



MINISTRY OF EDUCATION OF REPUBLIC OF MOLDOVA

TECHNICAL UNIVERSITY OF MOLDOVA

FACULTY OF COMPUTERS, INFORMATICS AND MICROELECTRONICS

COMPUTER SCIENCE

NETWORK PROGRAMMING

LABORATORY WORK #4

E-mail client

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Work purpose:

Use application-level protocols (POP3/IMAP and SMTP) to implement an email client with basic functionality.

- 1 Implement a simple mail client which offers the following features: Log in; Get number of unread messages; Get last N received messages (display subject, date, sender), ordered by date; Send a message. Next fields must be available - subject, recipient, CC, body;

Program flow:

First of all program asks from you mail and password(password is hidden) this was made simply using "gets.chomp" for login and "STDIN.noecho(&gets).chomp!" for password.

After that the program log in you in the mail using IMAP from 'net/imap' library. I used IMAP because using POP3 is impossible to get the number of unread messages.

After log in program print the number of unread messages 3605 messages... yes I know.

Then program ask you to enter the number of last messages you want to see and print the subject date and sender. A lot of data were encoded so I had to decode them using Base64.

```
Enter your email:
oksurdu@mail.ru
Enter your password:
Number of unread messages: 3605
Enter last N received messages:
5
Subject: Темы дня: «Ильюшино чудо»: Ил-112В...; Доказательства того, что...; Меркель, Макрон, Мэй - это МММ...; и многое другое
Sender: МирТесен
Date: Mon, 21 May 2018 13:00:08 +0000
Subject: [FAF-151] Notele la PS atestarea 2
Sender: Sirbu Cornelia
Date: Mon, 21 May 2018 11:38:48 +0000
Subject: Темы дня: Сергей Безруков снова сыграет...; Новый тренд из Японии (7 фото); Психологи выяснили, почему у...; и многое другое
Sender: МирТесен
Date: Mon, 21 May 2018 01:09:01 +0000
Subject: Free image of the week: Virus
Sender: Dreamstime
Date: Mon, 21 May 2018 00:18:30 +0000
Subject: Лес Зеленый ți-a trimis un mesaj.
Sender: Лес Зеленый
Date: Sun, 20 May 2018 22:31:18 +0000
```

Figure 1.1– Mail Flow

At the end program send a test message to the "okdan96@gmail.com" mail form the mail I entered using "net/smtp" library. And I recived the message on my gmail client.

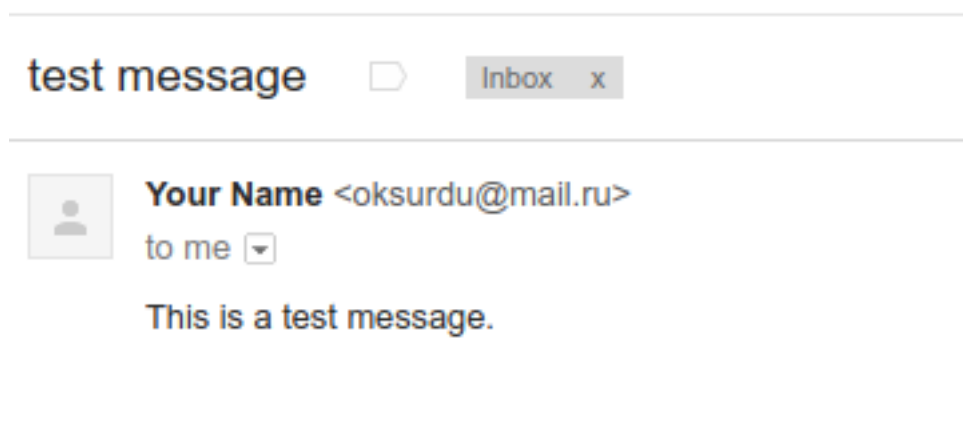


Figure 1.2– Test message