Báo cáo Week 7 - Thực hành Lập trình mạng - Kỳ 2025.1

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Github: https://github.com/nammannam/IT4062_Network_Programming

File account.txt:

Kết quả: **Mô hình 1 Server - 3 Clients**

+ Lenh who, help

+ Dang xuat he thong


```
Shared memory initialized successfully.
[SERVER]|[CHILD 77287] Gửi danh sách: namnk, admin, locdinh
DEBUG: len = 3
[SERVER]|[CHILD 77287] Nhận TEXT từ [locdinh] : bye
Received message from locdinh: Type=0x10, Length=3, Value="bye"
[SERVER]|[CHILD 77287] Gửi phản hồi: CONFIRM sau khi lưu log
[CHILD 77287] Client (127.0.0.1:50040) sent bye command.
[AUTH LOG] Logout: locdinh from 127.0.0.1:50040
[SHARED MEM] Removed client: locdinh (PID: 77287)
No user is currently logged in.
DEBUG: len = 3
[SERVER]|[CHILD 77425] Nhận TEXT từ [namnk] : bye
Received message from namnk: Type=0x10, Length=3, Value="bye"
[SERVER]|[CHILD 77425] Gửi phản hồi: CONFIRM sau khi lưu log
[CHILD 77425] Client (127.0.0.1:45176) sent bye command.
[AUTH LOG] Logout: namnk from 127.0.0.1:45176
[SHARED MEM] Removed client: namnk (PID: 77425)
No user is currently logged in.
```

```
namng@namng-ASUS:/mnt/BA145E2B145DEB41/Study/2025.1/THLTM/Code/W7$ ./client 127.0.0.9 8080
Connected to server (127.0.0.9:8080)
namnk
[CLIENT] Enter password:namnk123
[CLIENT] Server CONFIRM (0x11): namnk
who
[CLIENT] Logged-in users: namnk, admin, locdinh
bye
[CLIENT] Server CONFIRM (0x11): namnk
```

```
namng@namng-ASUS:/mnt/BA145E2B145DEB41/Study/2025.1/THLTM/Code/W7$ ./client 127.0.0.1 8080
Connected to server (127.0.0.1:8080)
admin
[CLIENT] Enter password:admin123
[CLIENT] Server CONFIRM (0x11): admin
help
[CLIENT] Server CONFIRM (0x11):
=== AVAILABLE COMMANDS ===
who  - Display list of logged-in users
help - Display this help message
bye  - Logout and disconnect
==========================
```

```
namng@namng-ASUS:/mnt/BA145E2B145DEB41/Study/2025.1/THLTM/Code/W7$ ./client 127.0.0.120 8080
Connected to server (127.0.0.120:8080)
locdinh
[CLIENT] Enter password:loc
[CLIENT] Server DENY (0x00): ERROR: Incorrect password. Attempt 1/3. Warning: Account will be locked after 3 fa
iled attempts.
