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:

  1    71 ms     6 ms   124 ms  172.18.48.1
  2    17 ms     4 ms     7 ms  172.22.3.1
  3    46 ms    21 ms    22 ms  172.22.7.2
  4    56 ms   106 ms    27 ms  ptpl-as56272-rev-241.121.235.180-chn.pulse.in [180.235.121.241]
  5   311 ms     *        79 ms  61.95.248.189
  6    84 ms    93 ms    65 ms  182.79.224.183
  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 ifconfig 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.