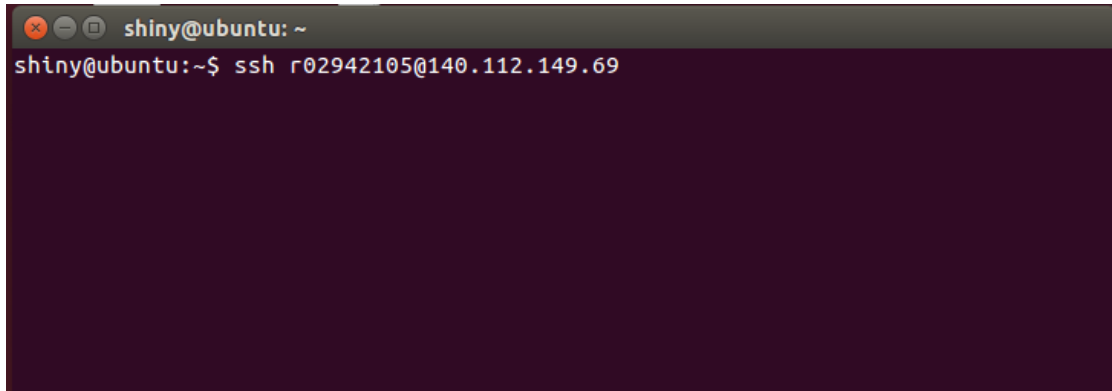


[SDN-Lab2]How to upload your sever.py

1. Server ip : 140.112.149.69
2. ssh to the sever (default port:22)
 - a. terminal (Ubuntu, your vm) command: ssh stu_id@140.112.149.69

A terminal window with a dark purple background. The title bar shows 'shiny@ubuntu: ~'. The prompt is 'shiny@ubuntu:~\$'. The command 'ssh r02942105@140.112.149.69' has been entered and is highlighted in red. The rest of the terminal is empty.

```
shiny@ubuntu: ~  
shiny@ubuntu:~$ ssh r02942105@140.112.149.69
```

3. ID & Password

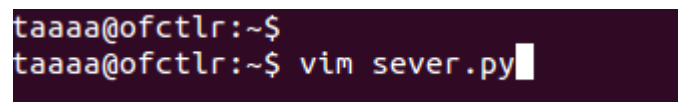
ID : your student_ID

Pwd: your student_ID

sever port of the socket: reference it in the list.xls file (server application port)

4. Open your sever server.py

Command: vim server.py

A terminal window with a dark purple background. The prompt is 'taaaa@ofctlr:~\$'. The command 'vim sever.py' has been entered and is highlighted in red. The cursor is at the end of the command.

```
taaaa@ofctlr:~$  
taaaa@ofctlr:~$ vim sever.py
```

5. Copy your code to the sever

```
taaaa@ofctlr: ~  
import socket  
  
HOST = '' # Symbolic name meaning all available interfaces  
PORT = 50007 # Arbitrary non-privileged port  
s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)  
s.bind((HOST, PORT))  
s.listen(1)  
conn, addr = s.accept()  
print 'Connected by', addr  
while 1:  
    data = conn.recv(1024)  
    if not data: break  
    conn.sendall(data)  
conn.close()  
  
~  
~  
~  
~  
~  
~  
~  
~  
~
```

Then press “Esc” and enter “:wq” (which means write and quit)

6. Then you could see your file under the directory

Command “I”

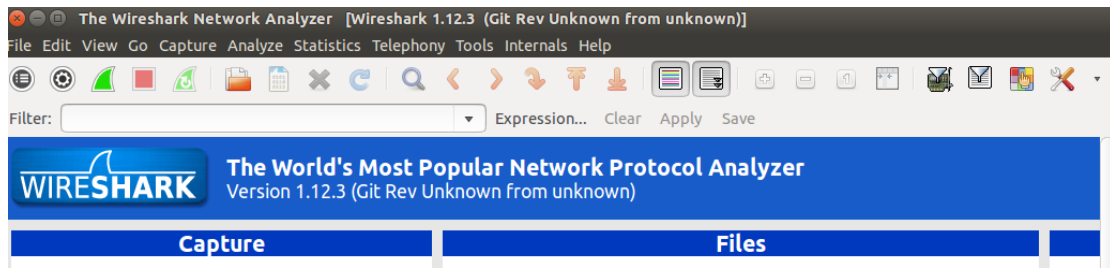
```
taaaaa@ofctlr:~$ ll
total 36
drwxr-xr-x  3 taaaa taaaa 4096 May  1 16:41 ./
drwxr-xr-x 44 root   root   4096 Apr 14 16:41 ../
-rw-r--r--  1 taaaa taaaa  220 Apr 14 16:41 .bash_logout
-rw-r--r--  1 taaaa taaaa 3637 Apr 14 16:41 .bashrc
drwx-----  2 taaaa taaaa 4096 May  1 16:00 .cache/
-rw-r--r--  1 taaaa taaaa  675 Apr 14 16:41 .profile
-rw-rw-r--  1 taaaa taaaa  381 May  1 16:18 r02942105.py
-rw-rw-r--  1 taaaa taaaa  382 May  1 16:41 sever.py
-rw-----  1 taaaa taaaa  872 May  1 16:41 .viminfo
taaaaa@ofctlr:~$
```

7. Run your socket code on the remote server

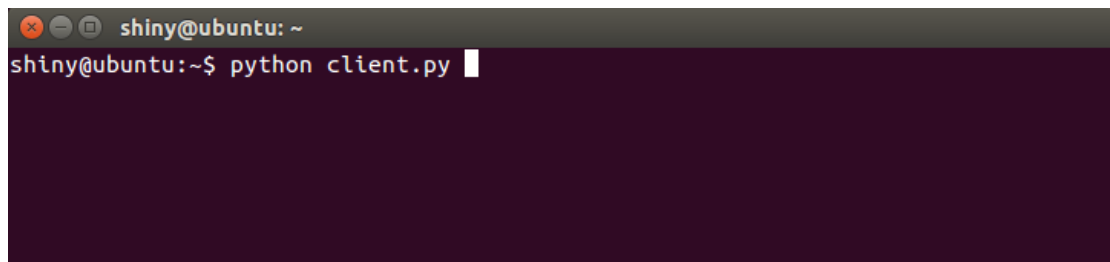
```
taaaa@ofctlr:~$ python r02942105.py
```

8. Run “wireshark” in your computer (client side) to observe the whole process of communication between sockets and write what you observe in the report.

```
shiny@ubuntu:~$ sudo wireshark
[sudo] password for shiny:
```



9. Open **"another"** terminal to run your client.py to send the txt file to the remote server.



10. The server should send the correct data back to the client. Then when client receive it, you should save it as **stu_id.txt (correct txt file)**