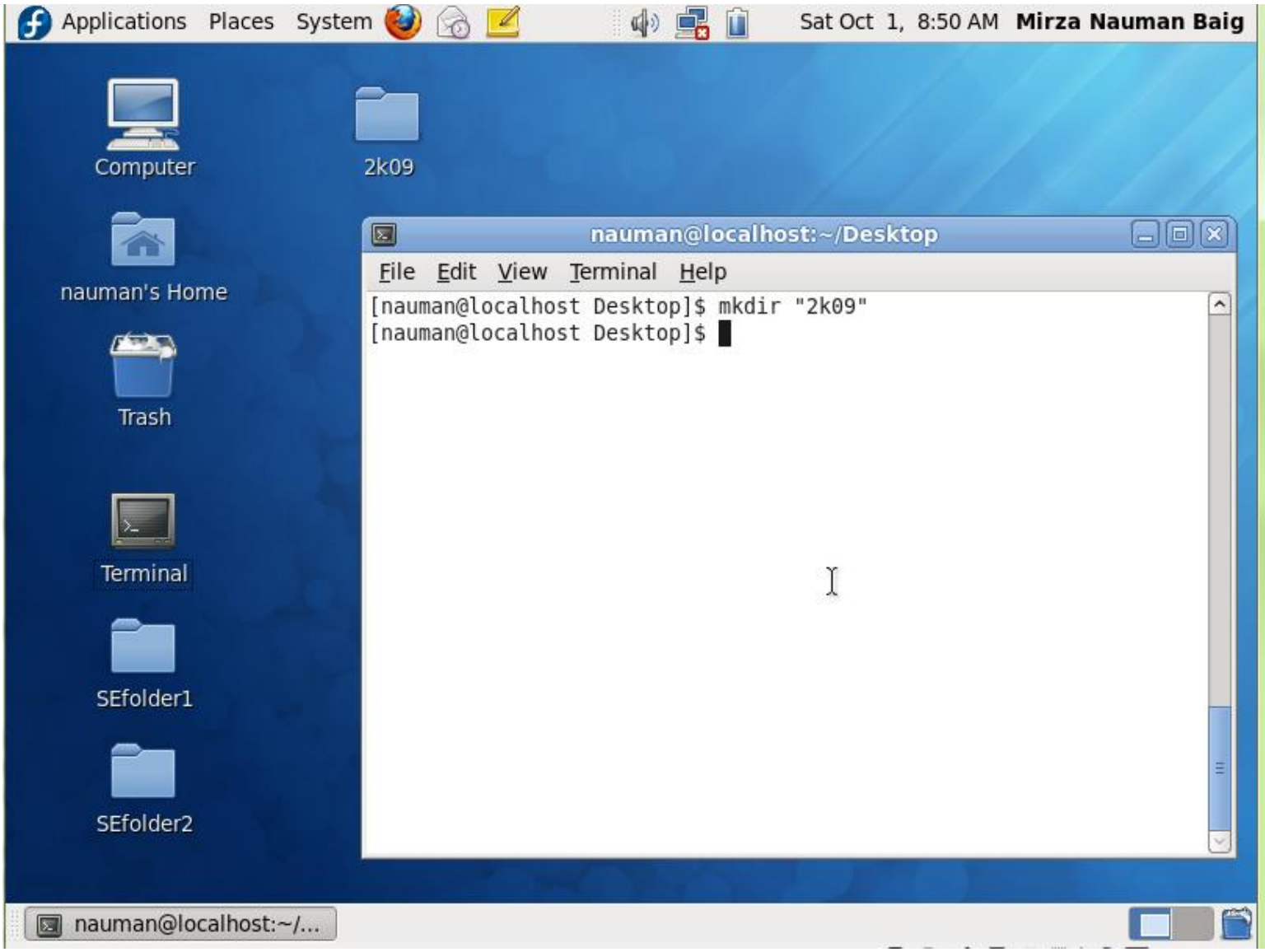
Copy in the Current Directory ./



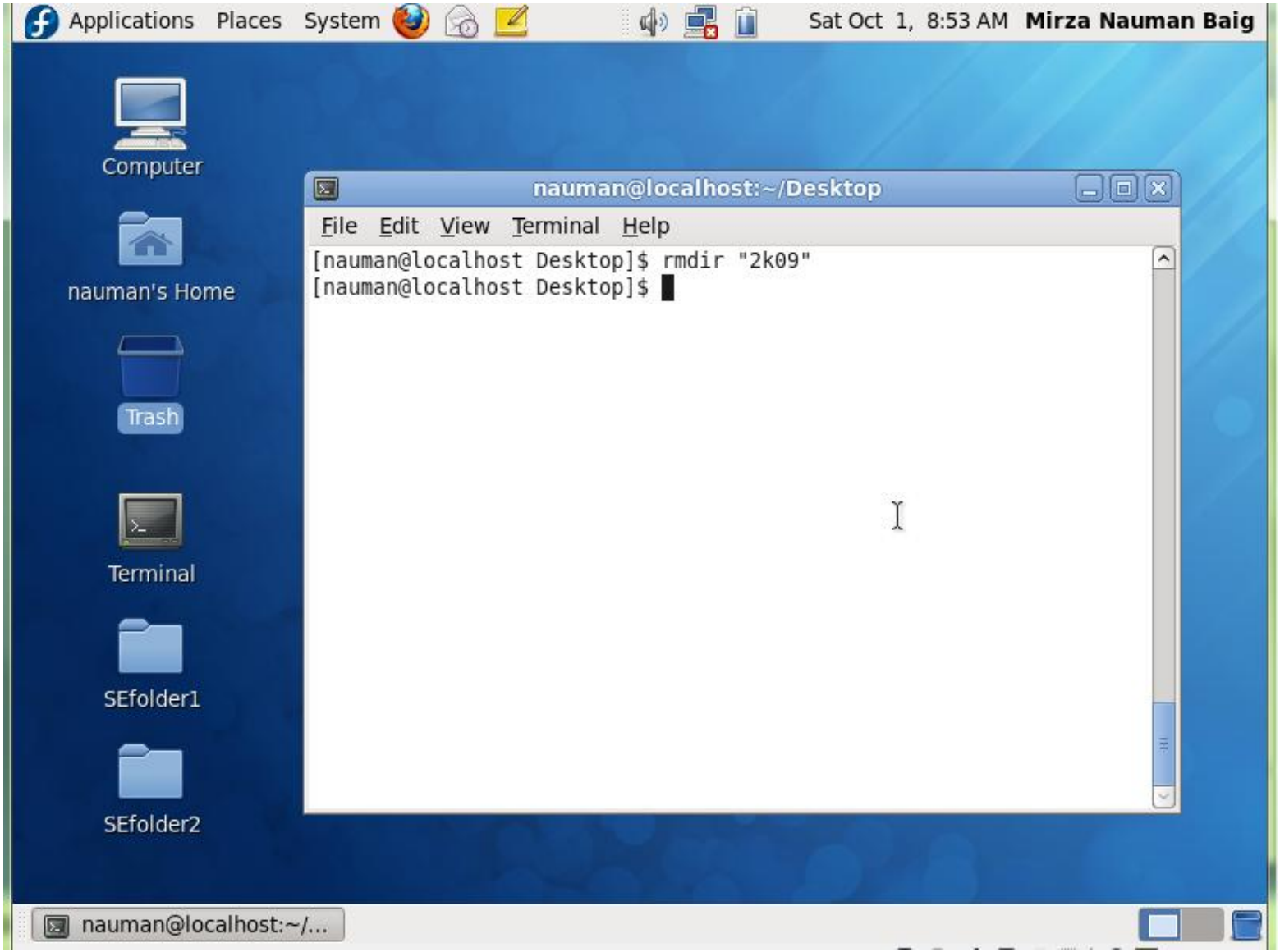
DOS Vs Linux

DOS Command	LINUX Command	Action
DIR	ls -l	List directory contents
TREE	tree	List directory recursively
CD	cd	Change directory
MKDIR	mkdir	Make a new directory
RMDIR	rmdir	Remove a directory
CHDIR	pwd	Display directory location
DEL	rm	Remove a file

mkdir


Applications
Places
System
Sat Oct 1, 8:50 AM
Mirza Nauman Baig
Computer
2k09
nauman's Home
Trash
Terminal
SEfolder1
SEfolder2
nauman@localhost:~/Desktop
File Edit View Terminal Help
[nauman@localhost Desktop]$ mkdir "2k09"
[nauman@localhost Desktop]$
nauman@localhost:~/...

