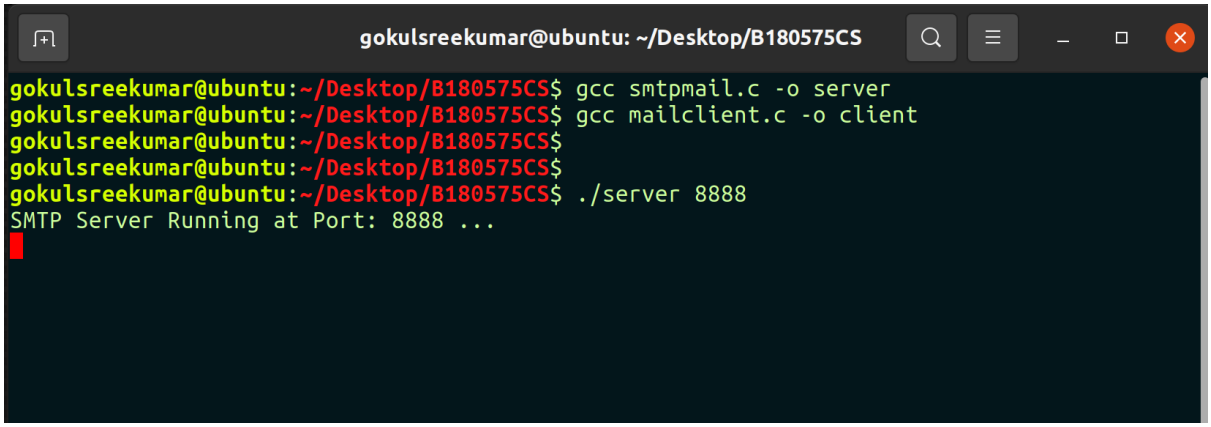
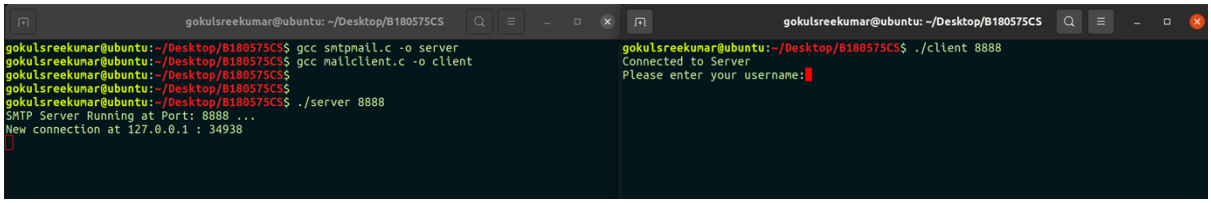
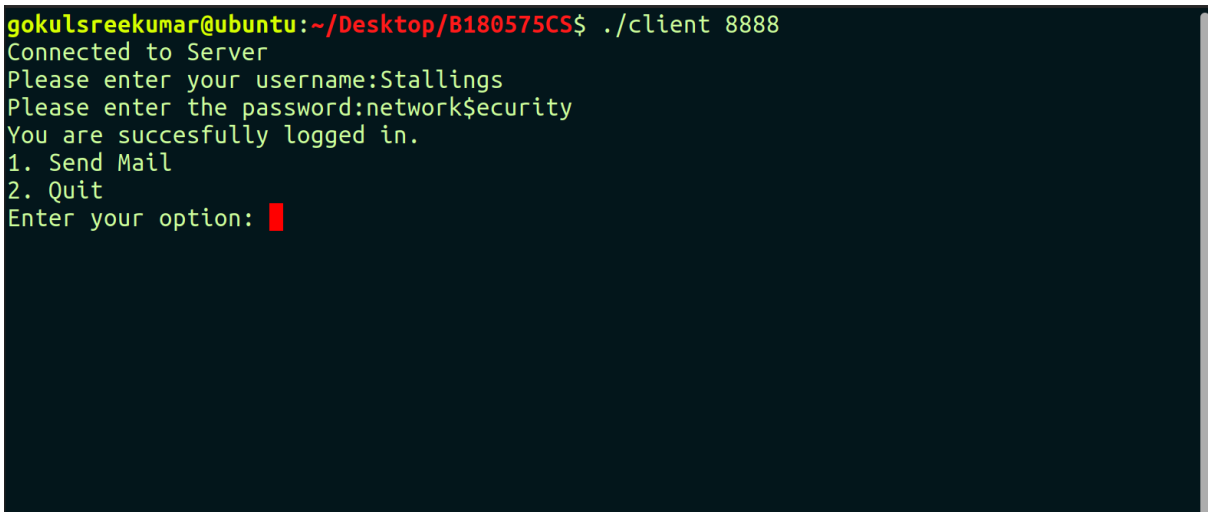
# Experiment 8

