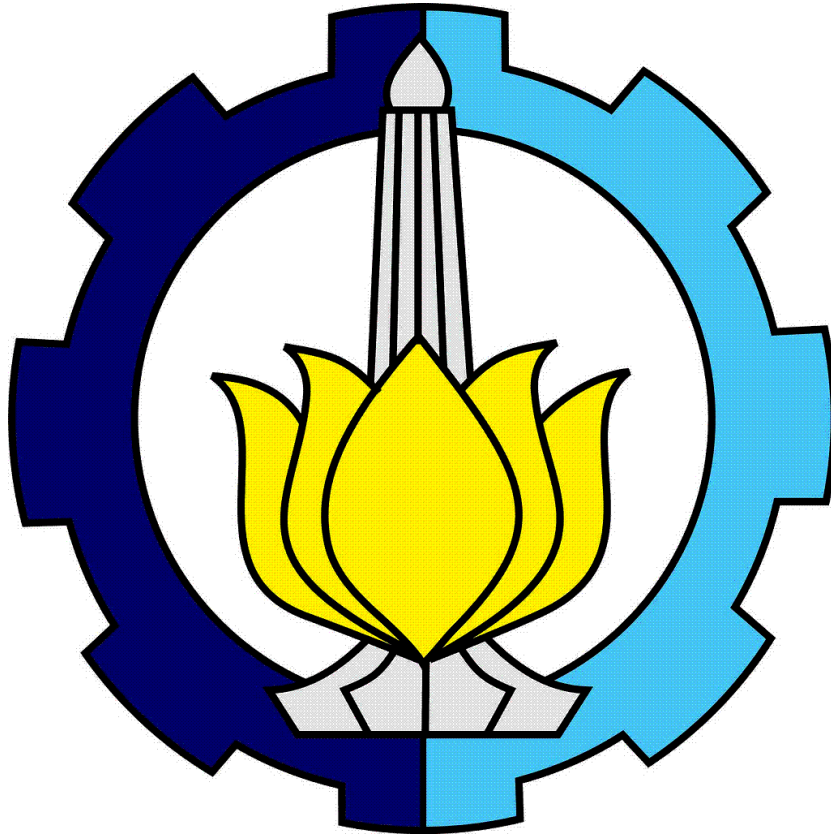


**Dokumentasi**  
**Tugas Praktikum UDP 1**



**Pemrograman Jaringan**  
**Kelas E**

Afia Hana Yusriya

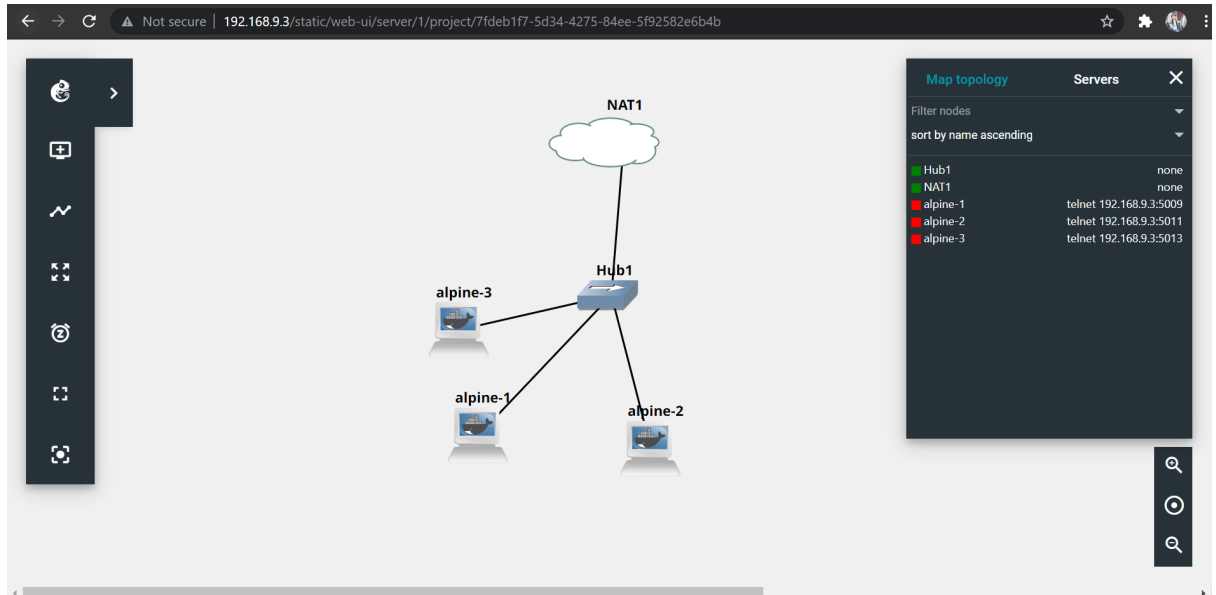
05111840000111

**Institut Teknologi Sepuluh Nopember**  
**Surabaya**  
**2021**

## 