

# Assignment 3 Design

## Implementation of SMTP protocol

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### **Files :**

1. 3\_B130727SMTP.c
2. 3\_B130727Client1.c
3. 3\_B130727Client2.c

#### **• 3\_B130727SMTP.c :**

A socket is created and appropriate values are assigned. This program takes 2 command line arguments. First is the max no of ports to be allocated and the other is the port no of first connection to the client to be made, Then, a structure of sockets is created depending on the no of ports nos allocated and then if any further connections are made, they are done

through the next available sockets in the structure. Select mechanism is used to control the concurrency. After receiving the sender and receiver's email addresses and the body of the message to be sent, it looks for the port no corresponding to the receiver's email in the text file. After getting the port no, it forwards the mail to that port.

- **3\_B130727Client1.c :**

This the user program. A socket is created and appropriate values are assigned and binded to the SMTP server. Then the user is prompted to authenticate with his email and password. On successful login, he is further prompted to enter the receiver's email id and the body of the message to be sent. On sending the message, he gets a notification that the email has been sent.

- **3\_B130727Client2.c :**

This is the receiver program. A socket is created and appropriate values are assigned and binded to the SMTP server. Whenever a mail is received, the mail sender's email and the body of the email is displayed.