Compile and run the smtp.c and mailclient.c as below:



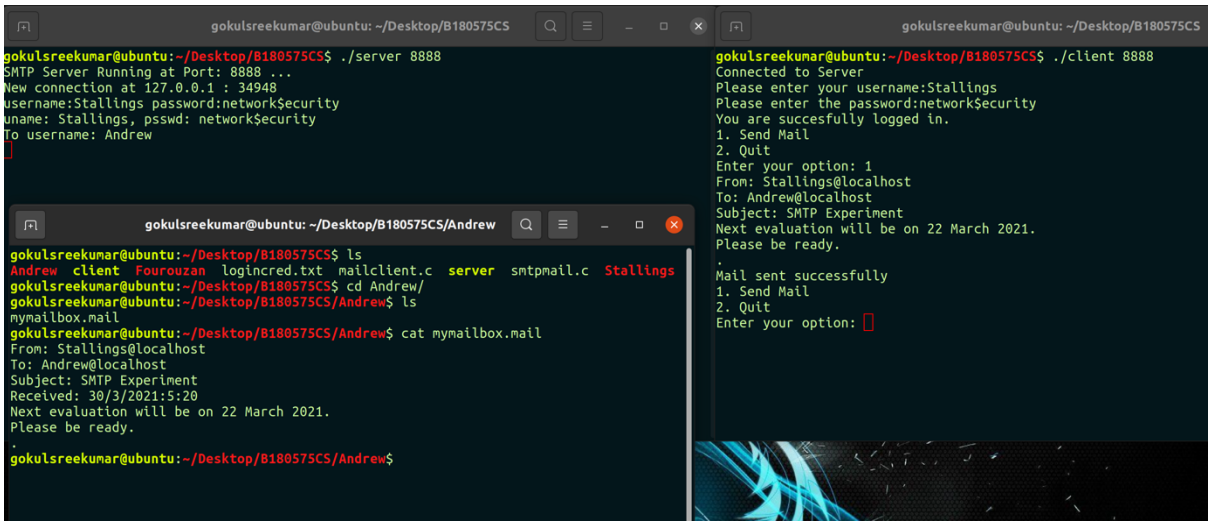

Note that Port number has to be given as a terminal line argument for both server and client to determine the port to listen and connect to respectively.
Client must enter a Username and Password, which is sent to Server to be verified by using the logincred.txt file and once successful it will display “You are successfully logged in” message and also a Menu with 2 options as below:



