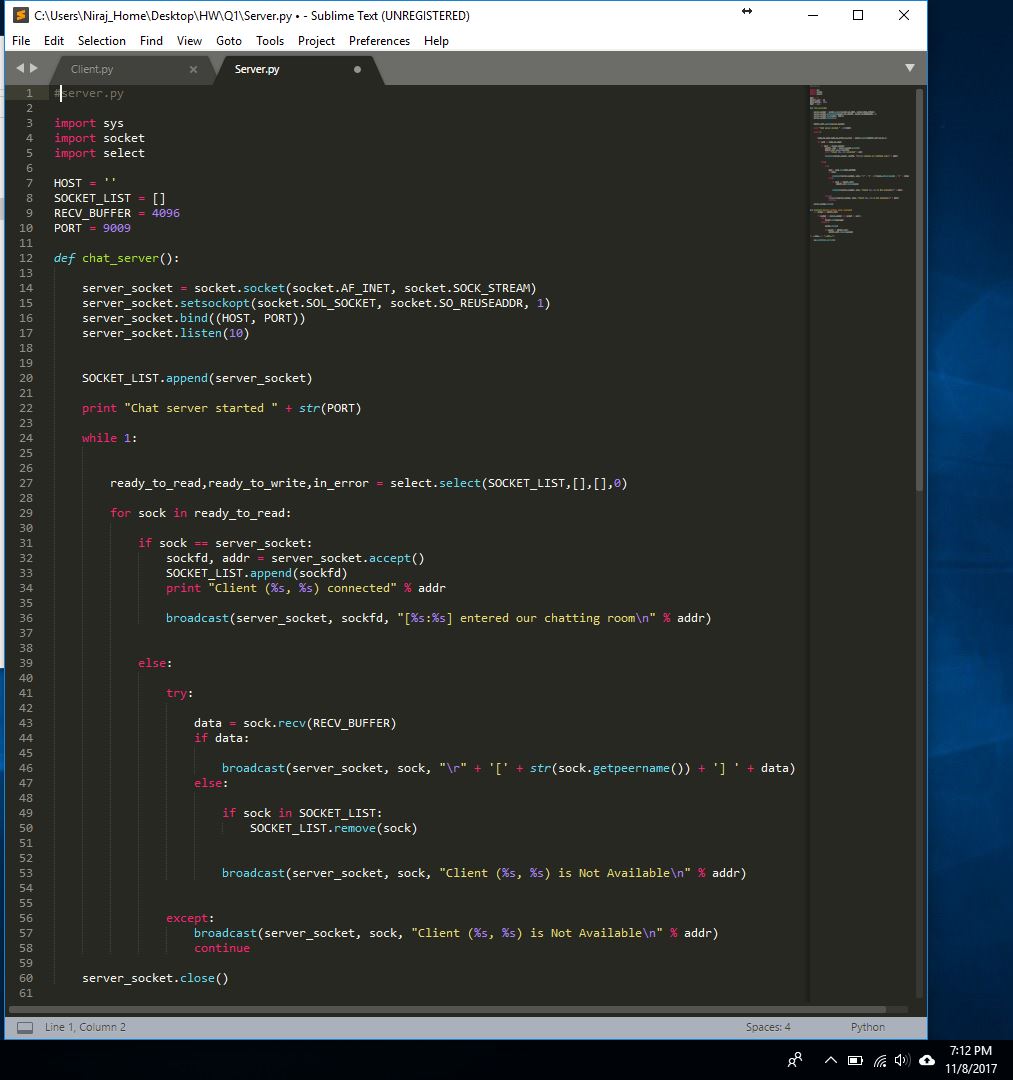
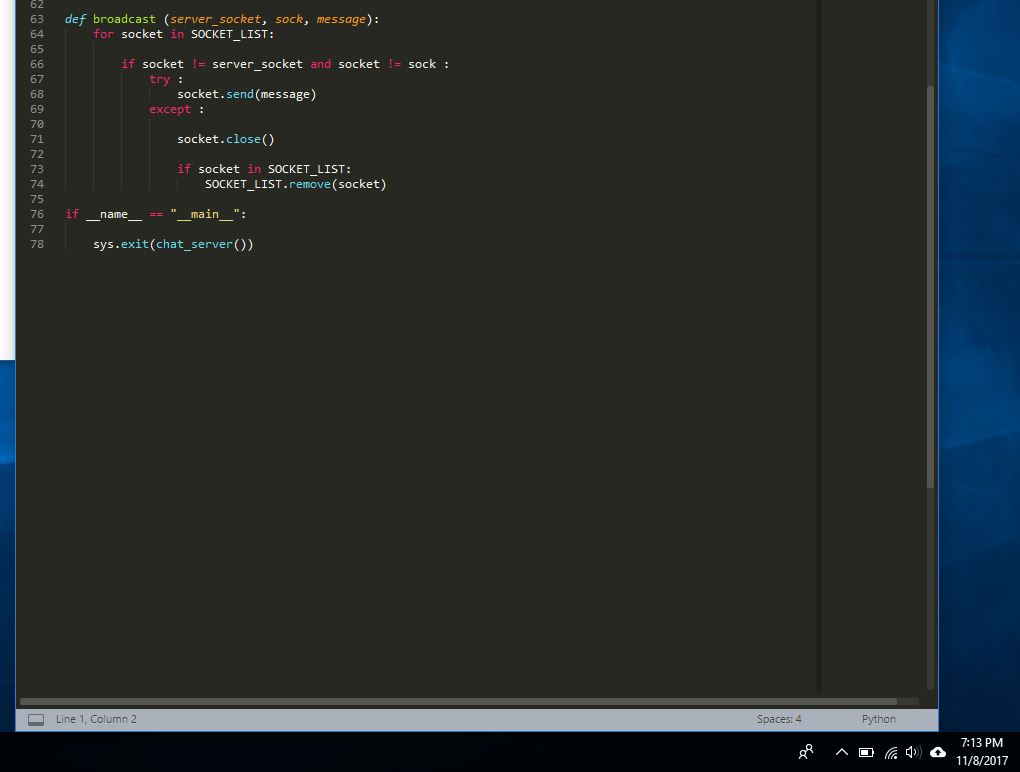
NAME: NIRAJ THANKI SID: 19376 CLASS: CS531