rmdir


Applications
Places
System
Sat Oct 1, 8:53 AM
Mirza Nauman Baig
Computer
nauman's Home
Trash
Terminal
SEfolder1
SEfolder2
nauman@localhost:~/Desktop
File Edit View Terminal Help
[nauman@localhost Desktop]$ rmdir "2k09"
[nauman@localhost Desktop]$
nauman@localhost:~/...

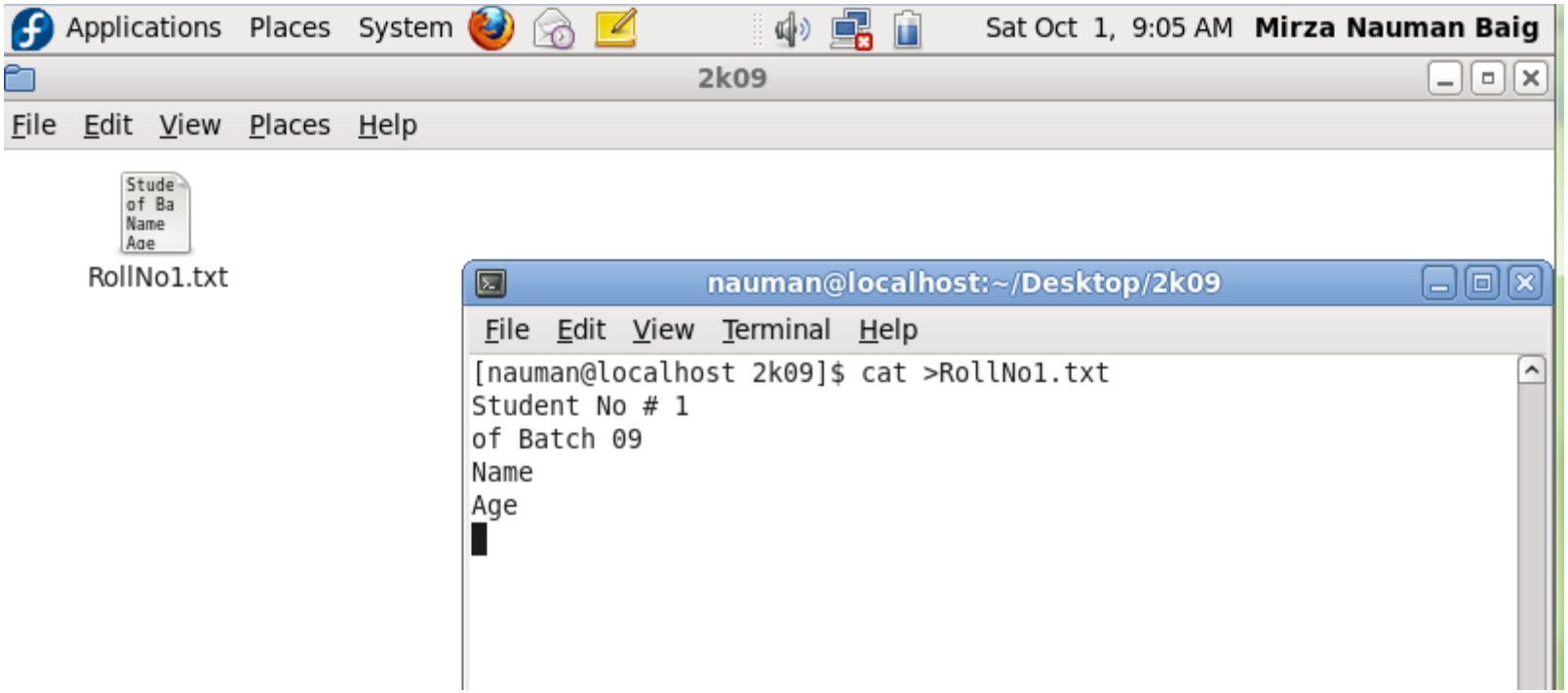
Create a Text File with cat

cat >filename.txt

Ctrl+D to save file

for display file

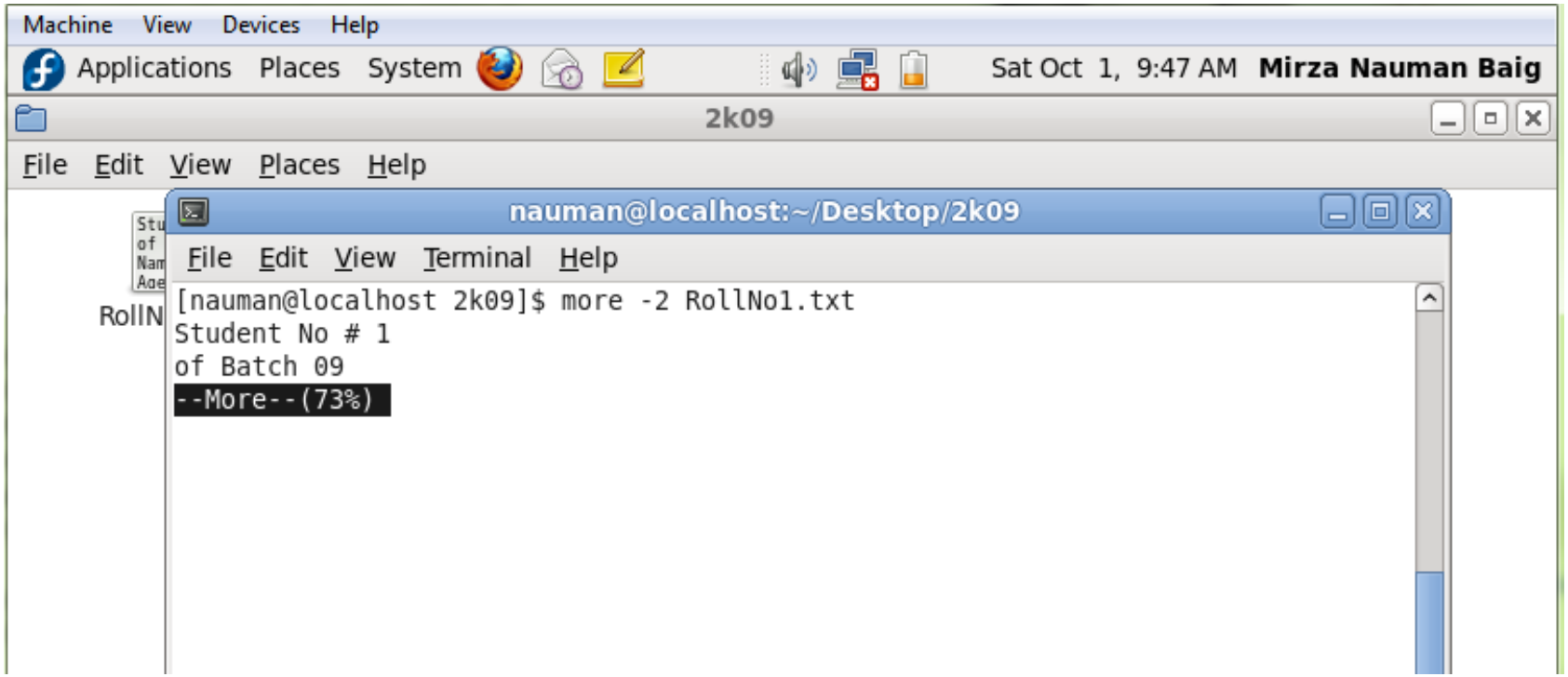
cat filename.txt



DOS Vs Linux

DOS Command	LINUX Command	Action
RMDIR /S (NT) DELTREE (Win 95...)	rm -r	Remove all directories and files below given directory
COPY	cp	Copy a file
XCOPY	cp -r	Copy all file of directory recursively
RENAME or MOVE	mv	Rename/move a file
TYPE	cat	Dump contents of a file to users screen
MORE	more	Pipe output a single page at a time
HELP or *COMMAND* /?	man	Online manuals