1. Load file di simulator

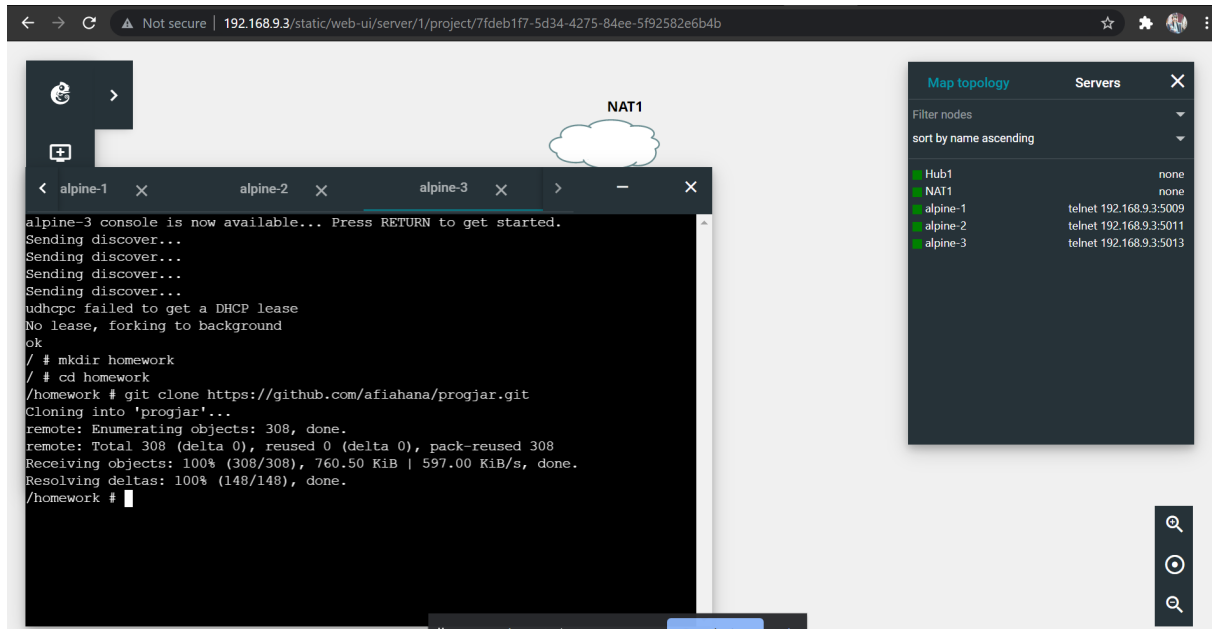
File yang di load dapat di download di

[https://drive.google.com/file/d/1\\_kGda6tKbWe6hOmzQlBrQOfw0wVEOlw8/view?usp=sharing](https://drive.google.com/file/d/1_kGda6tKbWe6hOmzQlBrQOfw0wVEOlw8/view?usp=sharing)

