[Guvi Task]
Day 3 - LINUX - Network Basic

TASK: Get me IP address of particular domain (guvi.in) How do I find my CPU/memory usage of my server? Test the connectivity between 2 nodes? I have deployed an application in guvi.com:9000, and logs shows my app is running, but I'm unable to view the page. Check whether my port is open or not ?

```
ubuntu@ip-172-31-42-100:~$
ubuntu@ip-172-31-42-100:~$
ubuntu@ip-172-31-42-100:~$
ubuntu@ip-172-31-42-100:~$ nslookup www.guvi.in
Server:         127.0.0.53
Address:        127.0.0.53#53

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

ubuntu@ip-172-31-42-100:~$
```

i-07353beffd505364b (Dockerfile)   X

PublicIPs: 13.232.99.59   PrivateIPs: 172.31.42.100

aws   ::: Services   Q Search   [Alt+S]   ⊡ △ ⑦ ⚙ Mumbai ▾ Sumit_aws_11 ▾

```
top - 18:10:00 up  4:33,  1 user,  load average: 0.00, 0.00, 0.00
Tasks: 107 total,   1 running, 106 sleeping,   0 stopped,   0 zombie
%Cpu(s):  9.1 us,  0.0 sy,  0.0 ni, 90.9 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :    957.4 total,    155.7 free,    363.9 used,    592.6 buff/cache
MiB Swap:      0.0 total,      0.0 free,      0.0 used.    593.5 avail Mem

    PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
      1 root      20   0   22244  13416   9576 S   0.0   1.4   0:04.26 systemd
      2 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kthreadd
      3 root      20   0       0      0      0 S   0.0   0.0   0:00.00 pool_workqueue_release
      4 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-rcu_g
      5 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-rcu_p
      6 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-slub_
      7 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-netns
     10 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/0:0H-events_highpri
     12 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-mm_pe
     13 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_rude_kthread
     14 root      20   0       0      0      0 I   0.0   0.0   0:00.00 rcu_tasks_trace_kthread
     15 root      20   0       0      0      0 S   0.0   0.0   0:00.28 ksoftirqd/0
     16 root      20   0       0      0      0 I   0.0   0.0   0:00.39 rcu_sched
     17 root      rt   0       0      0      0 S   0.0   0.0   0:00.09 migration/0
     18 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 idle_inject/0
     19 root      20   0       0      0      0 S   0.0   0.0   0:00.00 cpuhp/0
     20 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kdevtmpfs
     21 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/R-inet_
     23 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kauditd
     24 root      20   0       0      0      0 S   0.0   0.0   0:00.00 khungtaskd
```

```
    23 root      20   0       0       0      0 S   0.0   0.0   0:00.00 kauditd
    24 root      20   0       0       0      0 S   0.0   0.0   0:00.00 khungtaskd
ubuntu@ip-172-31-42-100:~$
ubuntu@ip-172-31-42-100:~$
ubuntu@ip-172-31-42-100:~$ free -h
              total        used        free      shared  buff/cache   available
Mem:          957Mi       363Mi       155Mi       912Ki       592Mi       593Mi
Swap:            0B          0B          0B
ubuntu@ip-172-31-42-100:~$
ubuntu@ip-172-31-42-100:~$
ubuntu@ip-172-31-42-100:~$ ping www.guvi.in
PING www.guvi.in (104.26.4.88) 56(84) bytes of data.
64 bytes from 104.26.4.88: icmp_seq=1 ttl=54 time=1.19 ms
64 bytes from 104.26.4.88: icmp_seq=2 ttl=54 time=1.18 ms
64 bytes from 104.26.4.88: icmp_seq=3 ttl=54 time=1.19 ms
64 bytes from 104.26.4.88: icmp_seq=4 ttl=54 time=1.18 ms
64 bytes from 104.26.4.88: icmp_seq=5 ttl=54 time=1.10 ms
64 bytes from 104.26.4.88: icmp_seq=6 ttl=54 time=1.18 ms
64 bytes from 104.26.4.88: icmp_seq=7 ttl=54 time=1.26 ms
64 bytes from 104.26.4.88: icmp_seq=8 ttl=54 time=1.18 ms
64 bytes from 104.26.4.88: icmp_seq=9 ttl=54 time=1.16 ms
64 bytes from 104.26.4.88: icmp_seq=10 ttl=54 time=1.16 ms
64 bytes from 104.26.4.88: icmp_seq=11 ttl=54 time=1.18 ms
64 bytes from 104.26.4.88: icmp_seq=12 ttl=54 time=1.25 ms
64 bytes from 104.26.4.88: icmp_seq=13 ttl=54 time=1.15 ms
64 bytes from 104.26.4.88: icmp_seq=14 ttl=54 time=1.18 ms
64 bytes from 104.26.4.88: icmp_seq=15 ttl=54 time=1.18 ms
```

```
sudo apt install net-tools
ubuntu@ip-172-31-42-100:~$ netstat