The command would begin displaying the file myfile.txt at line two



DOS Vs Linux

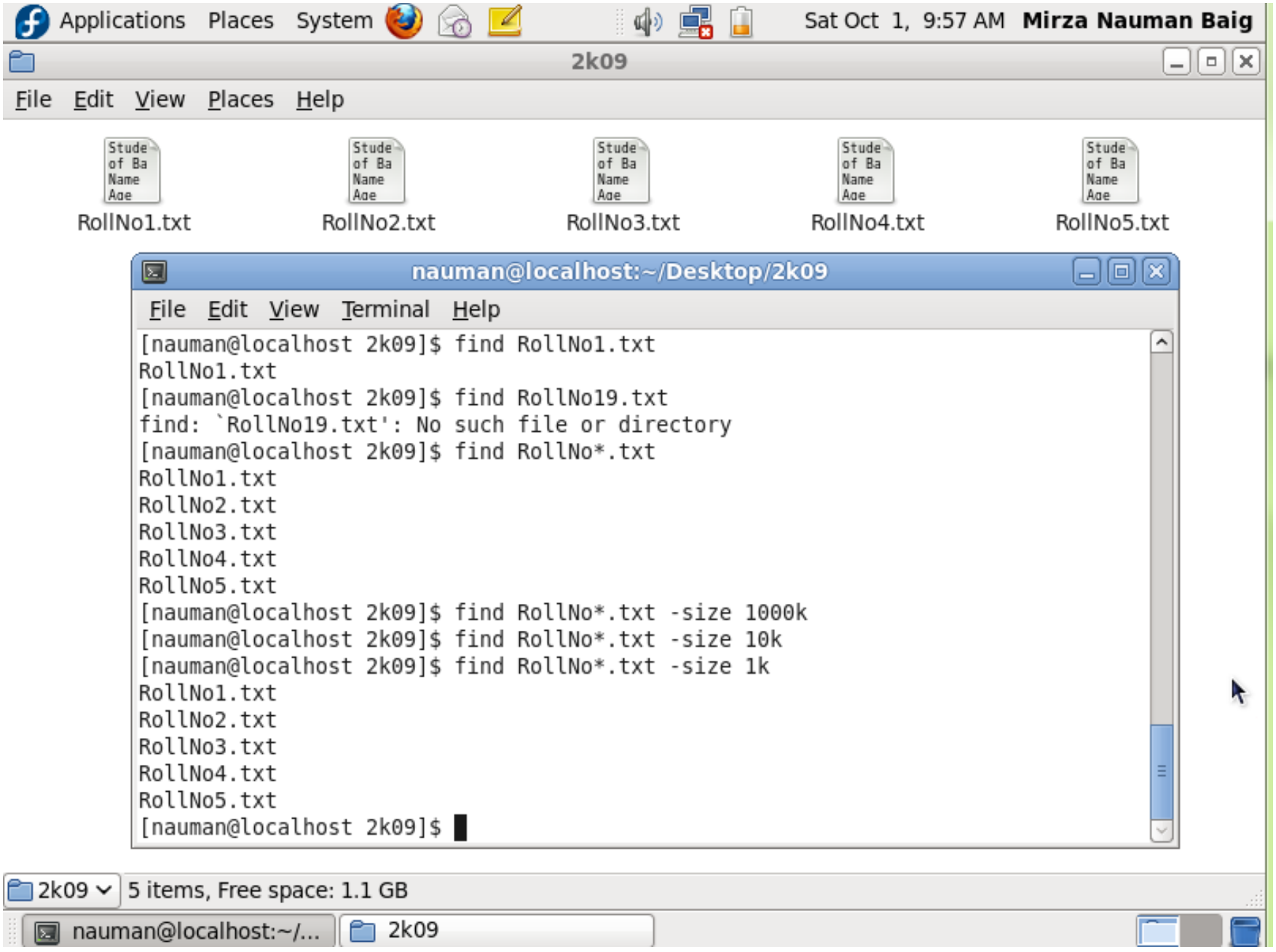
DOS Command	LINUX Command	Action
CLS	clear	Clear screen
EXIT	exit	Exit a shell
FIND	find	Look for a word in files given in command line
FC	diff	Compare two files and show differences. Also see mgdiff and tkdiff.
SET	set and env	Show environment variables
ECHO *text*	echo *text*	Echo text to screen

Environment variables

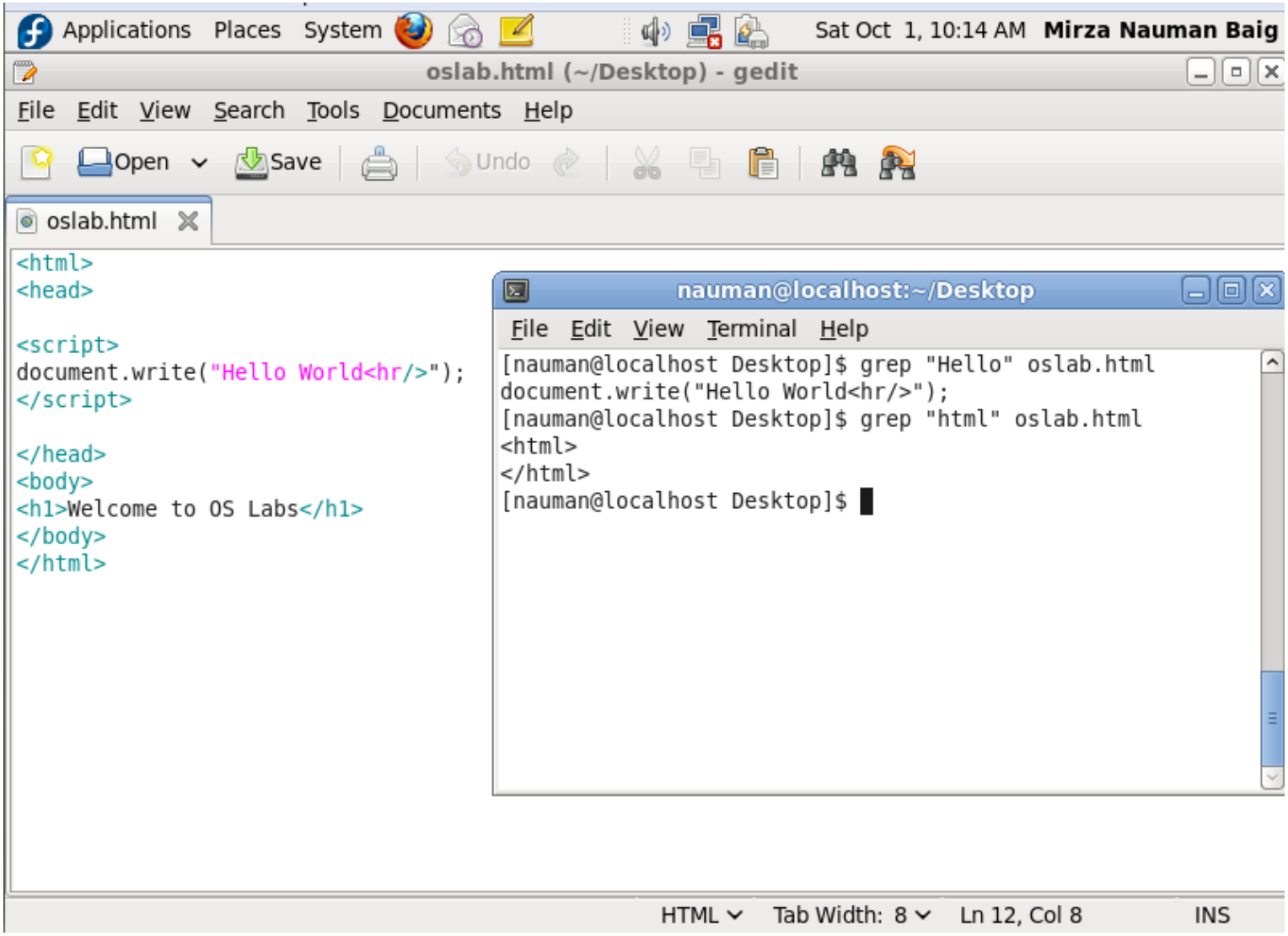
- are a set of dynamic named values that can affect the way running processes will behave on a computer.
- They can be said in some sense to create the operating environment in which a process runs. For example, an environment variable with a standard name can store the location that a particular computer system uses to store temporary files