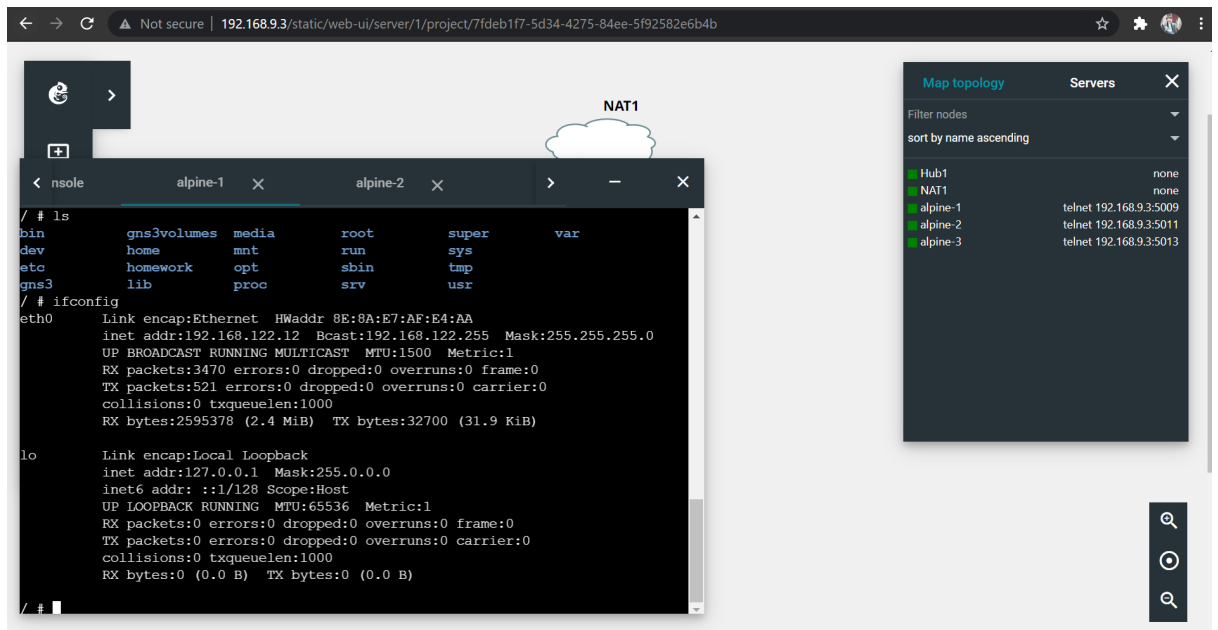


## 2. Clone repository progjar yang telah di-fork ke github masing-masing ke masing-masing node

**git clone https://github.com/afiahana/progjar.git**



### 3. Cek IP Server dengan **command iconfig** di alpine1



The screenshot shows a network simulator interface with a terminal window for 'alpine-1'. The terminal output of the 'ifconfig' command for the 'eth0' interface is as follows:

```
/ # ifconfig
eth0      Link encap:Ethernet  HWaddr 8E:8A:E7:AF:E4:AA
          inet addr:192.168.122.12  Bcast:192.168.122.255  Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:3470 errors:0 dropped:0 overruns:0 frame:0
          TX packets:521 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:2595378 (2.4 MiB)  TX bytes:32700 (31.9 KiB)

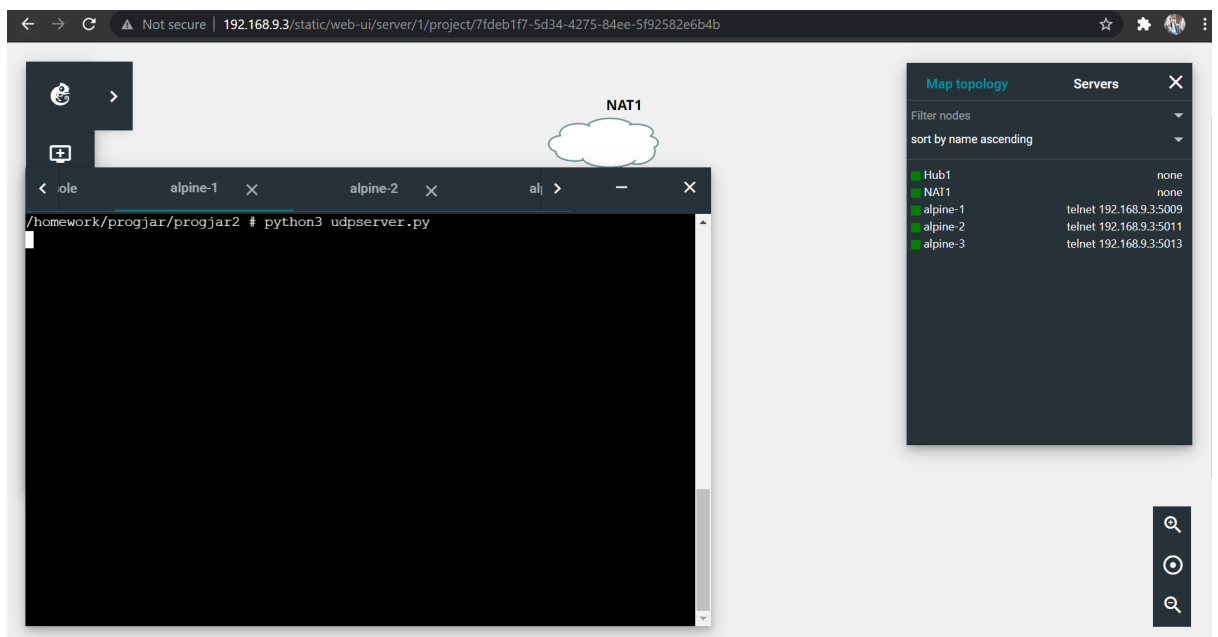
lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 B)  TX bytes:0 (0.0 B)

/ #
```

