

Computer Networks
Assignment 2
NetID - sst390

SMTP Client code:-

```
from socket import *
from ssl import *
from sys import * #to take the username and password from command line
import base64 #we need to use this to encode the username and password and send it for
authentication

if (len(argv) < 2):
    print "Usage : smtp.py UserName"
    exit(0)

program,UName = argv

msg = "\r\n I love computer networks"
endmsg = "\r\n.\r\n"

# Choose a mail server (e.g. Google mail server) and call it mailserver mailserver = #Fill in start #Fill
in end

#Note : Since we have been using GMAIL's SMTP server, inorder to check our code for the same we
need to go
# Google's security settings and allow less secure apps for this code to work and send mail .
mailServerHost = "smtp.nyu.edu"
mailserverPort = 25 #for SSL based SMTP communication

# Create socket called clientSocket and establish a TCP connection with mailserver
sslClientSock = socket(AF_INET, SOCK_STREAM)
sslClientSock.settimeout(10)

sslClientSock.connect((mailServerHost, mailserverPort))

recv = sslClientSock.recv(1024)

print recv

if recv[:3] != '220':
    print '220 reply not received from server.'

# Send HELO command and print server response.
heloCommand = 'HELO ALICE\r\n'

sslClientSock.send(heloCommand)

recv1 = sslClientSock.recv(1024)
```

```

print recv1

if recv1[:3] != '250':
    print '250 reply not received from server.'

#Send Mail From command
MailFrom = "MAIL FROM:<"+UName+">\r\n"

sslClientSock.send(MailFrom)

recv1 = sslClientSock.recv(1024)
if recv1[:3] != '250':
    print '[MAIL FROM:] 250 reply was not received from the server'
else:
    print recv1

#Note : for test purposes we will be using the same mail from and rcpt to id
RcptTo = "RCPT TO:<"+UName+">\r\n"
sslClientSock.send(RcptTo)

recv1 = sslClientSock.recv(1024)

if recv1[:3] != '250':
    print '[RCPT TO:] 250 reply was not received from the server'
else:
    print recv1

sslClientSock.send("DATA\r\n")
recv1 = sslClientSock.recv(1024)

if recv1[:3] != '354':
    print '[DATA] 354 reply was not received from the server'

#create a header to be send along with the payload
header = "To:"+UName+"\r\nFrom:"+UName+"\r\nSubject:Test Mail For Computer Networking Assignment 5\r\n"

#send the header, msg body and the end msg
sslClientSock.send(header)
sslClientSock.send(msg)
sslClientSock.send(endmsg)

recv1 = sslClientSock.recv(1024)

if recv1[:3] != '250':
    print '[DATA STREAM END] 250 reply was not received from the server'
else:
    print recv1

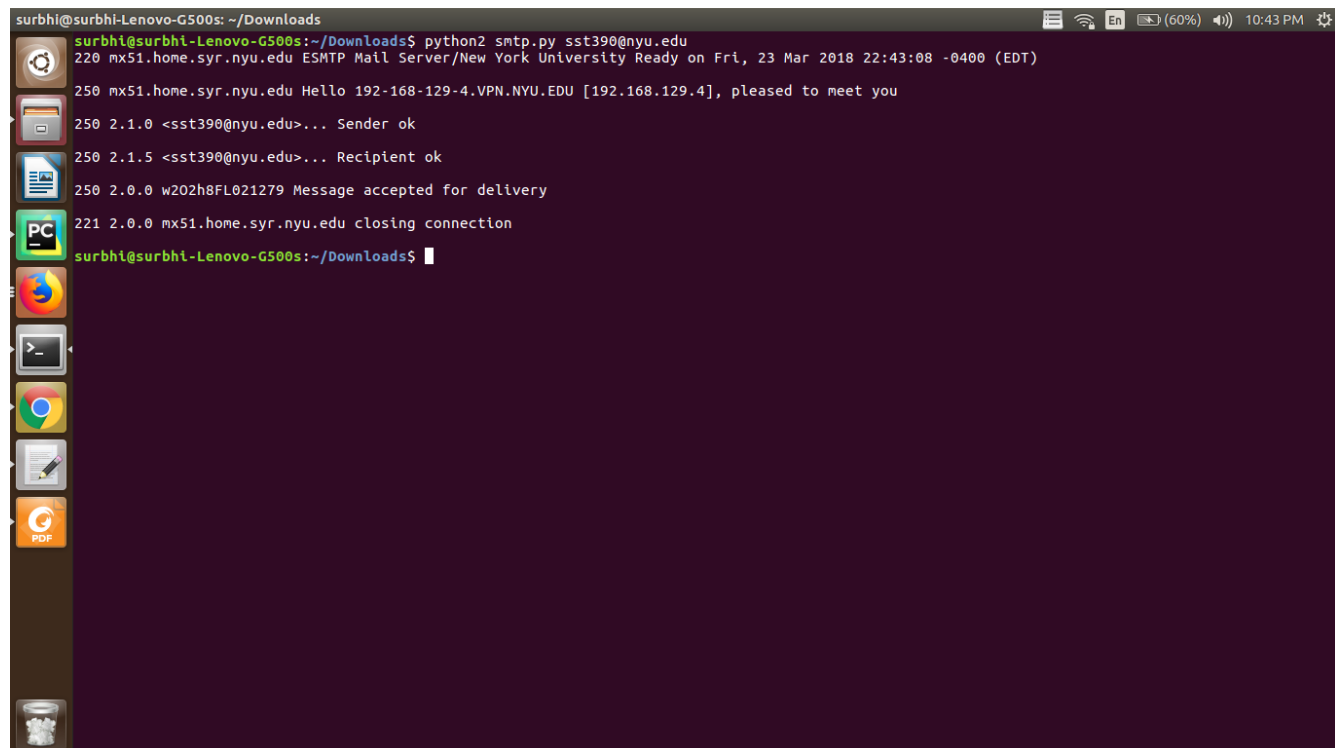
```

```
sslClientSock.send("QUIT\r\n")
```

```
print sslClientSock.recv(1024)
```

```
sslClientSock.close()
```

