#### EX.NO:1

### PROGRAM:

### **Ipconfig**

```
C:\Users\HP PROBOOK>ipconfig
Windows IP Configuration
Ethernet adapter Ethernet:
  Media State . . . . . . . . . . . . Media disconnected
  Connection-specific DNS Suffix . :
Wireless LAN adapter Local Area Connection* 1:
  Media State . . . . . . . . . : Media disconnected
  Connection-specific DNS Suffix . :
Wireless LAN adapter Local Area Connection* 2:
  Media State . . . . . . . . . : Media disconnected
  Connection-specific DNS Suffix . :
Ethernet adapter VMware Network Adapter VMnet1:
  Connection-specific DNS Suffix . :
  Link-local IPv6 Address . . . . : fe80::5fd9:10b7:f180:c9a9%4
  IPv4 Address. . . . . . . . . . : 192.168.174.1
  Default Gateway . . . . . . . . :
```

```
Ethernet adapter VMware Network Adapter VMnet1:
  Connection-specific DNS Suffix . :
  Link-local IPv6 Address . . . . . : fe80::5fd9:10b7:f180:c9a9%4
  IPv4 Address. . . . . . . . . . : 192.168.174.1
  Default Gateway . . . . . . . . :
Ethernet adapter VMware Network Adapter VMnet8:
  Connection-specific DNS Suffix . :
  Link-local IPv6 Address . . . . : fe80::d615:485:8242:84a9%9
  IPv4 Address. . . . . . . . . . : 192.168.159.1
  Subnet Mask . . . . . . . . . : 255.255.255.0
  Default Gateway . . . . . . . . :
Wireless LAN adapter Wi-Fi:
  Connection-specific DNS Suffix . :
  Link-local IPv6 Address . . . . : fe80::6990:82dd:c631:1ac6%12
  IPv4 Address. . . . . . . . . . : 10.10.5.4
  Default Gateway . . . . . . . . : 10.10.1.1
```

## tcpdump:

```
# tcpdump -i eth0
cpdump: verbose output suppressed, use -v or -vv for full protocol decode
istening on ethO, link-type ENIOMB (Ethernet), capture size 96 bytes
0:39:28.014065 IP 192.168.198.1.netbios-ns > 192.168.198.255.netbios-ns: NBT
P PACKET (137): QUERY; REQUEST; BROADCAST
0:39:28.014840 IP 192.168.198.128.56851 > 192.168.198.2.domain: 18867+ PTR? 25
.198.168.192.in-addr.arpa. (46)
0:39:28.027418 IP 192.168.198.1.49733 > 224.0.0.252.llmnr: UDP, length 22
0:39:28.027850 IP 192.168.198.128.50611 > lhr14s24-in-f19.1e100.net.https: P 2
12329209:2912329246(37) ack 1375935787 win 18760
0:39:28.034322 IP lhrl4s24-in-f19.le100.net.https > 192.168.198.128.50611: . a
 37 win 64240
0:39:28.037196 IPG fe80::2cfe:5154:6c0d:fafd.65460 > ff02::1:3.llmnr: UDP, len
th 22
0:39:28.039057 IP 192.168.198.1.65460 > 224.0.0.252.llmnr: UDP, length 22
0:39:28.051576 IP 192.168.198.2.domain > 192.168.198.128.56851: 18867 NXDomain
0/1/0 (95)
0:39:28.051744 IP 192.168.198.128.35496 > 192.168.198.2.domain: 58919+ PTR? 1
98.168.192.in-addr.arpa. (44)
0:39:28.077704 IP 192.168.198.2.domain > 192.168.198.128.35496: 58919 NXDomain
0/1/0 (93)
0:39:28.077903 IP 192.168.198.128.56215 > 192.168.198.2.domain: 59223+ PTR? 2.
98.168.192.in-addr.arpa. (44)
0:39:28.103262 IP 192.168.198.2.domain > 192.168.198.128.56215: 59223 NXDomain
0/1/0 (93)
```

