

### Exercise No 8: TraceRoute, ping, ifconfig, ipconfig, netstat

**Aim:**

Using TraceRoute, ping, ifconfig(LINUX), ipconfig(WINDOWS), and netstat

**Command.**

**Procedure:**

Step 1: open windows command prompt and Type tracert command and type  
tracert

www.saveetha.com -> "Enter"

```
C:\Users\arunk>tracert saveetha.com

Tracing route to saveetha.com [118.139.175.1]
over a maximum of 30 hops:

  0  71 ms    6 ms    124 ms   172.18.48.1
  1  17 ms     4 ms     7 ms    172.22.3.1
  2  46 ms    21 ms    22 ms    172.22.7.2
  3  56 ms   106 ms    27 ms   ptpl-as56272-rev-241.121.235.180-chn.pulse.in [180.235.121.241]
  4  311 ms     *       79 ms    61.95.248.189
  5  84 ms    93 ms    65 ms    182.79.224.183
  6  *         *         *       Request timed out.
  7  *         *         *       Request timed out.
  8  *         *         *       Request timed out.
  9  *         *         *       Request timed out.
 10 *         *         *       Request timed out.
 11 *         *         *       Request timed out.
 12 *         *         *       Request timed out.
 13 *         *         *       Request timed out.
 14 *         *         *       Request timed out.
 15 *         *         *       Request timed out.
 16 *         *         *       Request timed out.
 17 *         *         *       Request timed out.
 18 *         *         *       Request timed out.
 19 *         *         *       Request timed out.
 20 *         *         *       Request timed out.
 21 *         *         *       Request timed out.
 22 *         *         *       Request timed out.
 23 *         *         *       Request timed out.
 24 *         *         *       Request timed out.
 25 *         *         *       Request timed out.
 26 *         *         *       Request timed out.
 27 *         *         *       Request timed out.
 28 *         *         *       Request timed out.
 29 *         *         *       Request timed out.
 30 *         *         *       Request timed out.

Trace complete.
```

Step 2: Type ping command and type IP Address press “Enter”

```
C:\Users\arunk>ping 172.18.48.1

Pinging 172.18.48.1 with 32 bytes of data:
Reply from 172.18.48.1: bytes=32 time=451ms TTL=255
Reply from 172.18.48.1: bytes=32 time=673ms TTL=255
Reply from 172.18.48.1: bytes=32 time=697ms TTL=255
Reply from 172.18.48.1: bytes=32 time=43ms TTL=255

Ping statistics for 172.18.48.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 43ms, Maximum = 697ms, Average = 466ms
```

Step 3: Type ipconfig command

```
C:\Users\arunk>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet 2:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Ethernet adapter VirtualBox Host-Only Network:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::6daf:97be:be9b:4228%18
    IPv4 Address. . . . . : 192.168.56.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . :

Wireless LAN adapter Local Area Connection* 1:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 2:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::21c0:28ca:7558:9457%3
    IPv4 Address. . . . . : 192.168.137.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . :

Wireless LAN adapter Wi-Fi:

    Connection-specific DNS Suffix  . : saveetha.net
    Link-local IPv6 Address . . . . . : fe80::21ae:a837:878c:5c91%4
    IPv4 Address. . . . . : 172.18.49.214
    Subnet Mask . . . . . : 255.255.240.0
    Default Gateway . . . . . : 172.18.48.1
```

Step 4: Type netstat command

```
C:\Users\arunk>netstat

Active Connections

Proto Local Address           Foreign Address         State
TCP    127.0.0.1:22350          LAPTOP-LIH20JNS:49696  ESTABLISHED
TCP    127.0.0.1:49696          LAPTOP-LIH20JNS:22350  ESTABLISHED
TCP    127.0.0.1:49697          LAPTOP-LIH20JNS:49698  ESTABLISHED
TCP    127.0.0.1:49698          LAPTOP-LIH20JNS:49697  ESTABLISHED
TCP    127.0.0.1:49699          LAPTOP-LIH20JNS:49701  ESTABLISHED
TCP    127.0.0.1:49701          LAPTOP-LIH20JNS:49699  ESTABLISHED
TCP    127.0.0.1:58274          LAPTOP-LIH20JNS:58275  ESTABLISHED
TCP    127.0.0.1:58275          LAPTOP-LIH20JNS:58274  ESTABLISHED
TCP    172.18.49.214:52080      whatsapp-cdn-shv-02-maa2:https ESTABLISHED
TCP    172.18.49.214:52461      sl-in-f188:https        ESTABLISHED
TCP    172.18.49.214:52462      20.198.119.143:https    ESTABLISHED
TCP    [fe80::21ae:a837:878c:5c91%4]:5357 DESKTOP-K2T7LL4:50671  SYN_RECEIVED
TCP    [fe80::21ae:a837:878c:5c91%4]:5357 saveetha:49530          LAST_ACK
TCP    [fe80::21ae:a837:878c:5c91%4]:5357 XEROX-PC-PC:49602       ESTABLISHED
TCP    [fe80::21ae:a837:878c:5c91%4]:5357 [fe80::70c9:f7a9:2c9d:8bfe%4]:51860 ESTABLISHED
TCP    [fe80::21ae:a837:878c:5c91%4]:5357 DESKTOP-QK535R0:51734  LAST_ACK
TCP    [fe80::21ae:a837:878c:5c91%4]:5357 DESKTOP-U3LILBH:52305  ESTABLISHED
```

## Result

Hence the Traceroute, ping , ipconfig (LINUX), ipconfig(WINDOWS) and netstat command executed successfully.

