Assignment 4A: Communicating with a Standard Email Server

Objective:

This assignment is an extension to Assignment 4, and the objective of this assignment is to enable the Garuda clients you have written as part of Assignment 4, communicate with standard SMTP and POP servers. To make the communication successful, the clients need to be compliant with the RFCs for each of these protocols.

Description:

Recapitulate that the Garuda infrastructure as mentioned in Assignment 4, uses the following Internet standard protocols for sending and retrieving email:

● Simple Mail Transfer Protocol (SMTP): the Internet standard protocol for sending email.
● Post Office Protocol (POP): an Internet standard protocol for retrieving email.

In this assignment, the Garuda server implementing SMTP and POP server instances is residing in a remote machine having **domain name garudaserver.com and IP address 10.5.30.131**. SMTP and POP servers are running at well-known ports 25 and 110.

There are two user accounts registered at garudaserver.com:

1. testuser@garudaserver.com
2. webmaster@garudaserver.com

You should be able to send emails to both users. The account webmaster@garudaserver.com is maintained by the system administrator and its password is not known. However, the testuser account is mainly used for testing purposes and its password is well-known (the password is "test"), therefore you can retrieve emails destined for testuser.

Deliverable:

The Garuda server running at 10.5.30.131 supports the following commands

SMTP Commands: HELO, MAIL FROM, RCPT TO, DATA, RSET, QUIT

POP Commands: USER, PASS, LIST, RETR, QUIT

You have to restructure (if needed) your Garuda client to properly communicate with the Garuda Server at 10.5.30.131 and send and retrieve emails using the above set of commands.