find

- **find -name 'mypage.htm'**
- In the above command the system would search for any file named mypage.htm in the current directory and any subdirectory.
- **find / -name 'mypage.htm'**
- In the above example the system would search for any file named mypage.htm on the root and all subdirectories from the root.
- **find -name 'file*'**
- In the above example the system would search for any file beginning with file in the current directory and any subdirectory.
- **find -name '*' -size +1000k**
- In the above example the system would search for any file that is larger then 1000k.


Applications Places System
Sat Oct 1, 9:57 AM Mirza Nauman Baig
2k09
File Edit View Places Help
RollNo1.txt
RollNo2.txt
RollNo3.txt
RollNo4.txt
RollNo5.txt
nauman@localhost:~/Desktop/2k09
File Edit View Terminal Help
[nauman@localhost 2k09]$ find RollNo1.txt
RollNo1.txt
[nauman@localhost 2k09]$ find RollNo19.txt
find: `RollNo19.txt': No such file or directory
[nauman@localhost 2k09]$ find RollNo*.txt
RollNo1.txt
RollNo2.txt
RollNo3.txt
RollNo4.txt
RollNo5.txt
[nauman@localhost 2k09]$ find RollNo*.txt -size 1000k
[nauman@localhost 2k09]$ find RollNo*.txt -size 10k
[nauman@localhost 2k09]$ find RollNo*.txt -size 1k
RollNo1.txt
RollNo2.txt
RollNo3.txt
RollNo4.txt
RollNo5.txt
[nauman@localhost 2k09]$
2k09 5 items, Free space: 1.1 GB
nauman@localhost:~/...
2k09