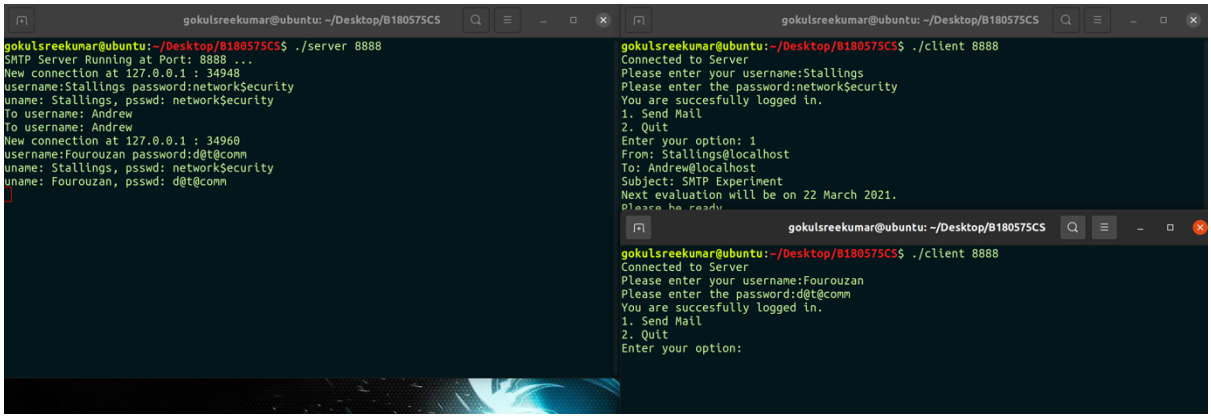

The client has to obey to the given format for sending the email. If the format is wrong “Incorrect format” message will be displayed, otherwise the mail is attempted to be sent to the correct receiver. If the receiver’s username is correct and the email was delivered, then “Mail sent successfully” message is displayed:

```
gokulsreekumar@ubuntu:~/Desktop/B180575CS$ ./client 8888
Connected to Server
Please enter your username:Stallings
Please enter the password:network$ecurity
You are succesfully logged in.
1. Send Mail
2. Quit
Enter your option: 1
From: Stallings@localhost
To: Andrew@localhost
Subject: SMTP Experiment
Next evaluation will be on 22 March 2021.
Please be ready.
.
Mail sent successfully
1. Send Mail
2. Quit
Enter your option:
```

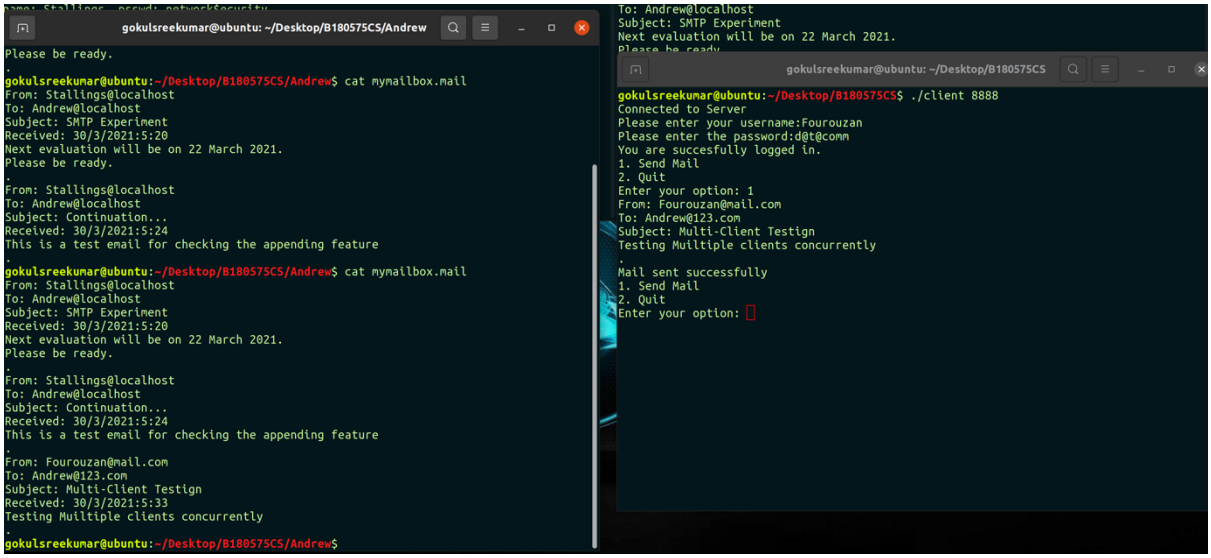
We can see that since the Email was sent to Andrew, in his corresponding folder, inside the mymailbox.mail file, the email has been recorded along with the received date and time as:



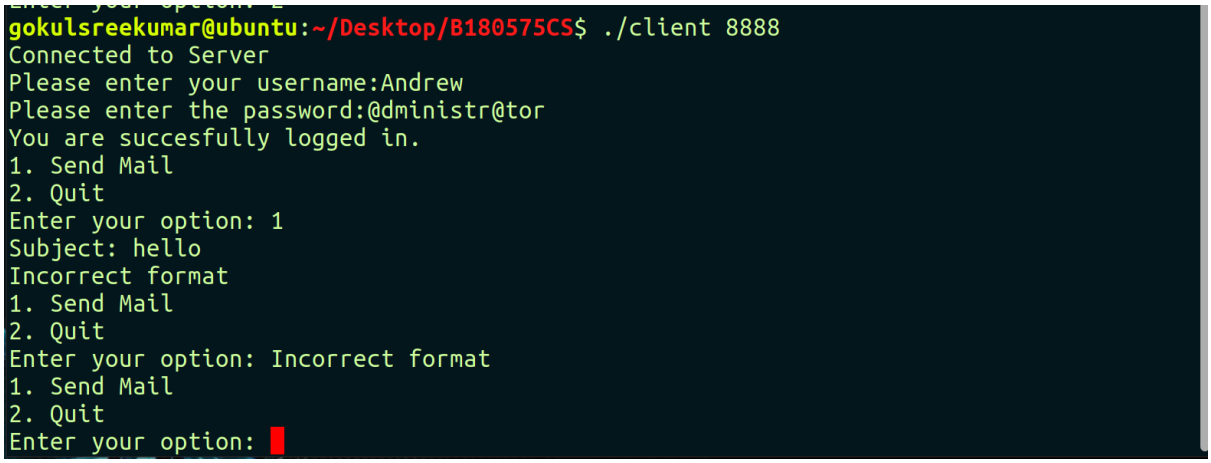

We can also have Multiple clients connected simultaneously to the Server by simply opening another client instance in a new Terminal Window/Tab as (here, Fourouzan was added as a second client concurrently connected to the server along with Stallings):



Now, if Fourouzan (the second client) also sends an Email to Andrew then, we can see that email appends to the mymailbox.mail  file as seen here:




If the Email is written in a wrong format, then “incorrect format” error is shown:




If the email given in the To field (the receiver) is not Valid, then “Failed to send the Email” message is shown and also Email verification (X@Y) is also checked as seen below:

```
gokulsreekumar@ubuntu:~/Desktop/B180575CS$ ./client 8888
Connected to Server
Please enter your username:Stallings
Please enter the password:network$ecurity
You are succesfully logged in.
1. Send Mail
2. Quit
Enter your option: 1
From: Stallings@localhost.com
To: Unkown@email.com
Subject: Unkown Reciever
will show error
.
Failed to Send the Email.
1. Send Mail
2. Quit
Enter your option: 1
From: Stallings@123.com
To: Hello
Subject: Error in email format
Incorrect format
1. Send Mail
2. Quit
Enter your option:
```

The folder structure for the Project is as below:

```
gokulsreekumar@ubuntu: ~/Desktop/B180575CS/Andrew
gokulsreekumar@ubuntu:~/Desktop/B180575CS$ ls
Andrew  client  Fourouzan  logincred.txt  mailclient.c  server  smtpmail.c  Stallings
gokulsreekumar@ubuntu:~/Desktop/B180575CS$ cd Andrew/
gokulsreekumar@ubuntu:~/Desktop/B180575CS/Andrew$ ls
mymailbox.mail
gokulsreekumar@ubuntu:~/Desktop/B180575CS/Andrew$ cat mymailbox.mail
From: Stallings@localhost
To: Andrew@localhost
Subject: SMTP Experiment
Received: 30/3/2021:5:20
Next evaluation will be on 22 March 2021.
Please be ready.
.
From: Stallings@localhost
To: Andrew@localhost
Subject: Continuation...
Received: 30/3/2021:5:24
This is a test email for checking the appending feature
.
From: Fourouzan@mail.com
To: Andrew@123.com
Subject: Multi-Client Testign
Received: 30/3/2021:5:33
Testing Muiltiple clients concurrently
.
gokulsreekumar@ubuntu:~/Desktop/B180575CS/Andrew$
```