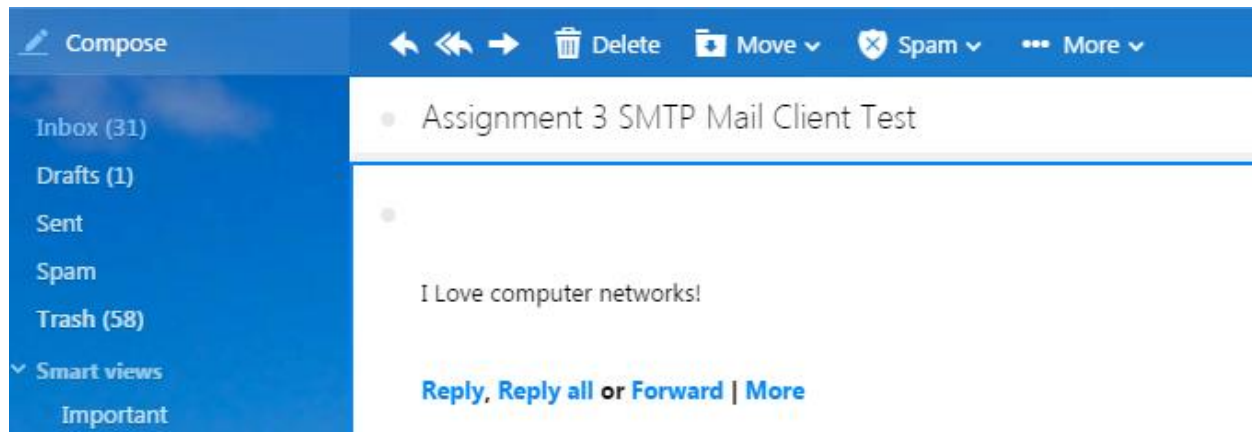


Assignment 3 – Socket Programming Assignment – SMTP

- Mail server – **smtp-pulse.com** port - **2525**

**Fig 1.1 Mail received at Yahoo**

```
Server: -220 smtp-pulse.com ESMTP SendPulse SMTP Server
Server: -250-smtp-pulse.com at your service, [192.76.177.125]
250-8BITIME
250-ENHANCEDSTATUSCODES
250-AUTH PLAIN LOGIN
250-AUTH=PLAIN LOGIN
250 STARTTLS

Sending AUTH Command
Server: 334 VXNlcm5hbWU6

Server: -334 UGFzc3dvcmQ6
|
Server: -235 2.7.0 Authentication successful

Sending MAIL FROM Command
Server: -250 2.1.0 Ok

Sending RCPT TO Command
Server: -250 2.1.0 Ok

Sending DATA Command
Server: 354 End data with <CR><LF>.<CR><LF>

Sending Data
Server: -250 2.0.0 Ok: queued as true

Sending QUIT
Server: -221 2.0.0 Goodbye!

Client: -Mail Sent

Process finished with exit code 0
```

Fig 1.2 Console Log

Code- smtpclient.py

```
from socket import *
msg = "I Love computer networks!"
endmsg = "\r\n.\r\n"

nyu_usn = "cnJrMzEwQG55dS51ZHU=\r\n"
nyu_pass = "ZGJETEd0VFJXTlRzbUY=\r\n"

pulsesmtpserver = "smtp-pulse.com"
pulsesmtpport = 2525

clientSocket = socket(AF_INET, SOCK_STREAM) #TCP
clientSocket.connect((pulsesmtpserver, pulsesmtpport))

print('Client: -connect done !')
recv = clientSocket.recv(1024)
recv = recv.decode('utf-8')
print ('Server: -'+recv)
if recv.split(' ', 1)[0] != '220':
    print ('Client: -220 reply not received from server.')

# Send HELO command and print server response.
heloCommand = 'EHLO rahul\r\n'
clientSocket.send(bytes(heloCommand, 'UTF-8'))
recv1 = clientSocket.recv(1024)
recv = recv1.decode('utf-8')
print ('Server: -'+recv)

#Send AUTH command and print server response.
print ("Sending AUTH Command")
#AUTH with base64 encoded user name password
clientSocket.send(bytes("AUTH LOGIN\r\n", 'ascii'))
recv2 = clientSocket.recv(1024)
recv = recv2.decode('utf-8')
print ('Server: -'+recv)
if recv.split(' ', 1)[0] != '334':
    print ('Client: -334 reply not received from server.')

clientSocket.send(bytes(nyu_usn, 'utf-8'))
recv3 = clientSocket.recv(1024)
recv = recv3.decode('utf-8')
print ('Server: -'+recv)
if recv.split(' ', 1)[0] != '334':
    print ('Client: -334 reply not received from server.')

clientSocket.send(bytes(nyu_pass, 'utf-8'))
```

```
recv4 = clientSocket.recv(1024)
recv = recv4.decode('ascii')
print ('Server: -'+recv)
if recv.split(' ',1)[0] != '235':
    print ('Client: -334 reply not received from server.')

#Send MAIL FROM command and print server response.
print ("Sending MAIL FROM Command")
clientSocket.send(bytes("MAIL FROM:<rrk310@nyu.edu>\r\n", 'UTF-8'))
recv5 = clientSocket.recv(1024)
recv = recv5.decode('utf-8')
print ('Server: -'+recv)
if recv.split(' ',1)[0] != '250':
    print ('Client: -250 MAIL FROM failed.')

#Send RCPT TO command and print server response.
print ("Sending RCPT TO Command")
clientSocket.send(bytes("RCPT TO:<rahul.ramesh89@yahoo.co.in>\r\n", 'UTF-8'))
recv6 = clientSocket.recv(1024)
recv = recv6.decode('utf-8')
print ('Server: -'+recv)
if recv.split(' ',1)[0] != '250':
    print ('Client: -250 RCPT TO Failed.')

#Send DATA command and print server response.
print ("Sending DATA Command")
clientSocket.send(bytes("DATA\r\n", 'UTF-8'))
recv7 = clientSocket.recv(1024)
recv = recv7.decode('utf-8')
print ('Server: -'+recv)
if recv.split(' ',1)[0] != '354':
    print ('Client: --354 DATA Ready failed.')

#Send Data and print server response.
print ("Sending Data")
clientSocket.send(bytes("SUBJECT: Assignment 3 SMTP Mail Client Test\n"+msg+endmsg, 'UTF-8'))
recv8 = clientSocket.recv(1024)
recv = recv8.decode('utf-8')
print ('Server: -'+recv)

#Send QUIT and print server response.
```

```
print ("Sending QUIT")
clientSocket.send(bytes("QUIT\r\n", 'UTF-8'))
recv9 = clientSocket.recv(1024)
recv = recv9.decode('utf-8')
print ('Server: -'+recv)

print ("Client: -Mail Sent")
clientSocket.close()
```