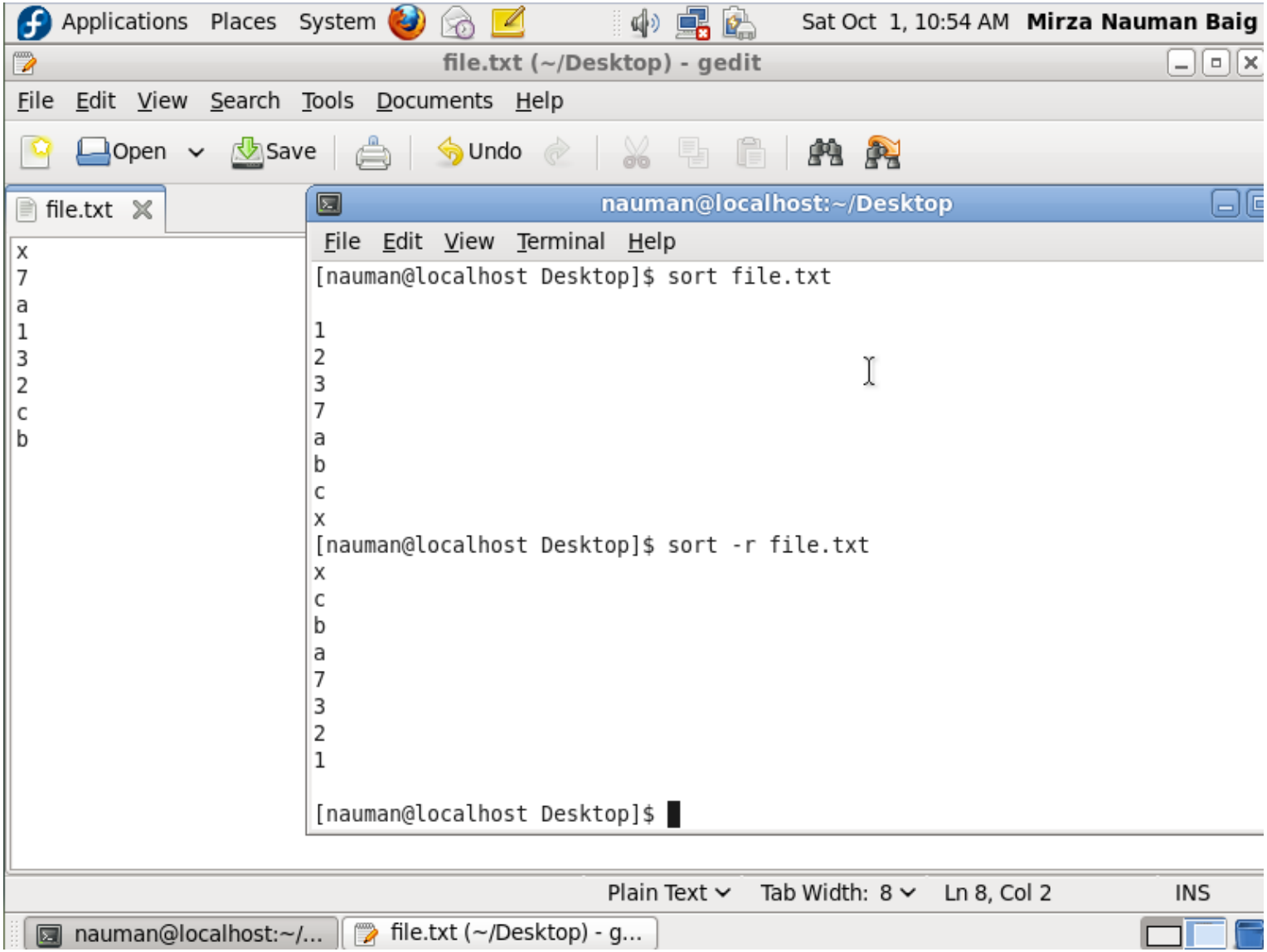
Search in a file



DOS Vs Linux

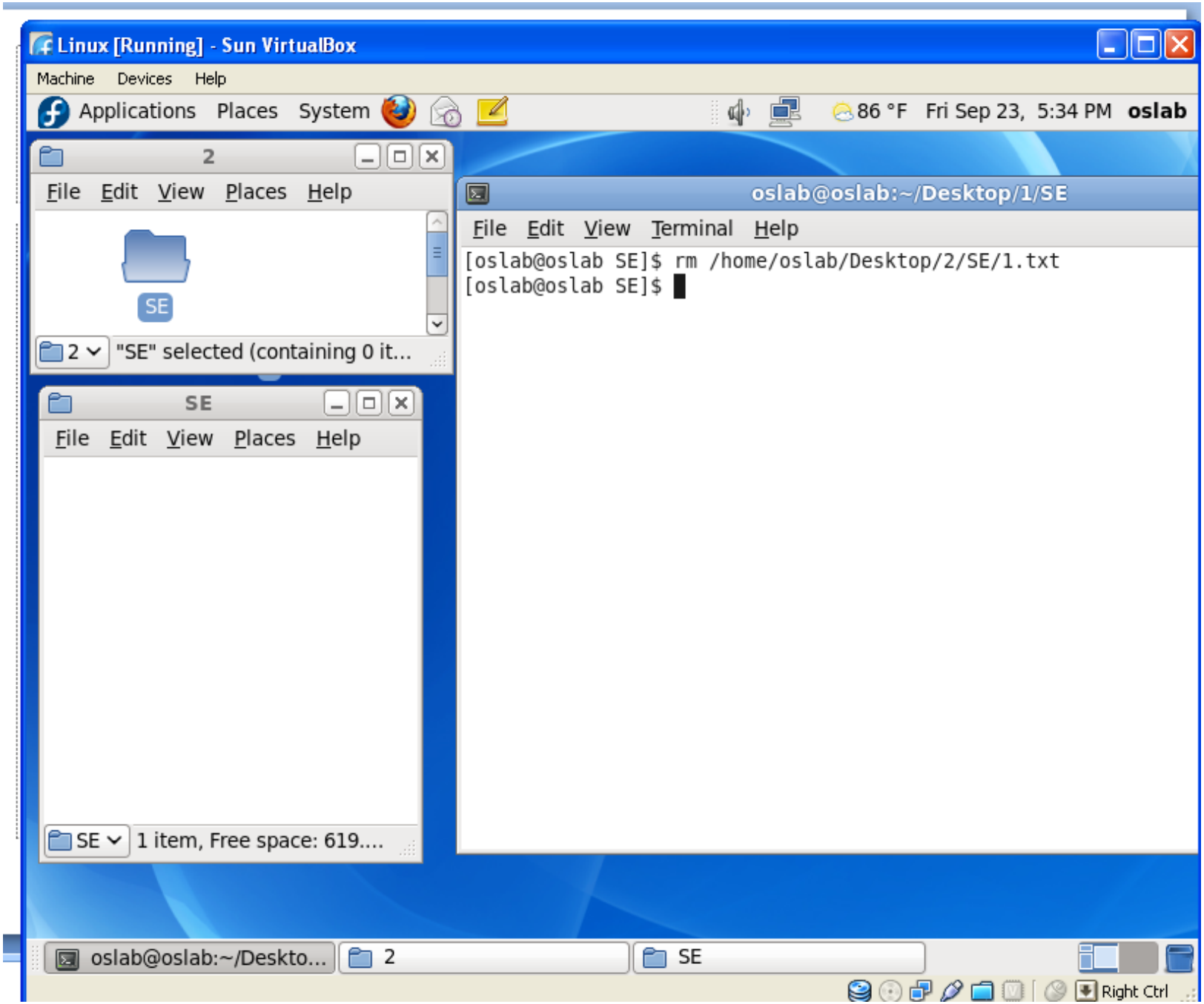
DOS Command	LINIUX Command	Action
SET *variable*	export variable name	Set environment variables
PATH	echo $PATH	Display search path for executables
DATE or TIME	date	Show date. (also set date - DOS only)
SORT	sort	Sort data alphabetically/numerically
EDIT *filename.txt*	vim	Edit a file. The Linux editor which looks most like DOS edit is probably Pico.
\	/	Directory path delimiter
.\	./	Current directory
..\	../	Parent directory

sort


Applications Places System Sat Oct 1, 10:54 AM Mirza Nauman Baig
file.txt (~/Desktop) - gedit
File Edit View Search Tools Documents Help
Open Save Undo
file.txt
x
7
a
1
3
2
c
b
nauman@localhost:~/Desktop
File Edit View Terminal Help
[nauman@localhost Desktop]$ sort file.txt
1
2
3
7
a
b
c
x
[nauman@localhost Desktop]$ sort -r file.txt
x
c
b
a
7
3
2
1
[nauman@localhost Desktop]$
Plain Text Tab Width: 8 Ln 8, Col 2 INS
nauman@localhost:~/...
file.txt (~/Desktop) - g...

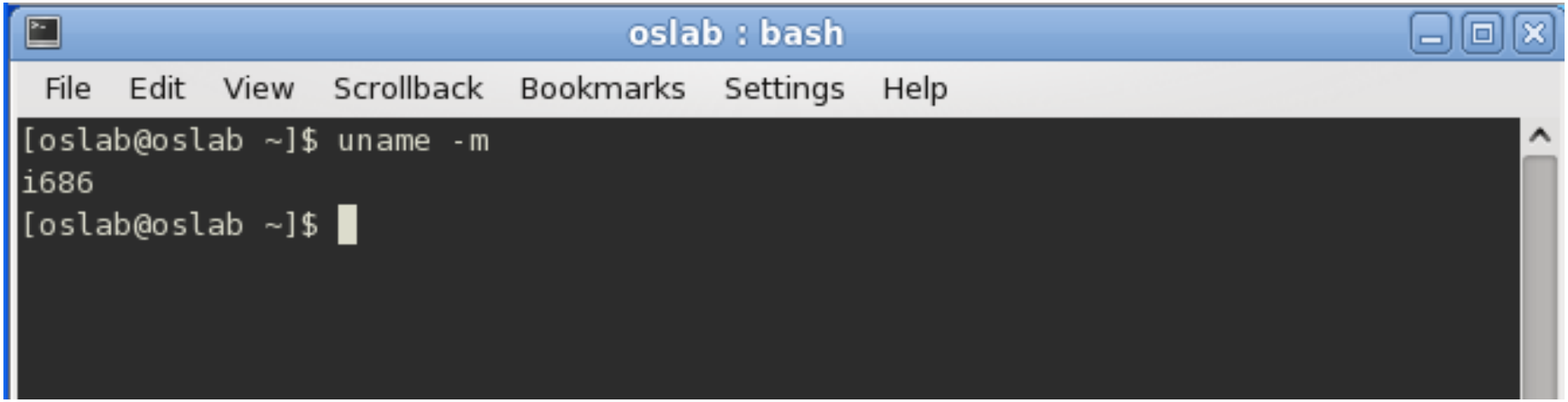
Other commands

- Rename folder
- Rename file
- Delete folder having files in it
- Free
- History

