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"

```
::\Users\arunk>tracert saveetha.com
Tracing route to saveetha.com [118.139.175.1]
over a maximum of 30 hops:
               6 ms 124 ms 172.18.48.1
      17 ms
               4 ms 7 ms 172.22.3.1
      46 ms
              21 ms
                       22 ms 172.22.7.2
              106 ms 27 ms ptpl-as56272-rev-241.121.235.180-chn.pulse.in [180.235.121.241] 
* 79 ms 61.95.248.189
      56 ms
     311 ms
            84 ms 93 ms 65 ms 182.79.224.183
                              Request timed out.
 8
                              Request timed out.
                              Request timed out.
 10
                              Request timed out.
                              Request timed out.
                              Request timed out.
12
                             Request timed out.
                             Request timed out.
                             Request timed out.
16
                              Request timed out.
17
                              Request timed out.
18
                              Request timed out.
19
                              Request timed out.
20
                              Request timed out.
                              Request timed out.
26
                              Request timed out.
                              Request timed out.
28
                              Request timed out.
                              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 if config 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

```
:\Users\arunk>netstat
Active Connections
 Proto Local Address
                               Foreign Address
                                                      State
                               LAPTOP-LIH20JNS:49696 ESTABLISHED
        127.0.0.1:22350
 TCP
                               LAPTOP-LIH20JNS:22350 ESTABLISHED
        127.0.0.1:49696
 TCP
                               LAPTOP-LIH20JNS:49698 ESTABLISHED
        127.0.0.1:49697
 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
        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
        [fe80::21ae:a837:878c:5c91%4]:5357 DESKTOP-K2T7LL4:50671 SYN_RECEIVED
 TCP
 TCP
         [fe80::21ae:a837:878c:5c91%4]:5357 saveetha:49530
                                                                   LAST_ACK
         [fe80::21ae:a837:878c:5c91%4]:5357
                                            XEROX-PC-PC:49602
 TCP
                                                                   ESTABLISHED
 TCP
         [fe80::21ae:a837:878c:5c91%4]:5357
                                            [fe80::70c9:f7a9:2c9d:8bfe%4]:51860 ESTABLISHED
         [fe80::21ae:a837:878c:5c91%4]:5357 DESKTOP-QK535R0:51734 LAST_ACK
 TCP
         [fe80::21ae:a837:878c:5c91%4]:5357 DESKTOP-U3LILBH:52305 ESTABLISHED
 TCP
```

Result

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