SERVER.py





Source Code:

#server.py

import sys

import socket

import select

HOST = ''

SOCKET\_LIST = []

RECV\_BUFFER = 4096

PORT = 9009

def chat\_server():

server\_socket = socket.socket(socket.AF\_INET, socket.SOCK\_STREAM)

server\_socket.setsockopt(socket.SOL\_SOCKET, socket.SO\_REUSEADDR, 1)

server\_socket.bind((HOST, PORT))

server\_socket.listen(10)

SOCKET\_LIST.append(server\_socket)

print "Chat server started " + str(PORT)

while 1:

ready\_to\_read,ready\_to\_write,in\_error = select.select(SOCKET\_LIST,[],[],0)

for sock in ready\_to\_read:

if sock == server\_socket:

sockfd, addr = server\_socket.accept()

SOCKET\_LIST.append(sockfd)

print "Client (%s, %s) connected" % addr

broadcast(server\_socket, sockfd, "[%s:%s] entered our chatting room\n" % addr)

else:

try:

data = sock.recv(RECV\_BUFFER)

if data:

broadcast(server\_socket, sock, "\r" + '[' + str(sock.getpeername()) + '] ' + data)

else:

if sock in SOCKET\_LIST:

SOCKET\_LIST.remove(sock)

broadcast(server\_socket, sock, "Client (%s, %s) is Not Available\n" % addr)

except:

broadcast(server\_socket, sock, "Client (%s, %s) is Not Available\n" % addr)

continue

server\_socket.close()

def broadcast (server\_socket, sock, message):

for socket in SOCKET\_LIST:

if socket != server\_socket and socket != sock :

try :

socket.send(message)

except :

socket.close()