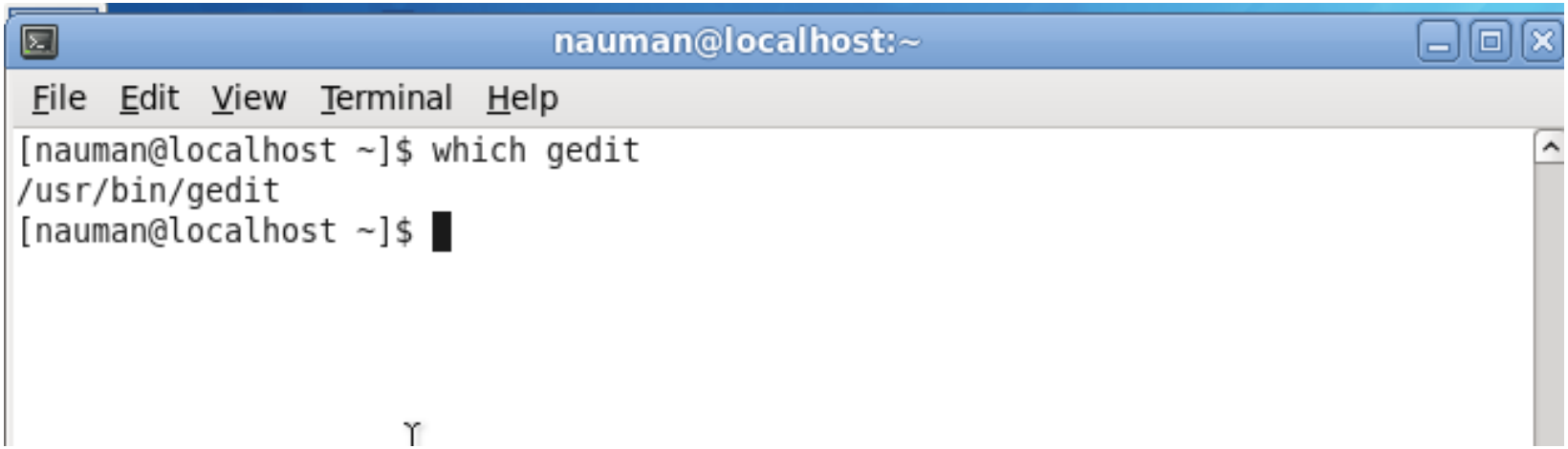

Linux [Running] - Sun VirtualBox
Machine Devices Help
Applications Places System
86 °F Fri Sep 23, 5:34 PM oslab
2
File Edit View Places Help
SE
2 "SE" selected (containing 0 it...
SE
File Edit View Places Help
SE 1 item, Free space: 619....
oslab@oslab:~/Desktop/1/SE
File Edit View Terminal Help
[oslab@oslab SE]$ rm /home/oslab/Desktop/2/SE/1.txt
[oslab@oslab SE]$
oslab@oslab:~/Deskto...
2
SE
Right Ctrl

uname –m

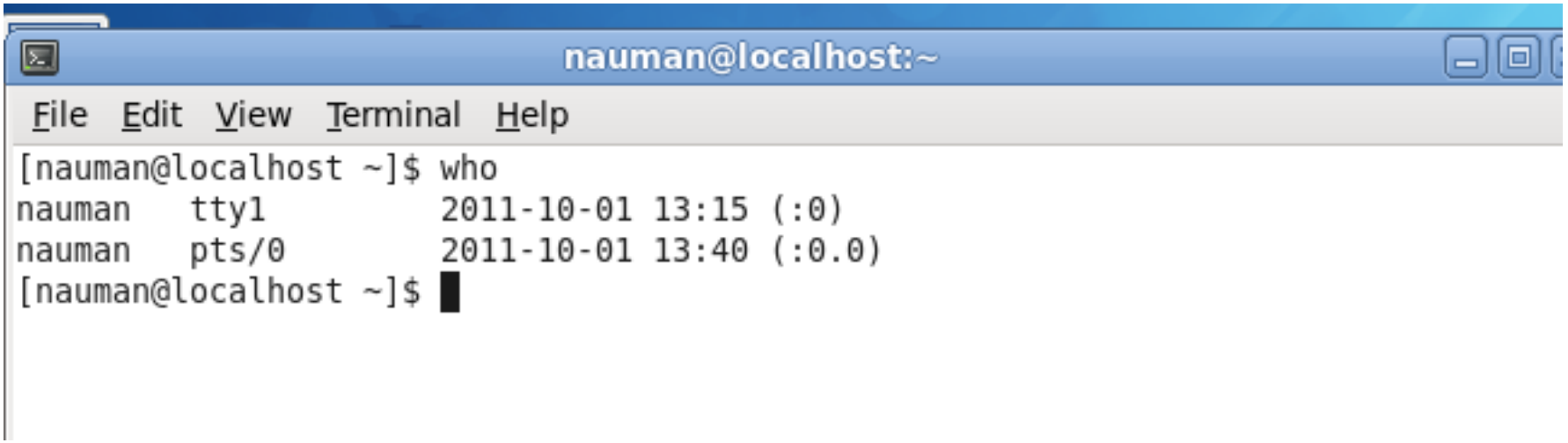
- x86_64 when it is an kernel 64 bits
- i686 for 32 bits kernel



which


nauman@localhost:~
File Edit View Terminal Help
[nauman@localhost ~]$ which gedit
/usr/bin/gedit
[nauman@localhost ~]$

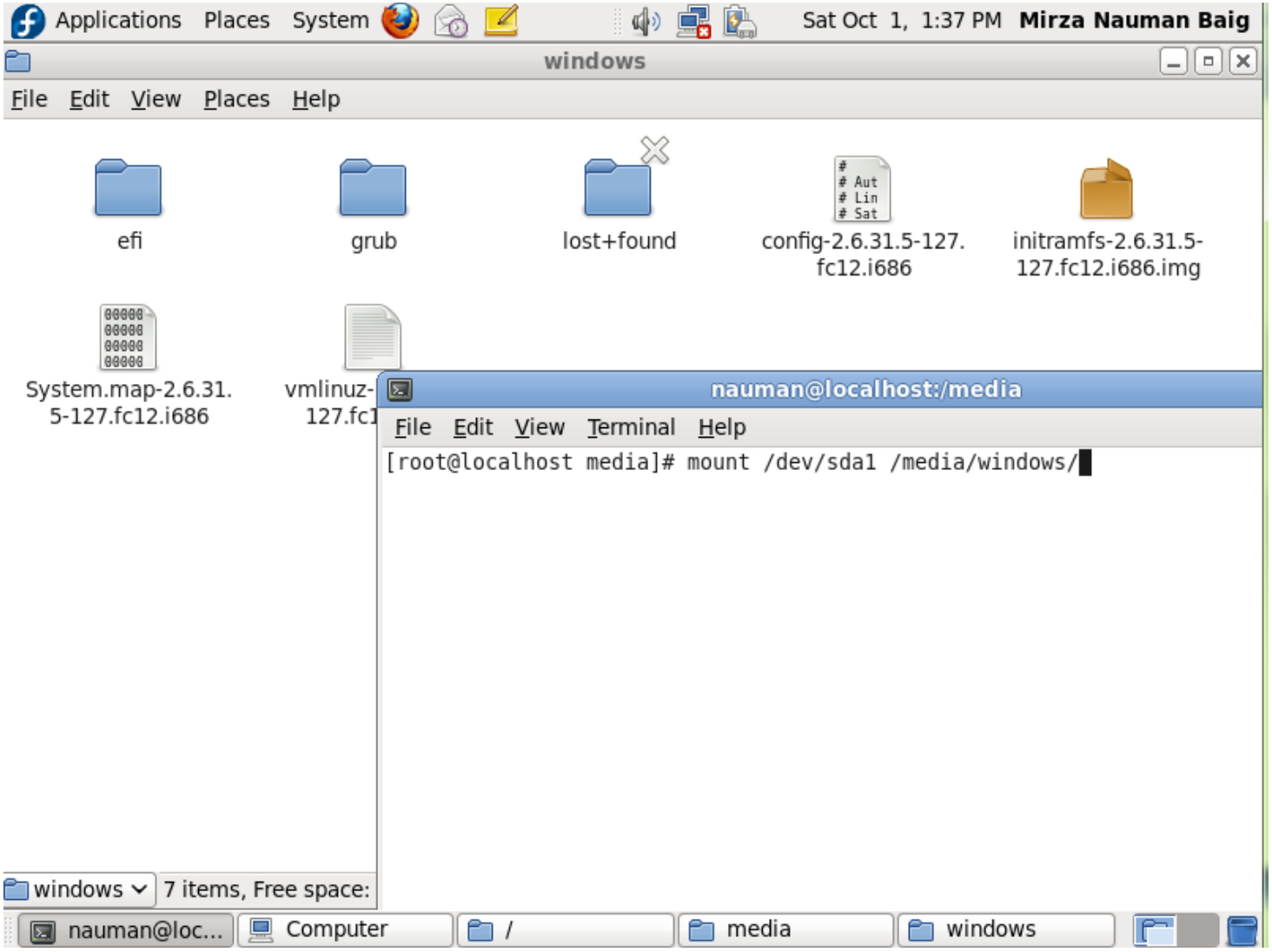
who


nauman@localhost:~
File Edit View Terminal Help
[nauman@localhost ~]$ who
nauman tty1 2011-10-01 13:15 (:0)
nauman pts/0 2011-10-01 13:40 (:0.0)
[nauman@localhost ~]$