The 'Servers' panel on the right lists the IP addresses for the nodes in the topology:

Node	IP Address
Hub1	none
NAT1	none
alpine-1	telnet 192.168.9.3:5009
alpine-2	telnet 192.168.9.3:5011
alpine-3	telnet 192.168.9.3:5013

### 4. Jalankan file **udpserver.py** di alpine1 dengan command **python3 udpserver.py**

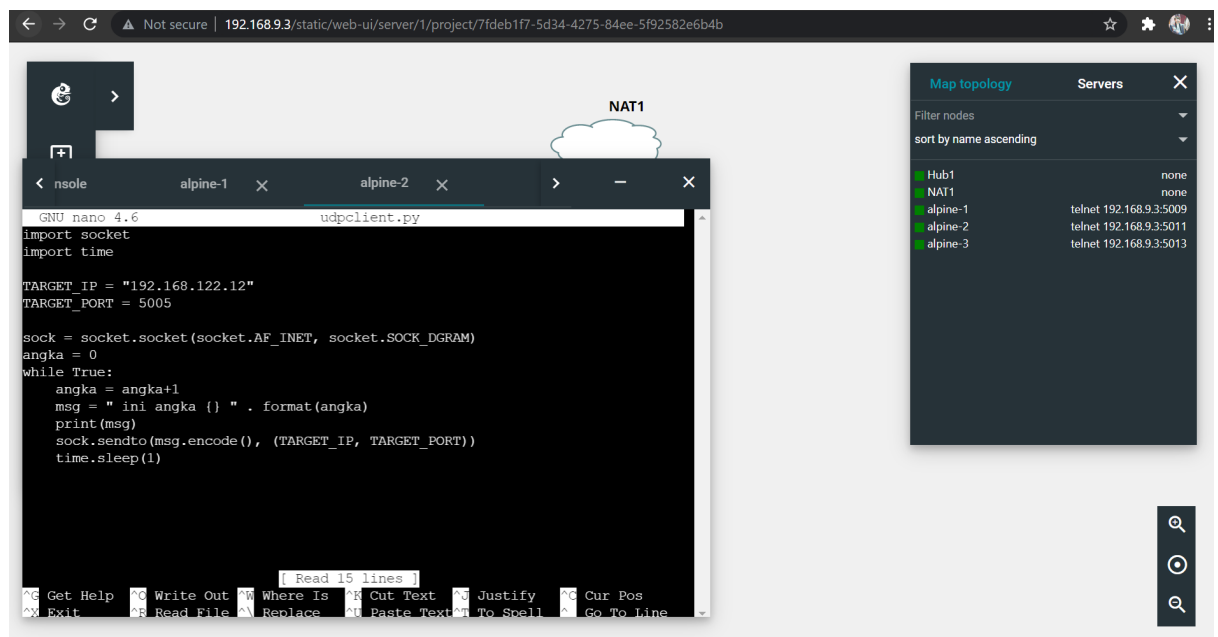


The screenshot shows the same network simulator interface, but the terminal window for 'alpine-1' now shows the command 'python3 udpserver.py' being executed. The output of the command is not visible in the screenshot.