locdinh
[CLIENT] Enter password:loc2004
[CLIENT] Server CONFIRM (0x11): locdinh
who
[CLIENT] Logged-in users: namnk, admin, locdinh
bye
[CLIENT] Server CONFIRM (0x11): locdinh
```
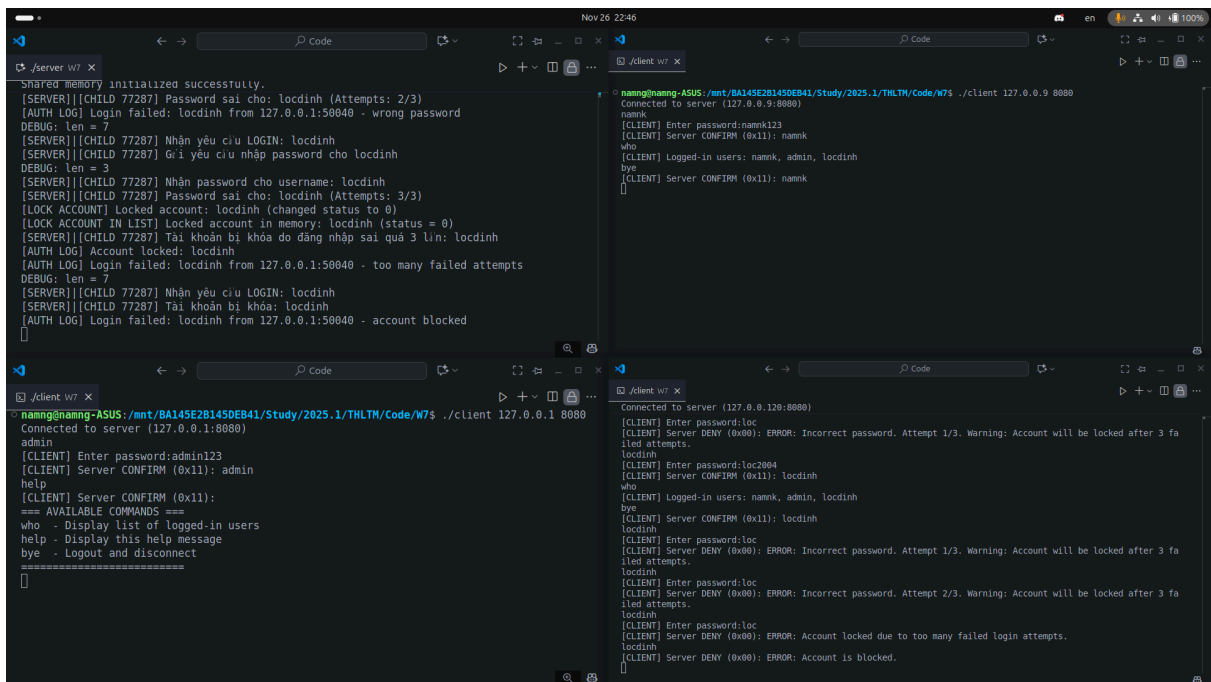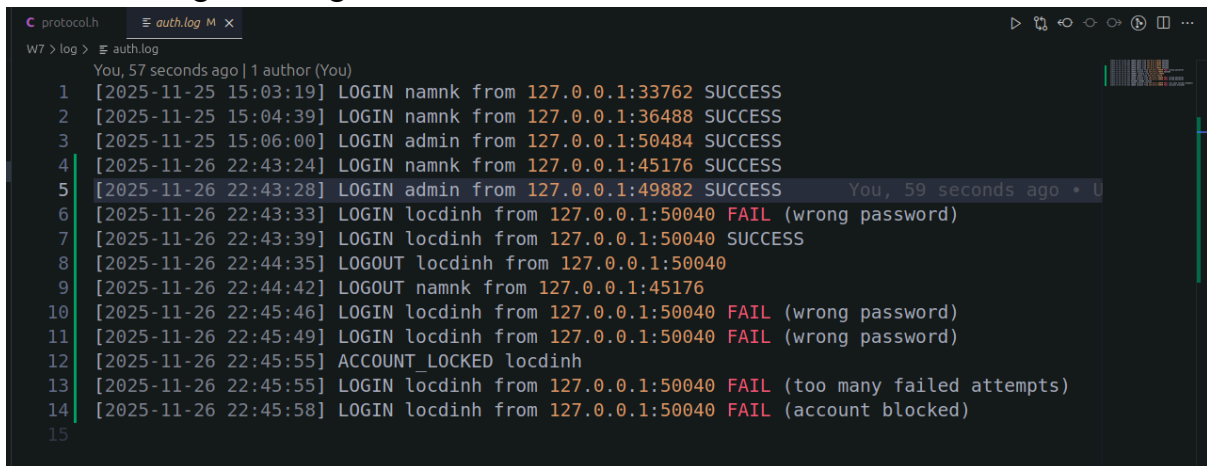
+ Khoa tai khoan
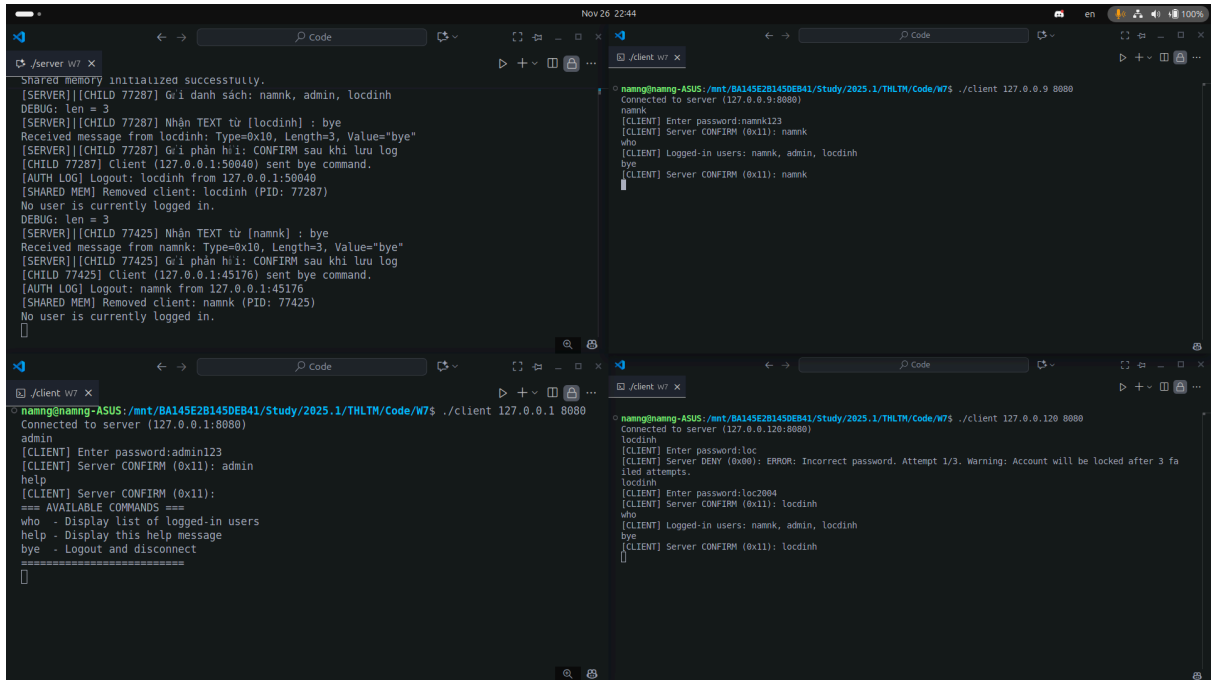

```
Shared memory initialized successfully.
[SERVER]|[CHILD 77287] Password sai cho: locdinh (Attempts: 2/3)
[AUTH LOG] Login failed: locdinh from 127.0.0.1:50040 - wrong password
DEBUG: len = 7
[SERVER]|[CHILD 77287] Nhận yêu cầu LOGIN: locdinh
[SERVER]|[CHILD 77287] Gửi yêu cầu nhập password cho locdinh
DEBUG: len = 3
[SERVER]|[CHILD 77287] Nhận password cho username: locdinh
[SERVER]|[CHILD 77287] Password sai cho: locdinh (Attempts: 3/3)
[LOCK ACCOUNT] Locked account: locdinh (changed status to 0)
[LOCK ACCOUNT IN LIST] Locked account in memory: locdinh (status = 0)
[SERVER]|[CHILD 77287] Tài khoản bị khóa do đăng nhập sai quá 3 lần: locdinh
[AUTH LOG] Account locked: locdinh
[AUTH LOG] Login failed: locdinh from 127.0.0.1:50040 - too many failed attempts
DEBUG: len = 7
[SERVER]|[CHILD 77287] Nhận yêu cầu LOGIN: locdinh
[SERVER]|[CHILD 77287] Tài khoản bị khóa: locdinh
[AUTH LOG] Login failed: locdinh from 127.0.0.1:50040 - account blocked
```

```
namng@namng-ASUS:/mnt/BA145E2B145DEB41/Study/2025.1/THLTM/Code/W7$ ./client 127.0.0.9 8080
Connected to server (127.0.0.9:8080)
namnk
[CLIENT] Enter password:namnk123
[CLIENT] Server CONFIRM (0x11): namnk
who
[CLIENT] Logged-in users: namnk, admin, locdinh
bye
[CLIENT] Server CONFIRM (0x11): namnk
```

```
namng@namng-ASUS:/mnt/BA145E2B145DEB41/Study/2025.1/THLTM/Code/W7$ ./client 127.0.0.1 8080
Connected to server (127.0.0.1:8080)
admin
[CLIENT] Enter password:admin123
[CLIENT] Server CONFIRM (0x11): admin
help
[CLIENT] Server CONFIRM (0x11):
=== AVAILABLE COMMANDS ===
who  - Display list of logged-in users
help - Display this help message
bye  - Logout and disconnect
==========================
```

```
Connected to server (127.0.0.120:8080)
[CLIENT] Enter password:loc
[CLIENT] Server DENY (0x00): ERROR: Incorrect password. Attempt 1/3. Warning: Account will be locked after 3 fa
iled attempts.
locdinh
[CLIENT] Enter password:loc2004
[CLIENT] Server CONFIRM (0x11): locdinh
who
[CLIENT] Logged-in users: namnk, admin, locdinh
bye
[CLIENT] Server CONFIRM (0x11): locdinh
locdinh
[CLIENT] Enter password:loc
[CLIENT] Server DENY (0x00): ERROR: Incorrect password. Attempt 1/3. Warning: Account will be locked after 3 fa
iled attempts.
locdinh
[CLIENT] Enter password:loc
[CLIENT] Server DENY (0x00): ERROR: Incorrect password. Attempt 2/3. Warning: Account will be locked after 3 fa
iled attempts.
locdinh
[CLIENT] Enter password:loc
[CLIENT] Server DENY (0x00): ERROR: Account locked due to too many failed login attempts.
locdinh
[CLIENT] Server DENY (0x00): ERROR: Account is blocked.
```

- **File log auth.log:**

```
        You, 57 seconds ago | 1 author (You)
   1    [2025-11-25 15:03:19] LOGIN namnk from 127.0.0.1:33762 SUCCESS
   2    [2025-11-25 15:04:39] LOGIN namnk from 127.0.0.1:36488 SUCCESS
   3    [2025-11-25 15:06:00] LOGIN admin from 127.0.0.1:50484 SUCCESS
   4    [2025-11-26 22:43:24] LOGIN namnk from 127.0.0.1:45176 SUCCESS
   5    [2025-11-26 22:43:28] LOGIN admin from 127.0.0.1:49882 SUCCESS      You, 59 seconds ago • L
   6    [2025-11-26 22:43:33] LOGIN locdinh from 127.0.0.1:50040 FAIL (wrong password)
   7    [2025-11-26 22:43:39] LOGIN locdinh from 127.0.0.1:50040 SUCCESS
   8    [2025-11-26 22:44:35] LOGOUT locdinh from 127.0.0.1:50040
   9    [2025-11-26 22:44:42] LOGOUT namnk from 127.0.0.1:45176
  10    [2025-11-26 22:45:46] LOGIN locdinh from 127.0.0.1:50040 FAIL (wrong password)
  11    [2025-11-26 22:45:49] LOGIN locdinh from 127.0.0.1:50040 FAIL (wrong password)
  12    [2025-11-26 22:45:55] ACCOUNT_LOCKED locdinh
  13    [2025-11-26 22:45:55] LOGIN locdinh from 127.0.0.1:50040 FAIL (too many failed attempts)
  14    [2025-11-26 22:45:58] LOGIN locdinh from 127.0.0.1:50040 FAIL (account blocked)
  15
```