

Bài tập Lập trình mạng ngày 29/05/2023

Trần Lâm – 20204759

IT4060 – 141337

Link Github:

https://github.com/tranlamm/network_programming/tree/main/29.05.2023

1. Ảnh chạy thử bài 1 (Telnet server):

```
tranlamm@MayTangHam: ~/network_programming/29.05.2023$ ./telnet_server.o 9000
user_database.txt cmd_output.txt
Waiting for client connecting ...
Client has connected: 127.0.0.1:44084
Client has connected: 127.0.0.1:55546
Receive from pid 1257: ls
Receive from pid 1259: dir
Child process 1257 terminated
Child process 1259 terminated

tranlamm@MayTangHam:~/network_programming/29.05.2023$ ./telnet_client.o 127.0.0.1 9000
Connected successfully
Please login to continue
admin
Wrong format
admin admin
Login successfully
ls
cmd_output.txt
http_server.c
http_server.o
telnet_client.c
telnet_client.o
telnet_server.c
telnet_server.o
time_client.c
time_client.o
time_server.c

tranlamm@MayTangHam:~/network_programming/29.05.2023$ ./telnet_client.o 127.0.0.1 9000
Connected successfully
Please login to continue
admin user
Wrong account or password
guest nopass
Login successfully
dir
cmd_output.txt telnet_client.c telnet_server.o time_server.c
http_server.c telnet_client.o time_client.c time_server.o
http_server.o telnet_server.c time_client.o user_database.txt

exit
Socket closed
Process closed
Killed
tranlamm@MayTangHam:~/network_programming/29.05.2023$ |
```

Process list khi có 2 kết nối

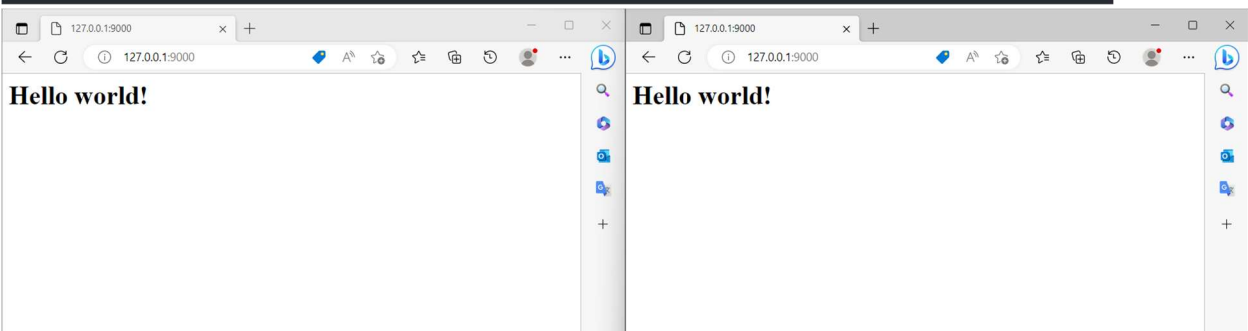
```
1150 pts/6 -bash Ss
1226 pts/0 /home/tranlamm/.vscode-serv Sl+
1254 pts/3 ./telnet_server.o 9000 user S+
1255 pts/4 ./telnet_client.o 127.0.0.1 S+
1256 pts/4 ./telnet_client.o 127.0.0.1 S+
1257 pts/3 ./telnet_server.o 9000 user S+
1258 pts/6 ./telnet_client.o 127.0.0.1 S+
1259 pts/3 ./telnet_server.o 9000 user S+
1260 pts/6 ./telnet_client.o 127.0.0.1 S+
1262 pts/5 ps -e -o pid,tty,cmd,stat R+
tranlamm@MayTangHam:~/network_programming/29.05.2023$ |
```

Process list khi đóng 2 kết nối

```
1150 pts/6 -bash Ss+
1226 pts/0 /home/tranlamm/.vscode-serv Sl+
1254 pts/3 ./telnet_server.o 9000 user S+
1268 pts/5 ps -e -o pid,tty,cmd,stat R+
tranlamm@MayTangHam:~/network_programming/29.05.2023$ |
```