Output:-



The screenshot shows a terminal window on a Linux system. The prompt is `surbhi@surbhi-Lenovo-G500s: ~/Downloads`. The user has executed the command `python2 smtp.py sst390@nyu.edu`. The output shows an SMTP session with the following lines:

```
220 mx51.home.syr.nyu.edu ESMTP Mail Server/New York University Ready on Fri, 23 Mar 2018 22:43:08 -0400 (EDT)
250 mx51.home.syr.nyu.edu Hello 192-168-129-4.VPN.NYU.EDU [192.168.129.4], pleased to meet you
250 2.1.0 <sst390@nyu.edu>... Sender ok
250 2.1.5 <sst390@nyu.edu>... Recipient ok
250 2.0.0 w202h8FL021279 Message accepted for delivery
221 2.0.0 mx51.home.syr.nyu.edu closing connection
surbhi@surbhi-Lenovo-G500s:~/Downloads$
```

The terminal window has a dark purple background. On the left side, there is a vertical dock with icons for various applications: a gear (system settings), a folder (file manager), a document (text editor), a PC icon, a Firefox browser, a terminal, a Chrome browser, a PDF viewer, and a trash can. The top of the window shows system status icons including network, battery (60%), and time (10:43 PM).

Test Mail For Computer Networking Assignment 5 - sst390@nyu.edu - New York University Mail - Mozilla Firefox

https://mail.google.com/mail/u/1/#inbox/16255e368a876a18

Search

Most VisitedGetting StartedY <a>tag html - Yahoo ...Homein Surbhi Thole | LinkedInChapter 15 solutions ...15.1 Rod cutting - CLRSNYU Login

NYU

1 of 2,763

Mail

COMPOSE

Inbox (1,198)

Starred

Sent Mail

Drafts (22)

More

Surbhi

Ayan Kailash Agrawal
You: <https://console.a>

Using 0.56 GB
[Manage](#)

Program Policies
Powered by Google

Last account activity: 18 minutes ago
[Details](#)

Test Mail For Computer Networking Assignment 5

sst390@nyu.edu
to me

10:43 PM (0 minutes ago)

I love computer networks

Click here to [Reply](#) or [Forward](#)

Person icon

Person icon

Person icon