CSC203L Computer Networks Lab

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Submitted to:

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SOCKET PROGRAMMING HOME TASKS EMAIL SENDING

1. HOME TASK PROBLEM FOR TCP in EMAIL sending:

The goal of this programming assignment is to create a simple mail client that sends e-mail to any recipient. Your client will need to establish a TCP connection with a mail server (e.g., a Google mail server), dialogue with the mail server using the SMTP protocol, send an e-mail message to a recipient (e.g., your friend) via the mail server, and finally close the TCP connection with the mail server.

2. SOLUTION:

In order to solve this problem, we have to import smtp library which will tend us to send emails using Gmail due to Gmail security concerns.

STEP 1:

Import smtplib module.

STEP 2:

Input all the required information.

- Sender email.
- Recipient email.
- App password of Gmail by client.
- Subject of Email.
- Body of Email.

STEP 3:

Start greetings with server by using the following commands because smtp protocol has its own set of rules.

- server = smtplib.SMTP("smtp.gmail.com", 587) # 587 = TLS port
- server.ehlo() # Say hello to the server
- server.starttls() # to secure connection
- server.ehlo()

STEP 4:

Gmail server now starts login via sender email and App password.

STEP 5:

The whole message will be compiled in the form of string with formatting and send the whole string with email address of both sender and recipient.

- message = f"Subject: {SUBJECT}\n\n{BODY}"
- server.sendmail(EMAIL_ADDRESS, TO_EMAIL, message)
- print(" Email sent successfully!")

STEP 6:

After the whole process, the server will quit the connection.

3. PYTHON CODE SNIPPET:

C: > Users > User > Downloads > smtp_client (1).py > ...

```python
import smtplib

# ------------------------------
# CONFIGURATION - CHANGE THESE
# ------------------------------
EMAIL_ADDRESS = input("Enter your email :  ")     # Your Gmail address
APP_PASSWORD = "ispo zysb hvbe kewb"          # Gmail App Password
TO_EMAIL = input("Enter recipient email :  ")     # Recipient email
SUBJECT = input("Enter subject of email :  ")
BODY = input("Enter email content :  ")

# ------------------------------
# 1. Connect to Gmail SMTP server
# ------------------------------
try:
    server = smtplib.SMTP("smtp.gmail.com", 587)  # 587 = TLS port
    server.ehlo()                                  # Say hello to the server
    server.starttls()                              # Upgrade to secure connection
    server.ehlo()

    # ------------------------------
    # 2. Login
    # ------------------------------
    server.login(EMAIL_ADDRESS, APP_PASSWORD)

    # ------------------------------
    # 3. Send Email
    # ------------------------------
    message = f"Subject: {SUBJECT}\n\n{BODY}"
    server.sendmail(EMAIL_ADDRESS, TO_EMAIL, message)
    print(" Email sent successfully!")

except Exception as e:
    print(" Something went wrong:", e)

finally:
    # ------------------------------
    # 4. Quit
    # ------------------------------
    server.quit()
```

4. OUTPUT: