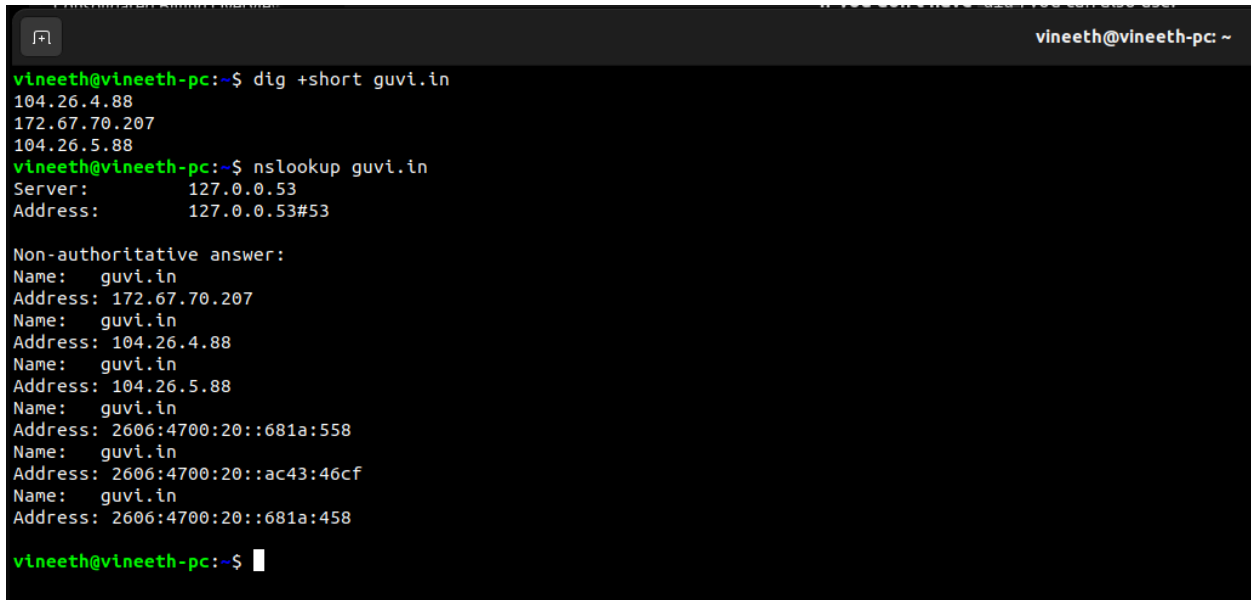


Network Task

Task 1:

1) Get IP address of domain (guvi.in) :

A terminal window with a dark background and green text. The prompt is 'vineeth@vineeth-pc: ~'. The user enters 'dig +short guvi.in' and the output shows three IP addresses: 104.26.4.88, 172.67.70.207, and 104.26.5.88. Then the user enters 'nslookup guvi.in' and the output shows the server 127.0.0.53 and the address 127.0.0.53#53. Below that, it shows a non-authoritative answer with multiple records for guvi.in, including IPv4 and IPv6 addresses.

```
vineeth@vineeth-pc:~$ dig +short guvi.in
104.26.4.88
172.67.70.207
104.26.5.88
vineeth@vineeth-pc:~$ nslookup guvi.in
Server:      127.0.0.53
Address:     127.0.0.53#53

Non-authoritative answer:
Name:   guvi.in
Address: 172.67.70.207
Name:   guvi.in
Address: 104.26.4.88
Name:   guvi.in
Address: 104.26.5.88
Name:   guvi.in
Address: 2606:4700:20::681a:558
Name:   guvi.in
Address: 2606:4700:20::ac43:46cf
Name:   guvi.in
Address: 2606:4700:20::681a:458

vineeth@vineeth-pc:~$
```

Commands used :

- **dig +short guvi.in :**
 - dig** → DNS lookup tool.
 - +short** → Only gives a clean IP address (without all detailed info).
 - guvi.in** → The domain you are querying.
- **nslookup guvi.in :**
 - another tool to find domain IP addresses.

2) Find CPU/Memory usage of your server :

```
vineeth@vineeth-pc: ~  
vineeth@vineeth-pc:~$ top -bn1 | grep "Cpu(s)"  
%Cpu(s):  1.2 us,  2.5 sy,  0.0 ni, 96.2 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st  
vineeth@vineeth-pc:~$ free -h  
              total        used        free      shared  buff/cache   available  
Mem:           11Gi         3.6Gi         3.8Gi         717Mi         4.1Gi         7.0Gi  
Swap:           0B           0B           0B  
vineeth@vineeth-pc:~$
```

Commands used :

- **top -bn1 | grep "Cpu(s)" :**
 - top** shows running processes and resource usage live.
 - b** = batch mode (good for scripting).
 - n1** = take only one sample.
 - grep "Cpu(s)"** = filter output to show only CPU usage line.
- **free -h :**
 - free** shows memory statistics.
 - h** = human-readable (MB/GB).

3) Test the connectivity between 2 nodes :

```
vineeth@vineeth-pc: ~  
vineeth@vineeth-pc:~$ ping -c 4 guvi.in  
PING guvi.in (172.67.70.207) 56(84) bytes of data.  
64 bytes from 172.67.70.207 (172.67.70.207): icmp_seq=1 ttl=56 time=24.0 ms  
64 bytes from 172.67.70.207 (172.67.70.207): icmp_seq=2 ttl=56 time=24.3 ms  
64 bytes from 172.67.70.207 (172.67.70.207): icmp_seq=3 ttl=56 time=24.1 ms  
64 bytes from 172.67.70.207 (172.67.70.207): icmp_seq=4 ttl=56 time=23.7 ms  
  
--- guvi.in ping statistics ---  
4 packets transmitted, 4 received, 0% packet loss, time 3003ms  
rtt min/avg/max/mdev = 23.689/24.021/24.259/0.214 ms  
vineeth@vineeth-pc:~$
```

Commands used:

- `ping -c 4 guvi.in:`
 - `ping` sends ICMP echo requests to a server.
 - `-c 4` → Only send 4 packets, then stop.

Task 2 :

- 1) Check if port 9000 on guvi.com is open :

```
vineeth@vineeth-pc: ~  
vineeth@vineeth-pc:~$ nc -zv guvi.com 9000  
^C  
vineeth@vineeth-pc:~$ nc -zv guvi.com 80  
Connection to guvi.com (172.67.146.154) 80 port [tcp/http] succeeded!  
vineeth@vineeth-pc:~$
```

- I am getting no response when i try connecting port 9000.