

Commands:

1) Ifconfig-

```
ubuntu@ubuntu-virtual-machine:~/Desktop$ ifconfig
ens33: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.74.128 netmask 255.255.255.0 broadcast 192.168.74.255
    inet6 fe80::d2dc:2882:8b82:4266 prefixlen 64 scopeid 0x20<link>
    ether 00:0c:29:82:16:e6 txqueuelen 1000 (Ethernet)
    RX packets 6825 bytes 9837548 (9.8 MB)
    RX errors 20 dropped 20 overruns 0 frame 0
    TX packets 5582 bytes 342863 (342.8 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
    device interrupt 19 base 0x2000

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 205 bytes 17775 (17.7 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 205 bytes 17775 (17.7 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

2) netstat:-

```
ubuntu@ubuntu-virtual-machine: ~/Desktop
ubuntu@ubuntu-virtual-machine:~/Desktop$ netstat -a
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 localhost:domain        0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:ssh             0.0.0.0:*               LISTEN
tcp        0      0 localhost:ipp           0.0.0.0:*               LISTEN
tcp        0      1 ubuntu-virtual-ma:36422 17.111.232.35.bc.g:http SYN_SENT
tcp6       0      0 [::]:http               [::]:*                 LISTEN
tcp6       0      0 [::]:ssh                 [::]:*                 LISTEN
tcp6       0      0 ip6-localhost:ipp      [::]:*                 LISTEN
udp        0      0 localhost:domain        0.0.0.0:*               *
udp        0      0 ubuntu-virtual-m:bootpc 192.168.74.254:bootps   ESTABLISHED
udp        0      0 0.0.0.0:mdns            0.0.0.0:*               *
udp        0      0 0.0.0.0:631              0.0.0.0:*               *
udp        0      0 0.0.0.0:37568            0.0.0.0:*               *
udp6       0      0 [::]:mdns                [::]:*                 *
udp6       0      0 [::]:58661                [::]:*                 *
raw6       0      0 [::]:ipv6-icmp           [::]:*                 7

Active UNIX domain sockets (servers and established)
Proto RefCnt Flags   Type       State         I-Node  Path
unix    2      [ ACC ] STREAM    LISTENING    49514   @/tmp/dbus-SjyboK97qL
unix    2      [ ACC ] STREAM    LISTENING    50811   @/tmp/.ICE-unix/1672
unix    2      [ ]       DGRAM                    47214   /run/user/1000/systemd/notify
```

3) whois-

```
ubuntu@ubuntu-virtual-machine:~/Desktop$ whois www.google.com
No match for "WWW.GOOGLE.COM".
>>> Last update of whois database: 2021-10-11T07:37:19Z <<<

NOTICE: The expiration date displayed in this record is the date the
registrar's sponsorship of the domain name registration in the registry is
currently set to expire. This date does not necessarily reflect the expiration
date of the domain name registrant's agreement with the sponsoring
registrar. Users may consult the sponsoring registrar's Whois database to
view the registrar's reported date of expiration for this registration.

TERMS OF USE: You are not authorized to access or query our Whois
database through the use of electronic processes that are high-volume and
automated except as reasonably necessary to register domain names or
modify existing registrations; the Data in VeriSign Global Registry
Services' ("VeriSign") Whois database is provided by VeriSign for
information purposes only, and to assist persons in obtaining information
```

4) dig-

```
ubuntu@ubuntu-virtual-machine:~/Desktop$ dig www.google.com

; <<>> DiG 9.16.1-Ubuntu <<>> www.google.com
;; global options: +cmd
;; Got answer:
;; ->HEADER<<- opcode: QUERY, status: NOERROR, id: 41420
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 65494
;; QUESTION SECTION:
;www.google.com.                IN      A

;; ANSWER SECTION:
www.google.com.                 5       IN      A      142.250.183.100

;; Query time: 3 msec
;; SERVER: 127.0.0.53#53(127.0.0.53)
;; WHEN: Mon Oct 11 16:43:15 IST 2021
;; MSG SIZE rcvd: 59
```

5) traceroute:

```
ubuntu@ubuntu-virtual-machine:~/Desktop$ traceroute www.google.com
traceroute to www.google.com (142.250.183.100), 30 hops max, 60 byte packets
 1 _gateway (192.168.74.2)  4.873 ms  0.346 ms  0.483 ms
 2 * * *
 3 * * *
 4 * * *
 5 * * *
 6 * * *
 7 * * *
 8 * * *
 9 * * *
10 * * *
11 * * *
12 * * *
13 * * *
14 * * *
15 * * *
16 * * *
17 * * *
```

6) nslookup:

```
ubuntu@ubuntu-virtual-machine:~/Desktop$ nslookup www.google.com
Server:      127.0.0.53
Address:     127.0.0.53#53

Non-authoritative answer:
Name:   www.google.com
Address: 142.250.183.100
Name:   www.google.com
Address: 2404:6800:4009:823::2004

ubuntu@ubuntu-virtual-machine:~/Desktop$ nslookup -type=ns cloudns.net
Server:      127.0.0.53
Address:     127.0.0.53#53

Non-authoritative answer:
cloudns.net      nameserver = dns7.cloudns.net.
cloudns.net      nameserver = ns4.cloudns.net.
cloudns.net      nameserver = pns1.cloudns.net.
cloudns.net      nameserver = dns2.cloudns.net.
cloudns.net      nameserver = pns4.cloudns.net.

Authoritative answers can be found from:

ubuntu@ubuntu-virtual-machine:~/Desktop$ nslookup -query=mx cloudns.net
Server:      127.0.0.53
Address:     127.0.0.53#53

Non-authoritative answer:
cloudns.net      mail exchanger = 5 ALT2.ASPMX.L.GOOGLE.COM.
cloudns.net      mail exchanger = 5 ALT1.ASPMX.L.GOOGLE.COM.
cloudns.net      mail exchanger = 1 ASPMX.L.GOOGLE.COM.
cloudns.net      mail exchanger = 10 ALT3.ASPMX.L.GOOGLE.COM.
cloudns.net      mail exchanger = 10 ALT4.ASPMX.L.GOOGLE.COM.

Authoritative answers can be found from:
```