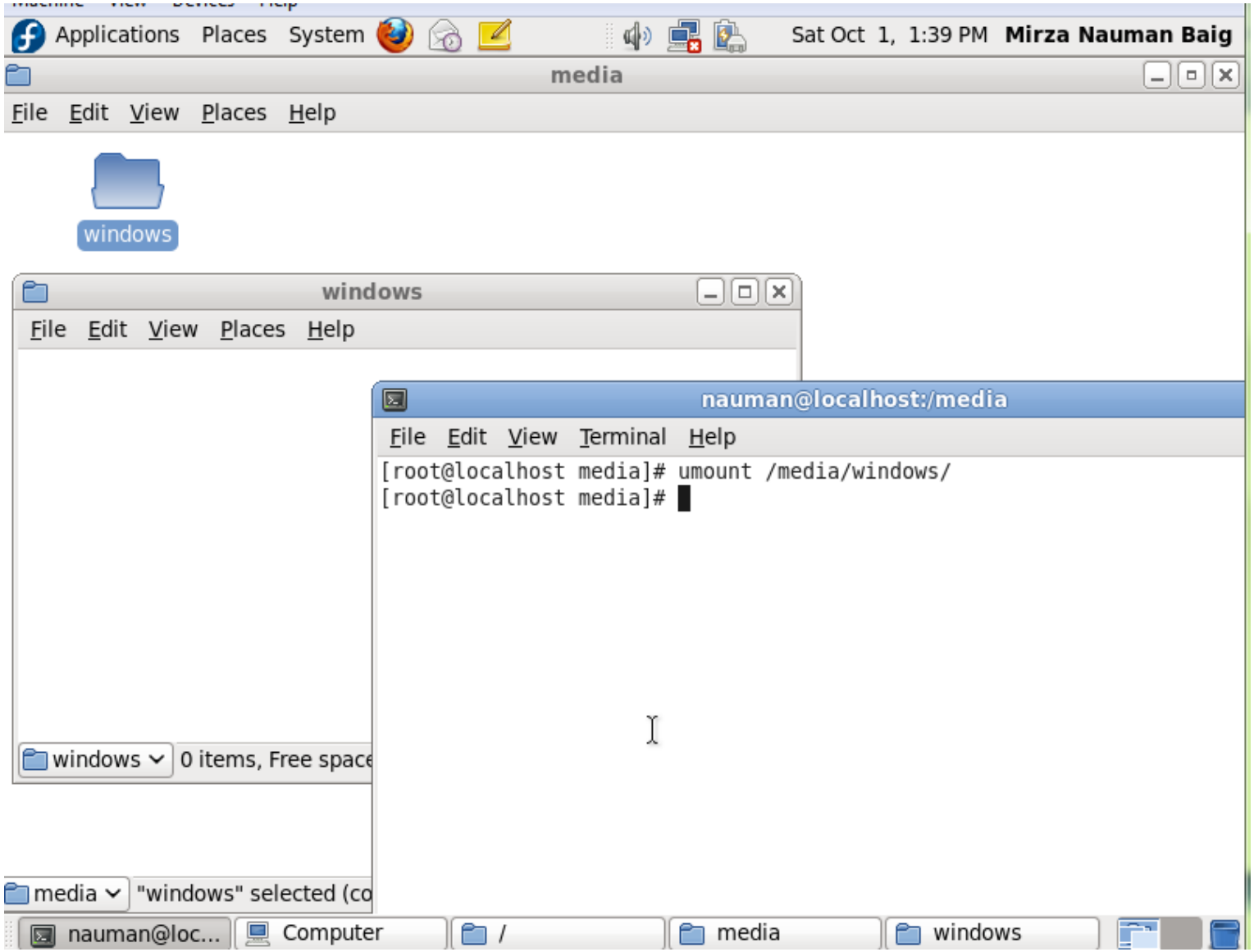
mount/unmount

- su root
- ls /dev
- fdisk –l
- Making a mount point
- mkdir /mnt/windows/
- mkdir /media/windows/ (ubuntu)
- mount /dev/sda1 /media/windows/
- umount /media/windows/

