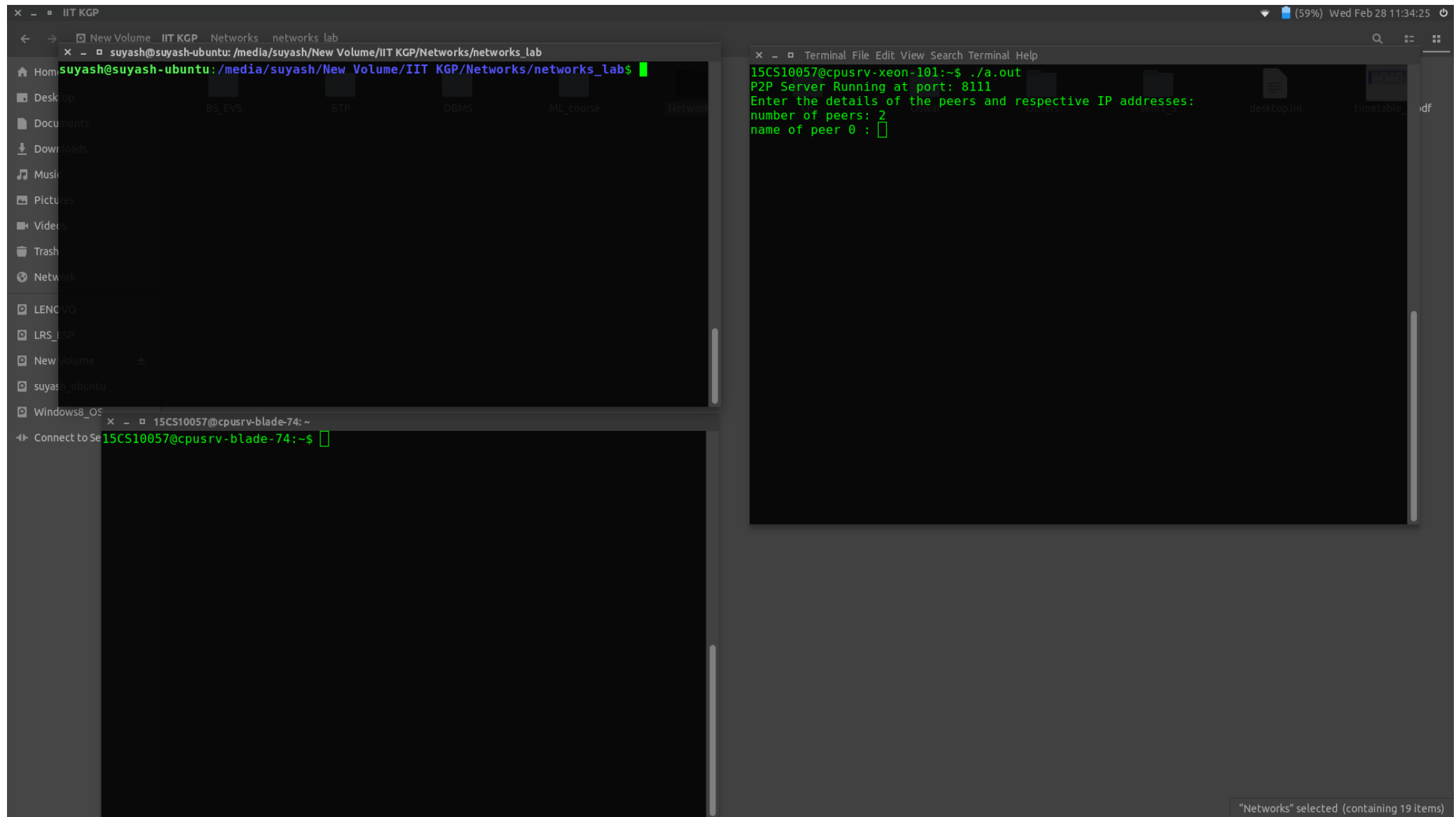


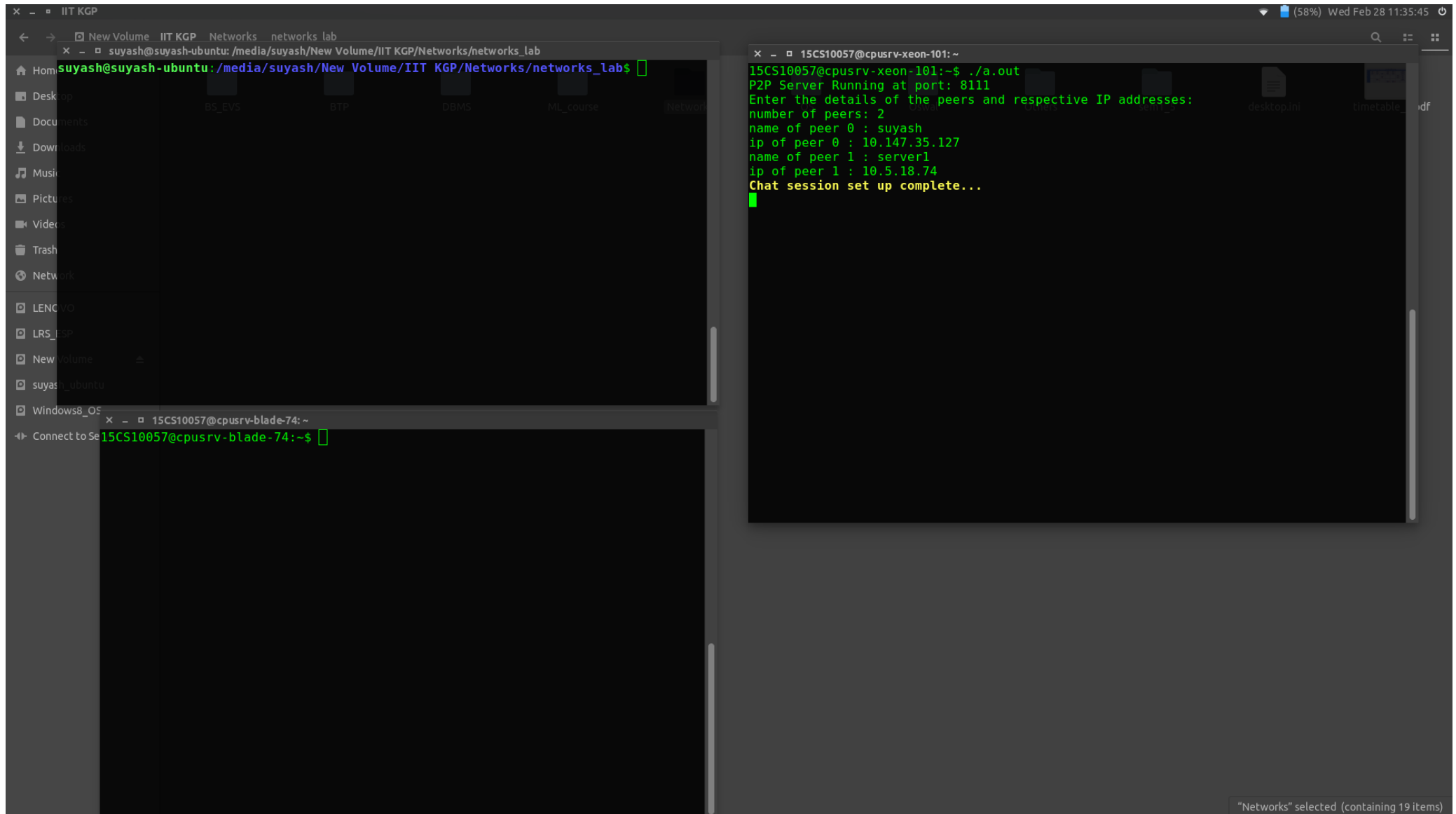
Screen-shots:

1)



3 different chat clients is simulated by (i) my own machine (upper left) (ii) server 10.5.18.74(lower left) (iii) server 10.5.18.101 (upper right)

2)



During the process of chat session set-up – one peer has set up the connection by providing his IP. Others HAVE NOT YET INITIATED the application.

3)

The screenshot displays three terminal windows in a dark-themed environment, showing the configuration of a P2P network. Each terminal window has a title bar indicating the user and host.

Upper-left terminal (suyash@cpusrv-blade-74):

```
suyash@cpusrv-blade-74:~$ ./a.out
P2P Server Running at port: 8111
Enter the details of the peers and respective IP addresses:
number of peers: 2
name of peer 0 : server1
ip of peer 0 : 10.5.18.74
name of peer 1 : server2
ip of peer 1 : 10.5.18.101
Chat session set up complete...
```

Upper-right terminal (15CS10057@cpusrv-xeon-101):

```
15CS10057@cpusrv-xeon-101:~$ ./a.out
P2P Server Running at port: 8111
Enter the details of the peers and respective IP addresses:
number of peers: 2
name of peer 0 : suyash
ip of peer 0 : 10.147.35.127
name of peer 1 : server1
ip of peer 1 : 10.5.18.74
Chat session set up complete...
```

Lower-left terminal (15CS10057@cpusrv-blade-74):

```
15CS10057@cpusrv-blade-74:~$ ./a.out
P2P Server Running at port: 8111
Enter the details of the peers and respective IP addresses:
number of peers: 2
name of peer 0 : suyash
ip of peer 0 : 10.147.35.127
name of peer 1 : server2
ip of peer 1 : 10.5.18.101
Chat session set up complete...
```

Chat session of all peers has been set-up. All waiting for discussion to begin.