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 ip-172-31-42-100.:48660 169.254.169.254:http    TIME_WAIT
tcp        0      0 ip-172-31-42-100.:55590 ec2-13-126-16-60.a:http TIME_WAIT
tcp        0      0 ip-172-31-42-100.:48706 169.254.169.254:http    TIME_WAIT
tcp        0      0 ip-172-31-42-100.:48654 169.254.169.254:http    TIME_WAIT
tcp        0      0 ip-172-31-42-100.:48642 169.254.169.254:http    TIME_WAIT
tcp        0      0 ip-172-31-42-100.:54540 169.254.169.254:http    TIME_WAIT
tcp6       0    452 ip-172-31-42-100.ap:ssh ec2-13-233-177-5.:28483 ESTABLISHED
tcp6       0      0 ip-172-31-42-100.ap:ssh ec2-13-233-177-4.:42858 ESTABLISHED
Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags       Type       State         I-Node   Path
unix  3      [ ]         STREAM     CONNECTED     7420     /run/dbus/system_bus_socket
unix  2      [ ]         DGRAM      CONNECTED     5537
unix  2      [ ]         DGRAM      CONNECTED     6727
unix  3      [ ]         STREAM     CONNECTED     7239
unix  3      [ ]         DGRAM      CONNECTED     5548
unix  3      [ ]         STREAM     CONNECTED     7235
unix  2      [ ]         DGRAM      CONNECTED     16287    /run/user/1000/systemd/notify
unix  3      [ ]         STREAM     CONNECTED     8553
unix  3      [ ]         STREAM     CONNECTED     6434
unix  3      [ ]         SEQPACKET  CONNECTED     6754
unix  3      [ ]         STREAM     CONNECTED     6116     /run/dbus/system_bus_socket
unix  3      [ ]         STREAM     CONNECTED     8554     /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     5523     /run/systemd/journal/stdout
```

```
ubuntu@ip-172-31-42-100:~$
ubuntu@ip-172-31-42-100:~$ netstat -an guvi.in:9000
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 127.0.0.53:53           0.0.0.0:*               LISTEN
tcp        0      0 127.0.0.54:53           0.0.0.0:*               LISTEN
tcp        0      0 127.0.0.1:37537         0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:80              0.0.0.0:*               LISTEN
tcp6       0      0 :::22                   :::*                    LISTEN
tcp6       0    340 172.31.42.100:22        13.233.177.5:28483      ESTABLISHED
tcp6       0      0 172.31.42.100:22        13.233.177.4:42858      ESTABLISHED
udp        0      0 127.0.0.1:323           0.0.0.0:*
udp        0      0 127.0.0.54:53           0.0.0.0:*
udp        0      0 127.0.0.53:53           0.0.0.0:*
udp        0      0 172.31.42.100:68        0.0.0.0:*
udp6       0      0 ::1:323                 :::*
raw6       0      0 :::58                   :::*                    7
Active UNIX domain sockets (servers and established)
Proto RefCnt Flags       Type       State         I-Node   Path
unix  2      [ ACC ]     STREAM     LISTENING     7216     /run/containerd/containerd.sock.ttrpc
unix  2      [ ACC ]     STREAM     LISTENING     7217     /run/containerd/containerd.sock
unix  3      [ ]         STREAM     CONNECTED     7420     /run/dbus/system_bus_socket
unix  2      [ ]         DGRAM      CONNECTED     5537
unix  2      [ ]         DGRAM      CONNECTED     6727
unix  3      [ ]         STREAM     CONNECTED     7239
unix  3      [ ]         DGRAM      CONNECTED     5548
unix  3      [ ]         STREAM     CONNECTED     7235
```

i-07353beffd505364b (Dockerfile)   X

PublicIPs: 13.232.99.59   PrivateIPs: 172.31.42.100

```
ubuntu@ip-172-31-42-100:~$ nmap -p 9000 guvi.com
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-08-16 18:15 UTC
Nmap scan report for guvi.com (172.67.146.154)
Host is up (0.0015s latency).
Other addresses for guvi.com (not scanned): 104.21.79.166 2606:4700:3031::6815:4fa6 2606:4700:3037::ac43:929a

PORT     STATE    SERVICE
9000/tcp filtered cslistener

Nmap done: 1 IP address (1 host up) scanned in 0.39 seconds
ubuntu@ip-172-31-42-100:~$ nmap -p 9000 guvi.in
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-08-16 18:19 UTC
Nmap scan report for guvi.in (172.67.70.207)
Host is up (0.022s latency).
Other addresses for guvi.in (not scanned): 104.26.4.88 104.26.5.88 2606:4700:20::681a:458 2606:4700:20::681a:558 2606:4700:20::ac43:46cf

PORT     STATE    SERVICE
9000/tcp filtered cslistener

Nmap done: 1 IP address (1 host up) scanned in 0.44 seconds
ubuntu@ip-172-31-42-100:~$
```

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