### nslookup:

```
# tcpdump -i eth0
cpdump: verbose output suppressed, use -v or -vv for full protocol decode
istening on ethO, link-type ENIOMB (Ethernet), capture size 96 bytes
0:39:28.014065 IP 192.168.198.1.netbios-ns > 192.168.198.255.netbios-ns: NBT
P PACKET (137): QUERY; REQUEST; BROADCAST
0:39:28.014840 IP 192.168.198.128.56851 > 192.168.198.2.domain: 18867+ PTR? 25
.198.168.192.in-addr.arpa. (46)
0:39:28.027418 IP 192.168.198.1.49733 > 224.0.0.252.llmnr: UDP, length 22
0:39:28.027850 IP 192.168.198.128.50611 > lhr14s24-in-f19.1e100.net.https: P
12329209: 2912329246(37) ack 1375935787 vin 18760
0:39:28.034322 IP lhrl4s24-in-f19.le100.net.https > 192.168.198.128.50611: .
 37 win 64240
0:39:28.037196 IP6 fe80::2cfe:5154:6c0d:fafd.65460 > ff02::1:3.llmnr: UDP, len
th 22
0:39:28.039057 IP 192.168.198.1.65460 > 224.0.0.252.llmnr: UDP, length 22
0:39:28.051576 IP 192.168.198.2.domain > 192.168.198.128.56851: 18867 NXDomain
0/1/0 (95)
0:39:28.051744 IP 192.168.198.128.35496 > 192.168.198.2.domain: 58919+ PTR? 1
98.168.192.in-addr.arpa. (44)
0:39:28.077704 IP 192.168.198.2.domain > 192.168.198.128.35496: 58919 NXDomain
0/1/0 (93)
0:39:28.077903 IP 192.168.198.128.56215 > 192.168.198.2.domain: 59223+ PTR? 2
98.168.192.in-addr.arpa. (44)
0:39:28.103262 IP 192.168.198.2.domain > 192.168.198.128.56215: 59223 NXDomain
0/1/0 (93)
```

# ping:

```
- # tcpdump -i eth0
cpdump: verbose output suppressed, use -v or -vv for full protocol decode
istening on ethO, link-type ENIOMB (Ethernet), capture size 96 bytes
0:39:28.014065 IP 192.168.198.1.netbios-ns > 192.168.198.255.netbios-ns: NBT
P PACKET(137): QUERY; REQUEST; BROADCAST
0:39:28.014840 IP 192.168.198.128.56851 > 192.168.198.2.domain: 18867+ PTR? 25
.198.168.192.in-addr.arpa. (46)
0:39:28.027418 IP 192.168.198.1.49733 > 224.0.0.252.llmnr: UDP, length 22
0:39:28.027850 IP 192.168.198.128.50611 > lhr14s24-in-f19.1e100.net.https: P
12329209: 2912329246(37) ack 1375935787 vin 18760
0:39:28.034322 IP lhrl4s24-in-f19.lel00.net.https > 192.168.198.128.50611: .
 37 win 64240
0:39:28.037196 IP6 fe80::2cfe:5154:6c0d:fafd.65460 > ff02::1:3.llmnr: UDP, len
th 22
0:39:28.039057 IP 192.168.198.1.65460 > 224.0.0.252.llmnr: UDP, length 22
0:39:28.051576 IP 192.168.198.2.domain > 192.168.198.128.56851: 18867 NXDomain
0/1/0 (95)
0:39:28.051744 IP 192.168.198.128.35496 > 192.168.198.2.domain: 58919+ PTR? 1
98.168.192.in-addr.arpa. (44)
0:39:28.077704 IP 192.168.198.2.domain > 192.168.198,128.35496: 58919 NXDomair
0/1/0 (93)
0:39:28.077903 IP 192.168.198.128.56215 > 192.168.198.2.domain: 59223+ PTR? 2.
98.168.192.in-addr.arpa. (44)
0:39:28.103262 IP 192.168.198.2.domain > 192.168.198.128.56215: 59223 NXDomain
0/1/0 (93)
```