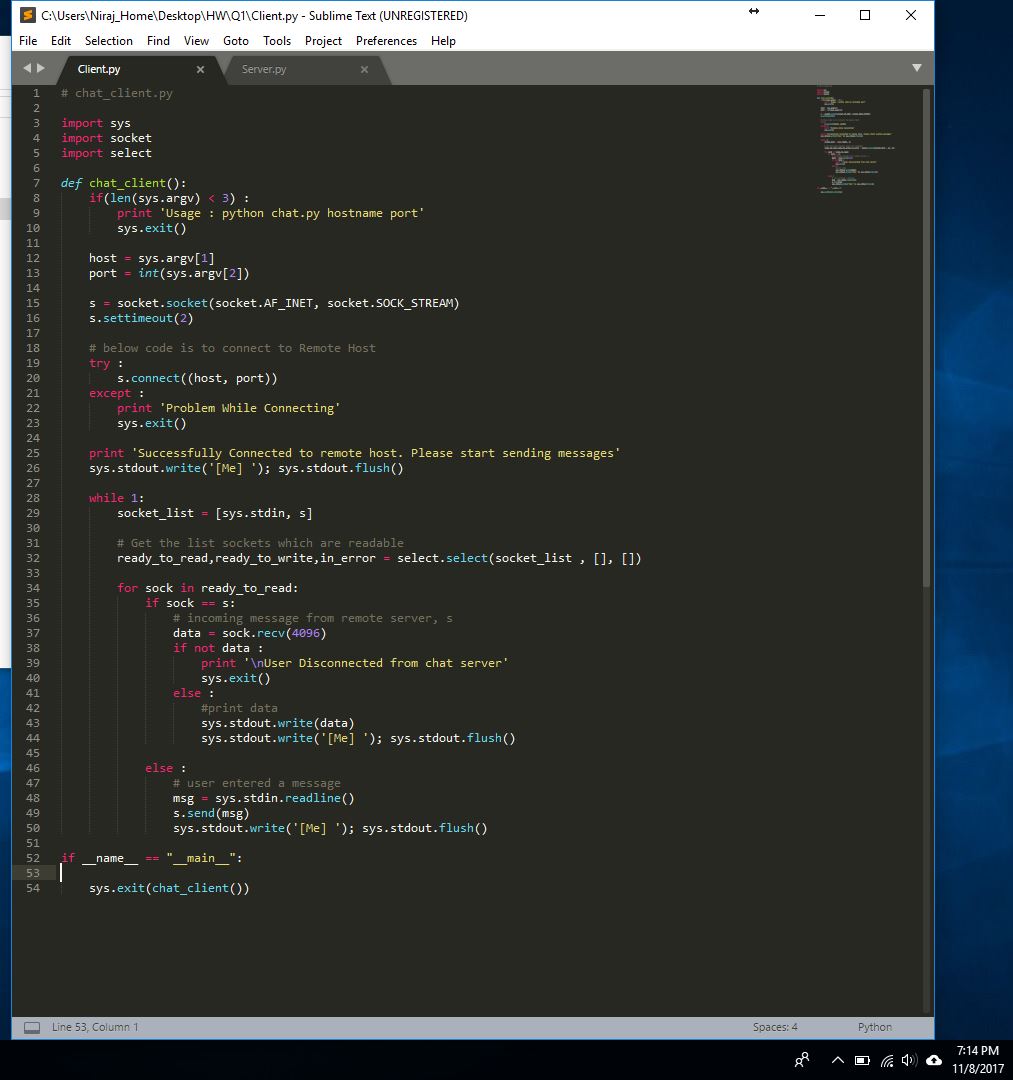
if socket in SOCKET\_LIST:

SOCKET\_LIST.remove(socket)

if \_\_name\_\_ == "\_\_main\_\_":

sys.exit(chat\_server())

CLIENT.py



Source Code:

# chat\_client.py

import sys

import socket

import select

def chat\_client():

if(len(sys.argv) < 3) :

print 'Usage : python chat.py hostname port'

sys.exit()

host = sys.argv[1]

port = int(sys.argv[2])

s = socket.socket(socket.AF\_INET, socket.SOCK\_STREAM)

s.settimeout(2)

# below code is to connect to Remote Host

try :

s.connect((host, port))

except :

print 'Problem While Connecting'

sys.exit()

print 'Successfully Connected to remote host. Please start sending messages'

sys.stdout.write('[Me] '); sys.stdout.flush()

while 1:

socket\_list = [sys.stdin, s]

# Get the list sockets which are readable

ready\_to\_read,ready\_to\_write,in\_error = select.select(socket\_list , [], [])

for sock in ready\_to\_read:

if sock == s:

# incoming message from remote server, s

data = sock.recv(4096)

if not data :

print '\nUser Disconnected from chat server'

sys.exit()

else :

#print data

sys.stdout.write(data)

sys.stdout.write('[Me] '); sys.stdout.flush()

else :

# user entered a message

msg = sys.stdin.readline()

s.send(msg)

sys.stdout.write('[Me] '); sys.stdout.flush()

if \_\_name\_\_ == "\_\_main\_\_":

sys.exit(chat\_client())

Output:

