Tugas Implementasi Program Chat

OLEH :

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PEMROGRAMAN JARINGAN - E

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Soal Tugas Implementasi Program Chat :

Jalankan program chat tersebut di EMULATOR. lakukan menggunakan konfigurasi

- 1 mesin berfungsi sebagai chat server

- 2 mesin berfungsi sebagai chat client

buatlah interaksi antara 2 mesin client dengan server. lakukan aktifitas-aktifitas berikut ini
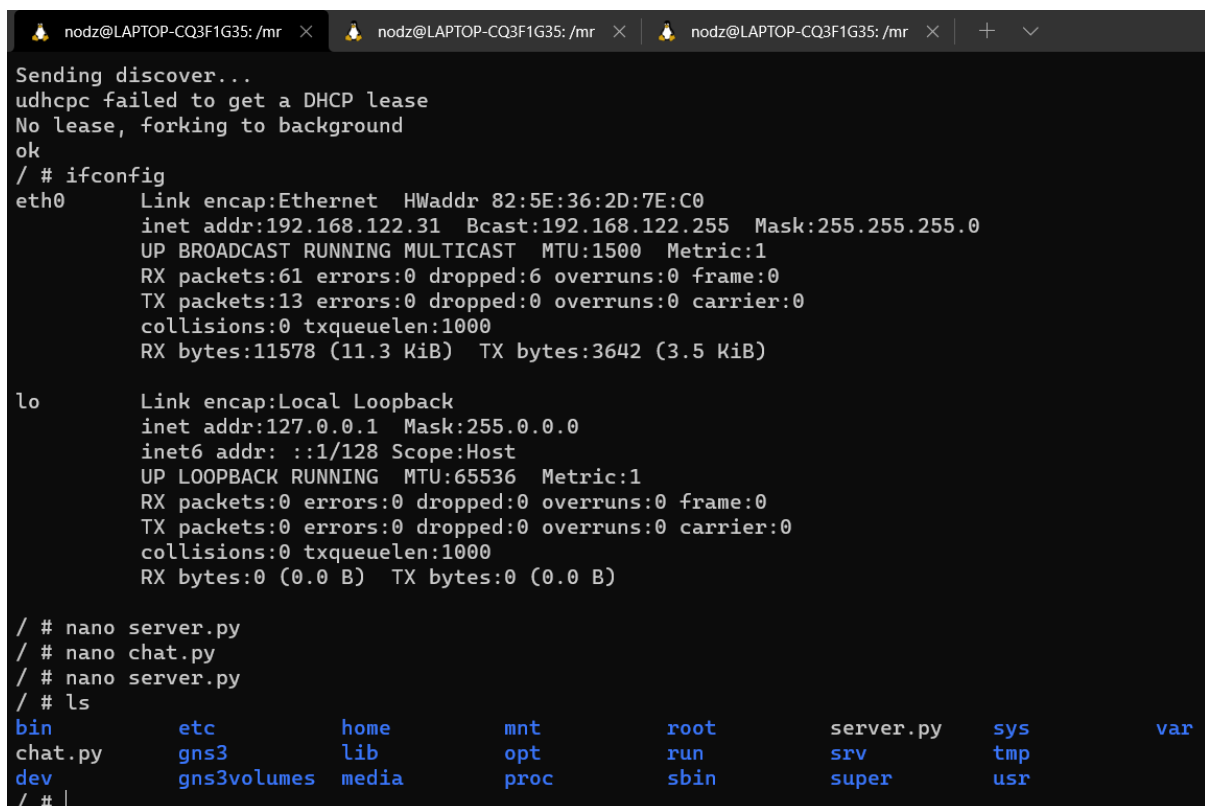
- authentication

- berkirim pesan antar user

dan capturelah ke dalam gambar, dan submitlah dalam bentuk 1 dokumen PDF. berikan PENJELASAN SINGKAT dari hasil capture anda

Jawaban Tugas Implementasi Program Chat :

Saat menjalankan program chat, alpine 1 menjadi server, lalu alpine 2 dan alpine 3 menjadi client

1. Masukan file server_thread_chat.py dan chat.py pada alpine 1 (sesuaikan server addressnya dengan IP alpine 1)

2. Masukan file client-cli.py di alpine 2 dan alpine 3 (Targer IP addressnya diarahkan ke IP address server yaitu alpine 1)

```
This message is shown once a day. To disable it please create the
/home/nodz/.hushlogin file.
nodz@LAPTOP-CQ3F1G35:/mnt/c/Users/Nodas Uziel$ telnet 192.168.99.101 5002
Trying 192.168.99.101...
Connected to 192.168.99.101.
Escape character is '^]'.
alpine-2 console is now available... Press RETURN to get started.
udhcpc (v1.24.2) started
Sending discover...
Sending discover...
Sending discover...
Sending discover...
Sending discover...
udhcpc failed to get a DHCP lease
No lease, forking to background
ok
/ # nano client.py
/ #
```

```
nodz@LAPTOP-CQ3F1G35:/mnt/c/Users/Nodas Uziel$ telnet 192.168.99.101 5004
Trying 192.168.99.101...
Connected to 192.168.99.101.
Escape character is '^]'.
alpine-3 console is now available... Press RETURN to get started.
udhcpc (v1.24.2) started
Sending discover...
Sending discover...
Sending discover...
Sending discover...
Sending select for 192.168.122.91...
Sending select for 192.168.122.91...
Sending select for 192.168.122.91...
Sending select for 192.168.122.91...
Sending select for 192.168.122.91...
udhcpc failed to get a DHCP lease
No lease, forking to background
ok
/ # nano client.py
/ #
```

3. Alpine 2 dan Alpine 3 melakukan authentication dengan command "auth<spasi>
    nama user<spasi>password"

```
The list of available updates is more than a week old.
To check for new updates run: sudo apt update


This message is shown once a day. To disable it please create the
/home/nodz/.hushlogin file.
nodz@LAPTOP-CQ3F1G35:/mnt/c/Users/Nodas Uziel$ telnet 192.168.99.101 5002
Trying 192.168.99.101...
Connected to 192.168.99.101.
Escape character is '^]'.
alpine-2 console is now available... Press RETURN to get started.
udhcpc (v1.24.2) started
Sending discover...
Sending discover...
Sending discover...
Sending discover...
Sending discover...
udhcpc failed to get a DHCP lease
No lease, forking to background
ok
/ # nano client.py
/ # python3 client.py
Command :auth messi surabaya
diterima dari server b'{"status": "OK", "tokenid": "90b5f312-834f-4146-9831-52518f3854c'
diterima dari server b'5"}\r\n\r\n'
end of string
username messi logged in, token 90b5f312-834f-4146-9831-52518f3854c5
Command 90b5f312-834f-4146-9831-52518f3854c5:
```

```
nodz@LAPTOP-CQ3F1G35:/mnt/c/Users/Nodas Uziel$ telnet 192.168.99.101 5004
Trying 192.168.99.101...
Connected to 192.168.99.101.
Escape character is '^]'.
alpine-3 console is now available... Press RETURN to get started.
udhcpc (v1.24.2) started
Sending discover...
Sending discover...
Sending discover...
Sending discover...
Sending select for 192.168.122.91...
Sending select for 192.168.122.91...
Sending select for 192.168.122.91...
Sending select for 192.168.122.91...
Sending select for 192.168.122.91...
udhcpc failed to get a DHCP lease
No lease, forking to background
ok
/ # nano client.py
/ # python3 client.py
Command :auth henderson surabaya
diterima dari server b'{"status": "OK", "tokenid": "9dc2f237-4b7d-4154-8756-5db9fc5f33e'
diterima dari server b'7"}\r\n\r\n'
end of string
username henderson logged in, token 9dc2f237-4b7d-4154-8756-5db9fc5f33e7
Command 9dc2f237-4b7d-4154-8756-5db9fc5f33e7:
```

4. Notifikasi authentication pada server

```
/ # python3 server.py
WARNING:root:connection from ('192.168.122.187', 33458)
WARNING:root:data dari client: auth messi surabaya

WARNING:root:AUTH: auth messi surabaya
WARNING:root:balas ke  client: {"status": "OK", "tokenid": "90b5f312-834f-4146-9831-52518f3854c5"}


WARNING:root:connection from ('192.168.122.91', 40472)
WARNING:root:data dari client: auth henderson surabaya

WARNING:root:AUTH: auth henderson surabaya
WARNING:root:balas ke  client: {"status": "OK", "tokenid": "9dc2f237-4b7d-4154-8756-5db9fc5f33e7"}
```

5. Alpine 2 dan Alpine 3 melakukan pengiriman pesan dengan command "send<spasi> nama user<spasi>pesan yang mau dikirim"

```
Command 90b5f312-834f-4146-9831-52518f3854c5:send henderson selamat siang bro hender
send 90b5f312-834f-4146-9831-52518f3854c5 henderson  selamat siang bro hender

diterima dari server b'{"status": "OK", "message": "Message Sent"}\r\n\r\n'
end of string
message sent to henderson
Command 90b5f312-834f-4146-9831-52518f3854c5:
```

```
Command 9dc2f237-4b7d-4154-8756-5db9fc5f33e7:send messi siang juga bro messi
send 9dc2f237-4b7d-4154-8756-5db9fc5f33e7 messi  siang juga bro messi

diterima dari server b'{"status": "OK", "message": "Message Sent"}\r\n\r\n'
end of string
message sent to messi
Command 9dc2f237-4b7d-4154-8756-5db9fc5f33e7:
```

6. Notifikasi pengirimasn pesan antar client (alpine 2 dan alpine 3)

```
WARNING:root:data dari client: send 90b5f312-834f-4146-9831-52518f3854c5 henderson  selamat siang bro hender

WARNING:root:SEND: session 90b5f312-834f-4146-9831-52518f3854c5 send message from messi to henderson
WARNING:root:balas ke  client: {"status": "OK", "message": "Message Sent"}


WARNING:root:data dari client: send 9dc2f237-4b7d-4154-8756-5db9fc5f33e7 messi  siang juga bro messi

WARNING:root:SEND: session 9dc2f237-4b7d-4154-8756-5db9fc5f33e7 send message from henderson to messi
WARNING:root:balas ke  client: {"status": "OK", "message": "Message Sent"}
```

7. Alpine 2 dan Alpine 3 mengecek inbox pesan yang sudah masuk

```
Command 9dc2f237-4b7d-4154-8756-5db9fc5f33e7:inbox
diterima dari server b'{"status": "OK", "messages": {"messi": [{"msg_from": "Lionel Mes'
diterima dari server b'si", "msg_to": "Jordan Henderson", "msg": "  selamat siang bro h'
diterima dari server b'ender \\r\\n"}]}}\r\n\r\n'
end of string
{"messi": [{"msg_from": "Lionel Messi", "msg_to": "Jordan Henderson", "msg": "  selamat siang bro hender \r\n"}]}
Command 9dc2f237-4b7d-4154-8756-5db9fc5f33e7:
```

```
Command 90b5f312-834f-4146-9831-52518f3854c5:inbox
diterima dari server b'{"status": "OK", "messages": {"henderson": [{"msg_from": "Jordan'
diterima dari server b' Henderson", "msg_to": "Lionel Messi", "msg": "  siang juga bro '
diterima dari server b'messi \\r\\n"}]}}\r\n\r\n'
end of string
{"henderson": [{"msg_from": "Jordan Henderson", "msg_to": "Lionel Messi", "msg": "  siang juga bro messi \r\n"}]}
Command 90b5f312-834f-4146-9831-52518f3854c5:
```