mount

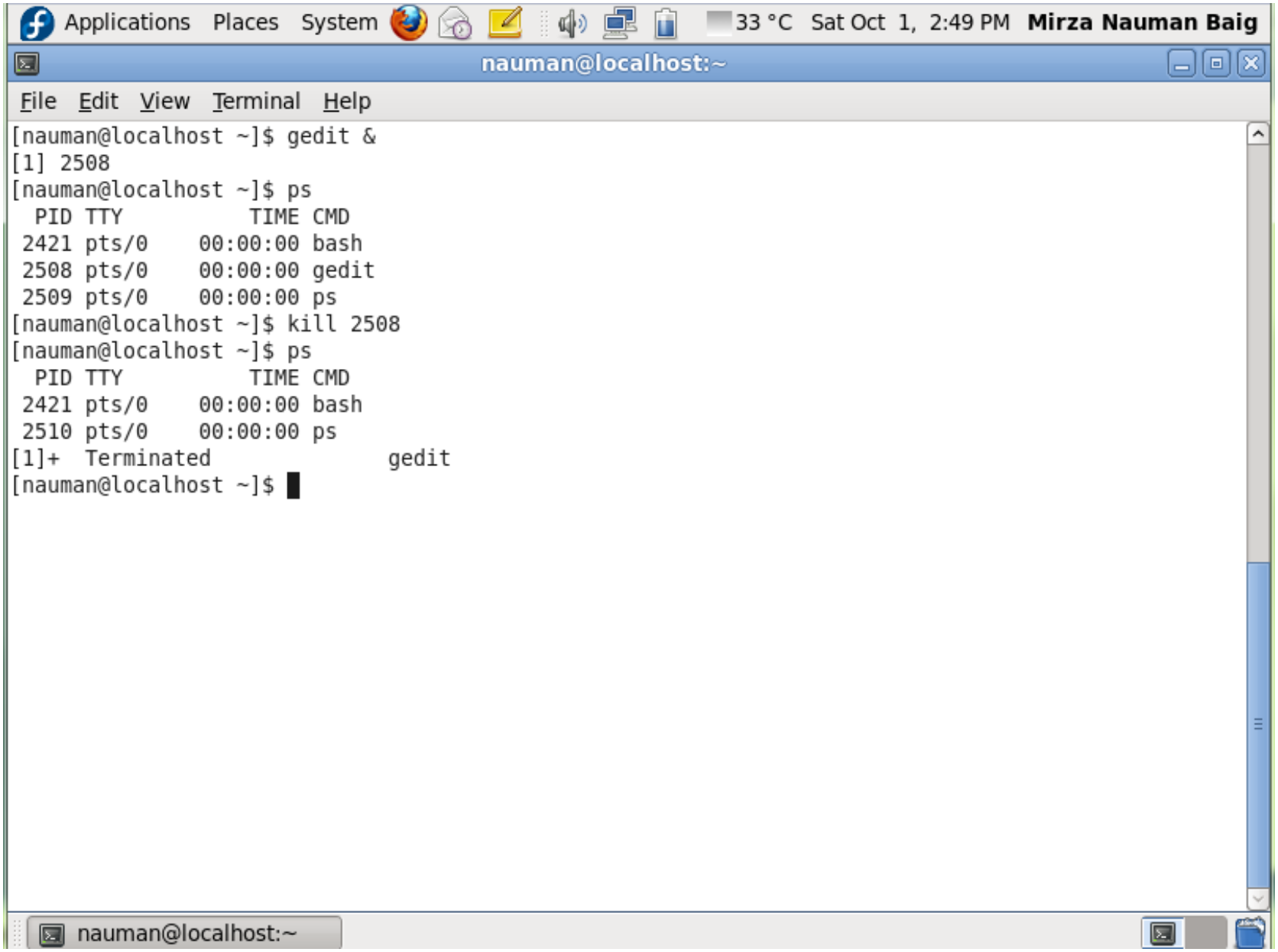

Applications Places System
Sat Oct 1, 1:37 PM Mirza Nauman Baig
windows
File Edit View Places Help
efi
grub
lost+found
config-2.6.31.5-127.fc12.i686
initramfs-2.6.31.5-127.fc12.i686.img
System.map-2.6.31.5-127.fc12.i686
vmlinuz-127.fc1
nauman@localhost:/media
File Edit View Terminal Help
[root@localhost media]# mount /dev/sda1 /media/windows/
windows 7 items, Free space:
nauman@loc...
Computer
/
media
windows

umount


Applications Places System
Sat Oct 1, 1:39 PM Mirza Nauman Baig
media
File Edit View Places Help
windows
windows
File Edit View Places Help
windows 0 items, Free space
nauman@localhost:/media
File Edit View Terminal Help
[root@localhost media]# umount /media/windows/
[root@localhost media]#
media "windows" selected (co
nauman@loc...
Computer
/
media
windows

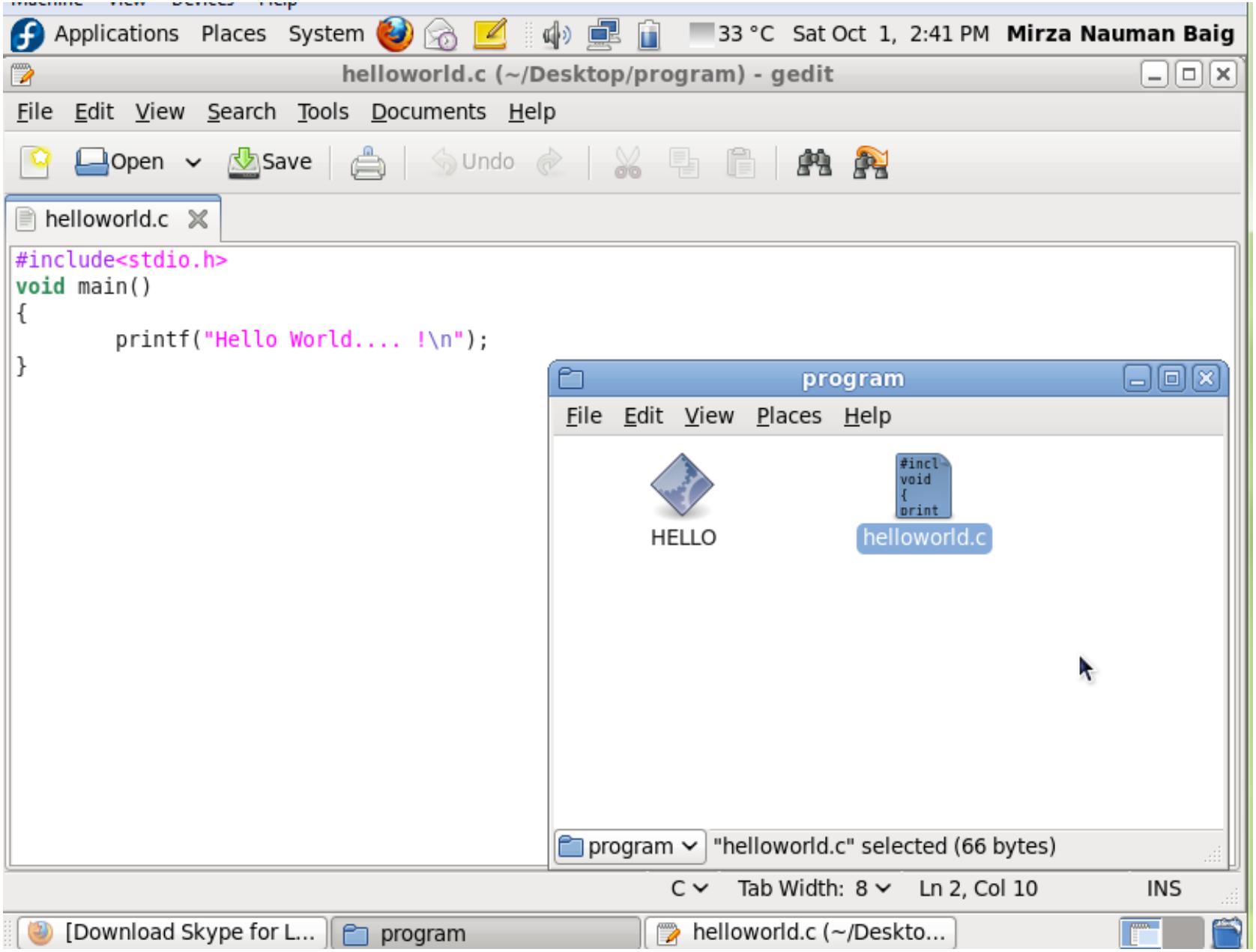
Process / kill

- gedit
- gedit &
- For running processes
- ps
- Kill PID


Applications Places System
33 °C Sat Oct 1, 2:49 PM Mirza Nauman Baig
nauman@localhost:~
File Edit View Terminal Help
[nauman@localhost ~]$ gedit &
[1] 2508
[nauman@localhost ~]$ ps
PID TTY TIME CMD
2421 pts/0 00:00:00 bash
2508 pts/0 00:00:00 gedit
2509 pts/0 00:00:00 ps
[nauman@localhost ~]$ kill 2508
[nauman@localhost ~]$ ps
PID TTY TIME CMD
2421 pts/0 00:00:00 bash
2510 pts/0 00:00:00 ps
[1]+ Terminated gedit
[nauman@localhost ~]$
nauman@localhost:~

Programming C complier

- touch helloworld.c
- gedit helloworld.c &
- Write simple hello world c code
- gcc helloworld.c -o HELLO
- ./ HELLO


Applications Places System
33 °C Sat Oct 1, 2:41 PM Mirza Nauman Baig
helloworld.c (~/Desktop/program) - gedit
File Edit View Search Tools Documents Help
Open Save Undo
helloworld.c
#include<stdio.h>
void main()
{
printf("Hello World.... !\n");
}
program
File Edit View Places Help
HELLO
helloworld.c
program "helloworld.c" selected (66 bytes)
C Tab Width: 8 Ln 2, Col 10 INS
[Download Skype for L...
program
helloworld.c (~/Deskto...

Assignment - 1

Quiz in Next LAB ☺