



Task: 08

SUBJECT: Computer Networks

SUBMITTED TO: Dr. Haseeb Tasleem

SUBMITTED BY: Hateem Gulzar

SAP ID: 37589

DEPARTMENT: Software Engineering

SEMESTER: 07

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1: Check IP Configuration:

```
Microsoft Windows [Version 10.0.19045.4894]
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C:\Users\ajwa>ipcnf
'ipcnf' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\ajwa>ipconf
'ipconf' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\ajwa>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* 10:

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

Wireless LAN adapter Wi-Fi:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::9e40:e855:630:df71%6
    IPv4 Address. . . . . : 192.168.43.243
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.43.129

Ethernet adapter Bluetooth Network Connection:

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

Activate Windows
Go to Settings to activate Windows.

2: Total Local Connectivity:

```
C:\Users\ajwa>ping 192.168.43.243

Pinging 192.168.43.243 with 32 bytes of data:
Reply from 192.168.43.243: bytes=32 time<1ms TTL=128
Reply from 192.168.43.243: bytes=32 time<1ms TTL=128
Reply from 192.168.43.243: bytes=32 time<1ms TTL=128
Reply from 192.168.43.243: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.43.243:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

3: test connectivity tot eh gateway:

```
C:\Users\ajwa>ping 192.168.43.129

Pinging 192.168.43.129 with 32 bytes of data:
Reply from 192.168.43.129: bytes=32 time=3ms TTL=64
Reply from 192.168.43.129: bytes=32 time=3ms TTL=64
Reply from 192.168.43.129: bytes=32 time=2ms TTL=64
Reply from 192.168.43.129: bytes=32 time=3ms TTL=64

Ping statistics for 192.168.43.129:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 3ms, Average = 2ms

C:\Users\ajwa>
```

4: Test Internet connectivity:

```
C:\Users\ajwa>ping 8.8.8.8

Pinging 8.8.8.8 with 32 bytes of data:
Reply from 8.8.8.8: bytes=32 time=42ms TTL=54
Reply from 8.8.8.8: bytes=32 time=44ms TTL=54
Reply from 8.8.8.8: bytes=32 time=45ms TTL=54
Reply from 8.8.8.8: bytes=32 time=89ms TTL=54

Ping statistics for 8.8.8.8:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 42ms, Maximum = 89ms, Average = 55ms

C:\Users\ajwa>ping www.google.com

Pinging www.google.com [172.217.169.228] with 32 bytes of data:
Reply from 172.217.169.228: bytes=32 time=37ms TTL=111
Reply from 172.217.169.228: bytes=32 time=37ms TTL=111
Reply from 172.217.169.228: bytes=32 time=40ms TTL=111
Reply from 172.217.169.228: bytes=32 time=99ms TTL=111

Ping statistics for 172.217.169.228:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 37ms, Maximum = 99ms, Average = 53ms
```

5: Flush DNS cache

```
C:\Users\ajwa>ipconfig /flushdns

Windows IP Configuration

Successfully flushed the DNS Resolver Cache.
```

6: Check Active Network connection:

```
C:\Users\ajwa>netstat -an
```

Active Connections

Proto	Local Address	Foreign Address	State
TCP	0.0.0.0:135	0.0.0.0:0	LISTENING
TCP	0.0.0.0:445	0.0.0.0:0	LISTENING
TCP	0.0.0.0:5040	0.0.0.0:0	LISTENING
TCP	0.0.0.0:5357	0.0.0.0:0	LISTENING
TCP	0.0.0.0:7070	0.0.0.0:0	LISTENING
TCP	0.0.0.0:49664	0.0.0.0:0	LISTENING
TCP	0.0.0.0:49665	0.0.0.0:0	LISTENING
TCP	0.0.0.0:49666	0.0.0.0:0	LISTENING
TCP	0.0.0.0:49667	0.0.0.0:0	LISTENING
TCP	0.0.0.0:49669	0.0.0.0:0	LISTENING
TCP	0.0.0.0:49670	0.0.0.0:0	LISTENING
TCP	0.0.0.0:49690	0.0.0.0:0	LISTENING
TCP	127.0.0.1:15292	0.0.0.0:0	LISTENING
TCP	127.0.0.1:15393	0.0.0.0:0	LISTENING
TCP	127.0.0.1:16494	0.0.0.0:0	LISTENING
TCP	192.168.43.243:139	0.0.0.0:0	LISTENING
TCP	192.168.43.243:52302	20.198.118.190:443	ESTABLISHED
TCP	192.168.43.243:52303	138.199.14.81:443	ESTABLISHED
TCP	192.168.43.243:52306	104.17.123.183:443	ESTABLISHED
TCP	192.168.43.243:52316	35.79.48.221:443	ESTABLISHED
TCP	192.168.43.243:52318	18.142.34.58:443	ESTABLISHED
TCP	192.168.43.243:52319	64.233.184.188:5228	ESTABLISHED
TCP	192.168.43.243:52320	104.16.103.112:443	ESTABLISHED
TCP	192.168.43.243:52322	57.144.149.32:5222	ESTABLISHED
TCP	192.168.43.243:52330	104.16.103.112:443	ESTABLISHED
TCP	192.168.43.243:52338	140.82.113.26:443	ESTABLISHED
TCP	192.168.43.243:52344	23.63.110.146:443	CLOSE_WAIT
TCP	192.168.43.243:52345	23.63.110.146:443	CLOSE_WAIT
TCP	192.168.43.243:52347	23.218.249.27:443	CLOSE_WAIT
TCP	192.168.43.243:52348	23.218.249.27:443	CLOSE_WAIT
TCP	192.168.43.243:52349	23.218.249.27:443	CLOSE_WAIT
TCP	192.168.43.243:52350	23.218.249.27:443	CLOSE_WAIT
TCP	192.168.43.243:52351	23.218.249.27:443	CLOSE_WAIT
TCP	192.168.43.243:52352	23.218.249.27:443	CLOSE_WAIT
TCP	192.168.43.243:52355	34.203.175.187:443	ESTABLISHED
TCP	192.168.43.243:52366	20.198.118.190:443	ESTABLISHED
TCP	[::]:135	:::0	LISTENING
TCP	[::]:445	:::0	LISTENING