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Course : Computer Networks

LAB TASK

Task 1: Using Ipconfig retrieve TCP/IP information for your computer. Write down the
following information:

```
IPv4 Address. . . . . . . . . . . . : 172.17.1.109
Subnet Mask . . . . . . . . . . . . : 255.255.252.0
Default Gateway . . . . . . . . . . : 172.17.0.2
```

    a. IPv4 : 172.17.1.109
    b. 255.255.252.0
    c. 172.17.0.2

Task2: Record a couple of IP addresses of your nearby hosts.

    a. 172.17.1.138
    b. 172.17.1.44
    c. 192.168.121.1

Task3: Find your IP address in at least 6 different ways.

1.**Ipconfig.**

Steps :
a.Open cmd.
b.Type ipconfig and press enter.

```
Wireless LAN adapter Wi-Fi:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . : fe80::6409:c7ae:1c3f:8916%11
   IPv4 Address. . . . . . . . . . . : 172.17.1.109
   Subnet Mask . . . . . . . . . . . : 255.255.252.0
   Default Gateway . . . . . . . . . : 172.17.0.2
```

2.**Through setting app.**

Steps :
a.Open setting app.
b.Click on Network and Internet.
c.Click on WiFi.
d.Click on the connected network.

Link-local IPv6 address:	fe80::6409:c7ae:1c3f:8916%11
IPv4 address:	172.17.1.109
IPv4 DNS servers:	8.8.8.8
	8.8.4.4

3.Through Control Panel.

Steps :
a.Open Control Panel.
b.Click on Network and Internet.
c.Click on Network and Sharing Center.
d.Click on Change adapter settings.
e.Double click the network adapter for which you want to see the IP address.
f.Click the Details button.

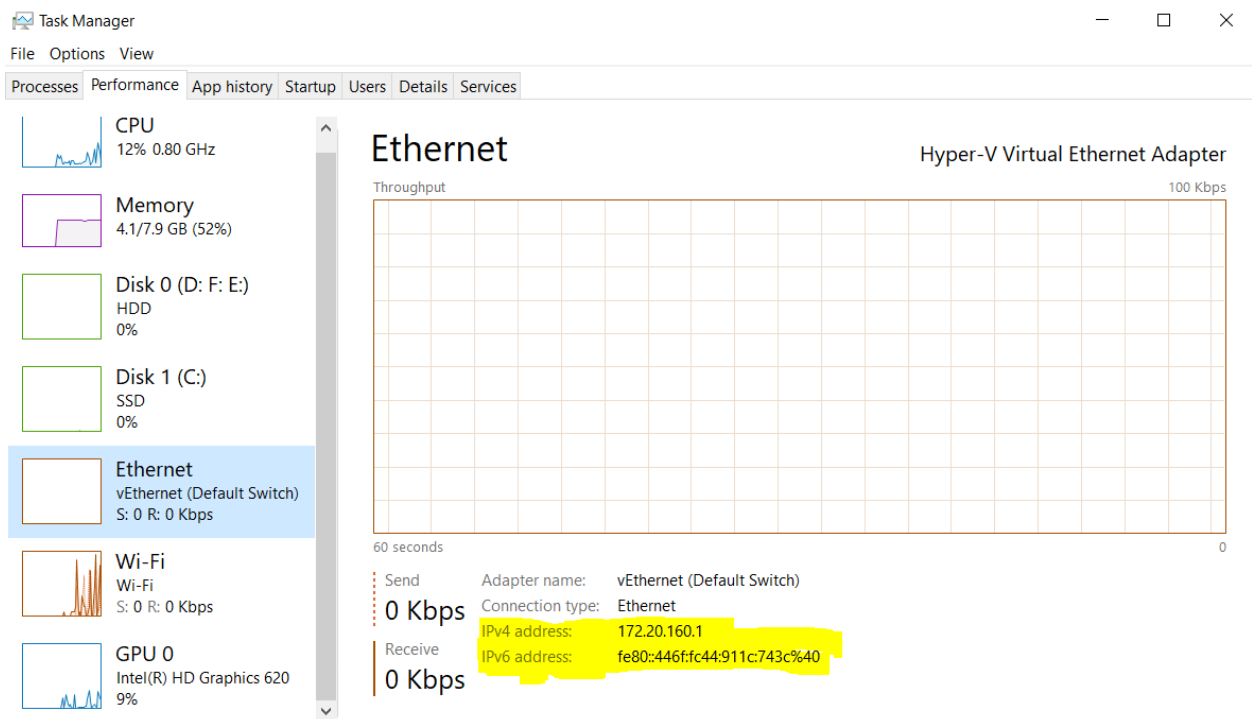| IPv4 Address	172.17.1.109
IPv4 Subnet Mask	255.255.252.0
Lease Obtained	Thursday, August 25, 2022 9:36:40 AM
Lease Expires	Thursday, August 25, 2022 3:50:38 PM
IPv4 Default Gateway	172.17.0.2
IPv4 DHCP Server	172.17.0.2
IPv4 DNS Servers	8.8.8.8
	8.8.4.4
IPv4 WINS Server	
NetBIOS over Tcpip Enabl...	Yes
Link-local IPv6 Address	fe80::6409:c7ae:1c3f:8916%11

4.Through System Information.

Steps :
a.Open System information
b.Click on Components.
c.Click on Network.
d.Click on Adapter.

Name	[00000002] Intel(R) Dual Band Wireless-AC 8265
Adapter Type	Ethernet 802.3
Product Type	Intel(R) Dual Band Wireless-AC 8265
Installed	Yes
PNP Device ID	PCI\VEN_8086&DEV_24FD&SUBSYS_00108086&REV_78\AC...
Last Reset	8/25/2022 2:36 PM
Index	2
Service Name	Netwtw06
IP Address	172.17.1.109, fe80::6409:c7ae:1c3f:8916
IP Subnet	255.255.252.0, 64

5.**Through Task Manager.**

Steps :
a.Open Task Manager.
b.Click on Performance.
c.Click on Ethernet.

6.Through Windows PowerShell.

Steps :
a.Open Windows PowerShell.
b.Type **gip** and press Enter**.**

```
PS C:\Users\iT HOME> gip


InterfaceAlias       : vEthernet (Default Switch)
InterfaceIndex       : 40
InterfaceDescription : Hyper-V Virtual Ethernet Adapter
IPv4Address          : 172.20.160.1
IPv6DefaultGateway   :
IPv4DefaultGateway   :
DNSServer            : fec0:0:0:ffff::1
                       fec0:0:0:ffff::2
                       fec0:0:0:ffff::3


InterfaceAlias       : Wi-Fi
InterfaceIndex       : 11
InterfaceDescription : Intel(R) Dual Band Wireless-AC 8265
NetProfile.Name      : campuswifi
IPv4Address          : 172.17.1.109
IPv6DefaultGateway   :
IPv4DefaultGateway   : 172.17.0.2
DNSServer            : 8.8.8.8
                       8.8.4.4
```