2. Ảnh chạy thử bài 2 (HTTP server):

```
1327 ? /init Ss
1328 ? /init S
1329 pts/3 -bash Ss
1403 pts/3 ./http_server.o 9000 S+
1404 pts/3 ./http_server.o 9000 S+
1405 pts/3 ./http_server.o 9000 S+
1406 pts/3 ./http_server.o 9000 S+
1407 pts/3 ./http_server.o 9000 S+
1408 pts/3 ./http_server.o 9000 S+
1409 pts/3 ./http_server.o 9000 S+
1410 pts/3 ./http_server.o 9000 S+
1411 pts/3 ./http_server.o 9000 S+
1412 pts/3 ./http_server.o 9000 S+
1413 pts/5 ps -e -o pid, tty, cmd, stat R+
tranlamm@MayTangHam:~/network_programming/29.05.2023$ |
```



```
tranlamm@MayTangHam: ~/n x tranlamm@MayTangHam: ~/n x +
tranlamm@MayTangHam:~/network_programming/29.05.2023$ gcc http_server.c -o http_server.o
tranlamm@MayTangHam:~/network_programming/29.05.2023$ ./http_server.o 9000
Waiting for client connecting
Client has connected: 127.0.0.1:56986
Receive from process 1404: GET / HTTP/1.1
Host: 127.0.0.1:9000
Connection: keep-alive
sec-ch-ua: "Microsoft Edge";v="113", "Chromium";v="113", "Not-A.Brand";v="24"
sec-ch-ua-mobile: ?0
sec-ch-ua-platform: "Windows"
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/5.0 (Windows
Client has connected: 127.0.0.1:56994
Client has connected: 127.0.0.1:56998
Receive from process 1405: GET /favicon.ico HTTP/1.1
Host: 127.0.0.1:9000
Connection: keep-alive
sec-ch-ua: "Microsoft Edge";v="113", "Chromium";v="113", "Not-A.Brand";v="24"
sec-ch-ua-mobile: ?0
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, l
Client has connected: 127.0.0.1:47008
Client has connected: 127.0.0.1:47028
Receive from process 1407: GET / HTTP/1.1
Host: 127.0.0.1:9000
Connection: keep-alive
sec-ch-ua: "Microsoft Edge";v="113", "Chromium";v="113", "Not-A.Brand";v="24"
sec-ch-ua-mobile: ?0
sec-ch-ua-platform: "Windows"
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/5.0 (Windows
Client has connected: 127.0.0.1:47014
Client has connected: 127.0.0.1:47028
Receive from process 1408: GET /favicon.ico HTTP/1.1
Host: 127.0.0.1:9000
Connection: keep-alive
sec-ch-ua: "Microsoft Edge";v="113", "Chromium";v="113", "Not-A.Brand";v="24"
sec-ch-ua-mobile: ?0
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, l
|
```

3. Ảnh chạy thử bài 3 (Time server):

```
1570 pts/7      -bash                                     Ss
1589 pts/5      ./time_server.o 9000                     S+
1590 pts/4      ./time_client.o 127.0.0.1 9 S+
1591 pts/5      ./time_server.o 9000                     S+
1592 pts/4      ./time_client.o 127.0.0.1 9 S+
1593 pts/7      ./time_client.o 127.0.0.1 9 S+
1594 pts/7      ./time_client.o 127.0.0.1 9 S+
1595 pts/5      ./time_server.o 9000                     S+
1596 pts/6      ./time_client.o 127.0.0.1 9 S+
1597 pts/6      ./time_client.o 127.0.0.1 9 S+
1598 pts/5      ./time_server.o 9000                     S+
1599 pts/3      ps -e -o pid,tty,cmd,stat              R+
tranlamm@MayTangHam:~/network_programming/29.05.2023$ |

tranlamm@MayTangHam:~/network_programming/29.05.2023$ ./time_server.o 9000
Waiting for client connecting ...
Client has connected: 127.0.0.1:56562
Client has connected: 127.0.0.1:56566
Client has connected: 127.0.0.1:56580
Receive: GET_TIME 123
Receive: GET_TIME dd/mm/yyyy 123
Receive: GET_TIME d/m/y
Receive: GET_TIME dd/mm/yyyy
Child process 1591 terminated
Receive: GET_TIME dd/mm/yy
Child process 1595 terminated
Receive: GET_TIME mm/dd/yy
Child process 1598 terminated
|

tranlamm@MayTangHam:~/network_programming/29.05.2023$ ./time_client.o 127.0.0.1 9000
Connected successfully
GET_TIME 123
Wrong format
GET_TIME dd/mm/yyyy
30/05/2023
Disconnected
Socket closed
Killed
tranlamm@MayTangHam:~/network_programming/29.05.2023$

tranlamm@MayTangHam:~/network_programming/29.05.2023$ ./time_client.o 127.0.0.1 9000
Connected successfully
GET_TIME d/m/y
Wrong format
GET_TIME dd/mm/yy
05/30/23
Disconnected
Socket closed
Killed
tranlamm@MayTangHam:~/network_programming/29.05.2023$

tranlamm@MayTangHam:~/network_programming/29.05.2023$ |

1570 pts/7      -bash                                     Ss+
1589 pts/5      ./time_server.o 9000                     S+
1601 pts/3      ps -e -o pid,tty,cmd,stat              R+
tranlamm@MayTangHam:~/network_programming/29.05.2023$ |
```