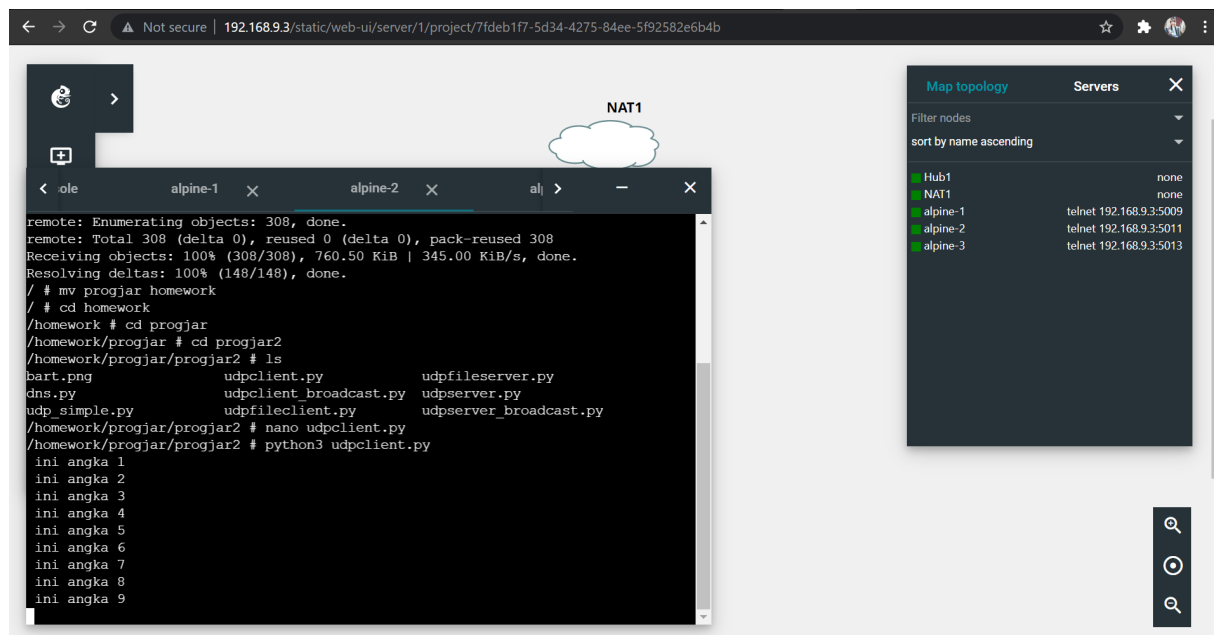
The 'Servers' panel on the right remains the same, listing the IP addresses for the nodes in the topology:

Node	IP Address
Hub1	none
NAT1	none
alpine-1	telnet 192.168.9.3:5009
alpine-2	telnet 192.168.9.3:5011
alpine-3	telnet 192.168.9.3:5013

5. Buka console alpine2 dan ubah udpclient.py menjadi sesuai gambar di bawah



6. Jalankan file udpclient.py di alpine2 dengan command **python3 udpclient.py**



7. Yang terjadi di alpine1 ketika file udpclient.py dijalankan di alpine2

The screenshot shows a network simulation interface. The main window displays a terminal for the 'alpine-1' node. The terminal output shows network interface details for 'lo' and a series of received and sent packets. The received packets are from '192.168.122.148' on port 51264, and the sent packets are to '192.168.122.148' on port 51264. The interface also shows a 'NAT1' node and a 'Servers' panel on the right.

**Terminal Output (alpine-1):**

```
lo      Link encap:Local Loopback
        inet addr:127.0.0.1  Mask:255.0.0.0
        inet6 addr: ::1/128 Scope:Host
        UP LOOPBACK RUNNING  MTU:65536  Metric:1
        RX packets:0 errors:0 dropped:0 overruns:0 frame:0
        TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:0 (0.0 B)  TX bytes:0 (0.0 B)

/ # cd homework
/homework # cd progjar
/homework/progjar # cd progjar2
/homework/progjar/progjar2 # python3 udpserver.py
diterima b' ini angka 1 '
dikirim oleh ('192.168.122.148', 51264)
diterima b' ini angka 2 '
dikirim oleh ('192.168.122.148', 51264)
diterima b' ini angka 3 '
dikirim oleh ('192.168.122.148', 51264)
diterima b' ini angka 4 '
dikirim oleh ('192.168.122.148', 51264)
diterima b' ini angka 5 '
dikirim oleh ('192.168.122.148', 51264)
```

**Servers Panel:**

Node	IP Address	Port
Hub1	none	none
NAT1	none	none
alpine-1	telnet 192.168.9.3:5009	
alpine-2	telnet 192.168.9.3:5011	
alpine-3	telnet 192.168.9.3:5013	