

Task

1. Get me the IP address of a particular domain (guvi.in)

The ping command will often used to gather information about network connectivity and to obtain the IP address of a domain or server. And also their is a tracert command which also shows us the ip address of that domain but the main purpose of these tracert command is used to Trace route to destination.

```
C:\Users\pgtr1>ping guvi.in

Pinging guvi.in [104.26.5.88] with 32 bytes of data:
Reply from 104.26.5.88: bytes=32 time=85ms TTL=52
Reply from 104.26.5.88: bytes=32 time=134ms TTL=52

Ping statistics for 104.26.5.88:
    Packets: Sent = 2, Received = 2, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 85ms, Maximum = 134ms, Average = 109ms
Control-C
```

Here you can see the ip address of guvi.in was **104.26.5.88**

2. How do I find the CPU/memory usage of my server?

To find out the cpu/memory usage of our server we can use top command and also we can use free -h also both commands used in Linux/Unix environments to monitor system resource usage, but they provide different perspectives on the system's performance.here i displayed both commands to display output that how much cpu memory got used you can see it.

Top command output

```
top - 14:00:59 up 11 min, 1 user, load average: 0.00, 0.03, 0.05
Tasks: 99 total, 1 running, 98 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.7 us, 0.3 sy, 0.0 ni, 99.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
KiB Mem : 1862968 total, 1527528 free, 199680 used, 135760 buff/cache
KiB Swap: 2897148 total, 2897148 free, 0 used, 1515772 avail Mem

  PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM    TIME+  COMMAND
 102 root        20   0       0       0       0 S   0.3   0.0   0:04.43 kworker/0:3
 664 root        20   0 272976   4772   3644 S   0.3   0.3   0:00.81 vmtoolsd
1609 root        20   0 162088   2220   1548 R   0.3   0.1   0:00.00 top
    1 root        20   0 128028   6692   4184 S   0.0   0.4   0:03.20 systemd
    2 root        20   0       0       0       0 S   0.0   0.0   0:00.01 kthreadd
    4 root        0 -20       0       0       0 S   0.0   0.0   0:00.00 kworker/0:0H
    5 root        20   0       0       0       0 S   0.0   0.0   0:00.02 kworker/u256:0
    6 root        20   0       0       0       0 S   0.0   0.0   0:00.00
```

Free -h command output

```
279 root      0      0      0      0 S  0.0  0.0  0:00.00 ata_sff
[root@localhost ~]# free -h
              total        used         free       shared    buff/cache       available
Mem:           1.8G          195M          1.5G           9.5M          132M           1.4G
Swap:          2.0G           0B           2.0G
[root@localhost ~]# _
```

3. Test the connectivity between 2 nodes.

Ping command used to check the connectivity between two nodes Type ping <ip-address> or <DNS> or <hostname> If the connectivity is available, the ping command typically shows a series of responses indicating that the destination host is reachable. You will see lines displaying round-trip time (in milliseconds) for each packet sent to the destination. Here i displayed sample output

```
C:\Users\pgtr1>ping 142.250.182.78

Pinging 142.250.182.78 with 32 bytes of data:
Reply from 142.250.182.78: bytes=32 time=29ms TTL=118
Reply from 142.250.182.78: bytes=32 time=31ms TTL=118

Ping statistics for 142.250.182.78:
    Packets: Sent = 2, Received = 2, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 29ms, Maximum = 31ms, Average = 30ms
Control-C
^C
```