Upper – left peer named “suyash”

Upper – right peer named B “server2”

Lower – left peer named B “server1”

4)

```

suyash@suyash-ubuntu: /media/suyash/New Volume/IIT KGP/Networks/networks_lab$ ./a.out
P2P Server Running at port: 8111
Enter the details of the peers and respective IP addresses:
number of peers: 2
name of peer 0 : server1
ip of peer 0 : 10.5.18.74
name of peer 1 : server2
ip of peer 1 : 10.5.18.101
Chat session set up complete...
server1/hi!!!!
server1 : hello - how are you???
server2/hey :0
server2 : am here :)

15CS10057@cpusrv-xeon-101: ~$ ./a.out
P2P Server Running at port: 8111
Enter the details of the peers and respective IP addresses:
number of peers: 2
name of peer 0 : suyash
ip of peer 0 : 10.147.35.127
name of peer 1 : server1
ip of peer 1 : 10.5.18.74
Chat session set up complete...
suyash : hey :0
suyash/am here :)
server1 : hello server2!!!
server1/hi server1!!! Nice to hear from you!!!

15CS10057@cpusrv-blade-74: ~$ ./a.out
P2P Server Running at port: 8111
Enter the details of the peers and respective IP addresses:
number of peers: 2
name of peer 0 : suyash
ip of peer 0 : 10.147.35.127
name of peer 1 : server2
ip of peer 1 : 10.5.18.101
Chat session set up complete...
suyash : hi!!!!
suyash/hello - how are you???
server2/hello server2!!!
server2 : hi server1!!! Nice to hear from you!!!
  
```

View after some interaction: to send message: **<peername> / <message>** . Received messages shown with peer name in Bold Blue letters for easy distinction

5)

```

suyash@ubuntu:~/media/suyash/New Volume/IIT KGP/Networks/networks_lab$ ./a.out
P2P Server Running at port: 8111
Enter the details of the peers and respective IP addresses:
number of peers: 2
name of peer 0 : server1
ip of peer 0 : 10.5.18.74
name of peer 1 : server2
ip of peer 1 : 10.5.18.101
Chat session set up complete...
server1/hi!!!!
server1 : hello - how are you???
server2/hey :0
server2 : am here :)

15CS10057@cpusrv-blade-74:~$ ./a.out
P2P Server Running at port: 8111
Enter the details of the peers and respective IP addresses:
number of peers: 2
name of peer 0 : suyash
ip of peer 0 : 10.147.35.127
name of peer 1 : server2
ip of peer 1 : 10.5.18.101
Chat session set up complete...
suyash : hi!!!!
suyash/hello - how are you???
server2/hello server2!!!
server2 : hi server1!!! Nice to hear from you!!!
server3/ are you listening???
No such peer found in the list: server3
are you listening???

15CS10057@cpusrv-xeon-101:~$ ./a.out
P2P Server Running at port: 8111
Enter the details of the peers and respective IP addresses:
number of peers: 2
name of peer 0 : suyash
ip of peer 0 : 10.147.35.127
name of peer 1 : server1
ip of peer 1 : 10.5.18.74
Chat session set up complete...
suyash : hey :0
suyash/am here :)
server1 : hello server2!!!
server1/hi server1!!! Nice to hear from you!!!

```

Highlighting response to **user** – **error** (a typo) . Simple error message is displayed, without terminating the application

6)

```
suyash@suyash-ubuntu:/media/suyash/New Volume/IIT KGP/Networks/networks_lab$ ./a.out
P2P Server Running at port: 8111
Enter the details of the peers and respective IP addresses:
number of peers: 2
name of peer 0 : server1
ip of peer 0 : 10.5.18.74
name of peer 1 : server2
ip of peer 1 : 10.5.18.101
Chat session set up complete...
server1/hi!!!!
server1 : hello - how are you???
server2/hey :0
server2 : am here :)
server2 : are YOU listening...

15CS10057@cpusrv-blade-74:~$ ./a.out
P2P Server Running at port: 8111
Enter the details of the peers and respective IP addresses:
number of peers: 2
name of peer 0 : suyash
ip of peer 0 : 10.147.35.127
name of peer 1 : server2
ip of peer 1 : 10.5.18.101
Chat session set up complete...
suyash : hi!!!!
suyash/hello - how are you???
server2/hello server2!!!
server2 : hi server1!!! Nice to hear from you!!!
server3/ are you listening???
No such peer found in the list: server3
are you listening???
server2/ are you listening???

15CS10057@cpusrv-xeon-101:~$ ./a.out
P2P Server Running at port: 8111
Enter the details of the peers and respective IP addresses:
number of peers: 2
name of peer 0 : suyash
ip of peer 0 : 10.147.35.127
name of peer 1 : server1
ip of peer 1 : 10.5.18.74
Chat session set up complete...
suyash : hey :0
suyash/am here :)
server1 : hello server2!!!
server1/hi server1!!! Nice to hear from you!!!
server1 : are you listening???
suyash/ are YOU listening...
```

Normal interaction resumes and proceeds after the error message.