COMPUTER NETWORKING

LAB-1

AIM:

1ST- HOSTNAME

```
Microsoft Windows [Version 10.0.19044.1526]
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C:\Users\student>hostname
DESKTOP-HJ13MH2

C:\Users\student>
```

2ND- IP CONFIGURATION

```
C:\Users\student>ipconfig

Windows IP Configuration


Ethernet adapter Npcap Loopback Adapter:

   Connection-specific DNS Suffix   . :
   Link-local IPv6 Address . . . . . : fe80::2888:c64f:fc72:ef5c%6
   Autoconfiguration IPv4 Address. . : 169.254.239.92
   Subnet Mask . . . . . . . . . . . : 255.255.0.0
   Default Gateway . . . . . . . . . :

Ethernet adapter Ethernet:

   Connection-specific DNS Suffix   . :
   Link-local IPv6 Address . . . . . : fe80::a438:e73a:357b:bd94%15
   IPv4 Address. . . . . . . . . . . : 192.168.6.4
   Subnet Mask . . . . . . . . . . . : 255.255.0.0
   Default Gateway . . . . . . . . . : fe80::38c0:46ec:e29a:1752%15
                                       192.168.1.251
```

3RD- IP CONFIGURATION/ALL

```
C:\Users\student>ipconfig/all

Windows IP Configuration

    Host Name . . . . . . . . . . . . : DESKTOP-HJ13MH2
    Primary Dns Suffix  . . . . . . . :
    Node Type . . . . . . . . . . . . : Hybrid
    IP Routing Enabled. . . . . . . . : No
    WINS Proxy Enabled. . . . . . . . : No

Ethernet adapter Npcap Loopback Adapter:

    Connection-specific DNS Suffix  . :
    Description . . . . . . . . . . . : Npcap Loopback Adapter
    Physical Address. . . . . . . . . : 02-00-4C-4F-4F-50
    DHCP Enabled. . . . . . . . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes
    Link-local IPv6 Address . . . . . : fe80::2888:c64f:fc72:ef5c%6(Preferred)
    Autoconfiguration IPv4 Address. . : 169.254.239.92(Preferred)
    Subnet Mask . . . . . . . . . . . : 255.255.0.0
    Default Gateway . . . . . . . . . :
    DHCPv6 IAID . . . . . . . . . . . : 302121036
    DHCPv6 Client DUID. . . . . . . . : 00-01-00-01-27-E3-C1-1F-7C-05-07-26-6B-EB
    DNS Servers . . . . . . . . . . . : fec0:0:0:ffff::1%1
                                        fec0:0:0:ffff::2%1
                                        fec0:0:0:ffff::3%1
    NetBIOS over Tcpip. . . . . . . . : Enabled

Ethernet adapter Ethernet:

    Connection-specific DNS Suffix  . :
    Description . . . . . . . . . . . : Qualcomm Atheros AR8152 PCI-E Fast Ethernet Controller (NDIS 6.30)
    Physical Address. . . . . . . . . : 7C-05-07-26-6B-EB
    DHCP Enabled. . . . . . . . . . . : No
    Autoconfiguration Enabled . . . . : Yes
    Link-local IPv6 Address . . . . . : fe80::a438:e73a:357b:bd94%15(Preferred)
    IPv4 Address. . . . . . . . . . . : 192.168.6.4(Preferred)
    Subnet Mask . . . . . . . . . . . : 255.255.0.0
    Default Gateway . . . . . . . . . : fe80::38c0:46ec:e29a:1752%15
                                        192.168.1.251
    DNS Servers . . . . . . . . . . . : 192.168.1.251
                                        8.8.8.8
    NetBIOS over Tcpip. . . . . . . . : Enabled
```

4TH- NSLOOKUP

```
C:\Users\student>nslookup
Default Server:   UnKnown
Address:   192.168.1.251

> www.google.com
Server:   UnKnown
Address:   192.168.1.251

Non-authoritative answer:
Name:       www.google.com
Addresses:   2404:6800:4002:81f::2004
            142.250.193.4

> wwww.facebook.com
Server:   UnKnown
Address:   192.168.1.251
```

```
> wwww.facebook.com
Server:   UnKnown
Address:   192.168.1.251

Non-authoritative answer:
Name:       star.c10r.facebook.com
Addresses:   2a03:2880:f044:12:face:b00c:0:2
            157.240.198.17
Aliases:   wwww.facebook.com
            star.facebook.com

> www.instagram.com
Server:   UnKnown
Address:   192.168.1.251

Non-authoritative answer:
Name:       z-p42-instagram.c10r.instagram.com
Addresses:   2a03:2880:f244:e0:face:b00c:0:4420
            157.240.198.174
Aliases:   www.instagram.com
            geo-p42.instagram.com
```

5TH-TRACERT

```
C:\Users\student>tracert www.facebook.com

Tracing route to star-mini.c10r.facebook.com [157.240.198.35]
over a maximum of 30 hops:

  1    <1 ms    <1 ms    <1 ms  192.168.1.251
  2     1 ms     1 ms     1 ms  103.101.119.65
  3     1 ms        *      1 ms  103.42.88.9
  4    15 ms     8 ms     8 ms  10.250.250.33
  5     3 ms     4 ms     3 ms  ae11.pr03.del1.tfbnw.net [157.240.76.246]
  6     1 ms     1 ms    <1 ms  po103.psw02.del1.tfbnw.net [74.119.78.135]
  7     1 ms     1 ms     1 ms  173.252.67.99
  8    <1 ms    <1 ms    <1 ms  edge-star-mini-shv-01-del1.facebook.com [157.240.198.35]

Trace complete.
```

6TH-PING

```
C:\Users\student>ping www.facebook.com

Pinging star-mini.c10r.facebook.com [157.240.198.35] with 32 bytes of data:
Reply from 157.240.198.35: bytes=32 time<1ms TTL=57
Reply from 157.240.198.35: bytes=32 time<1ms TTL=57
Reply from 157.240.198.35: bytes=32 time=1ms TTL=57
Reply from 157.240.198.35: bytes=32 time=4ms TTL=57

Ping statistics for 157.240.198.35:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 4ms, Average = 1ms
```

7TH-NETSTAT

```
C:\Users\student>netstat

Active Connections

  Proto  Local Address          Foreign Address        State
  TCP    192.168.6.4:52047      lb-140-82-113-25-iad:https  ESTABLISHED
  TCP    192.168.6.4:52054      sa-in-f188:5228        ESTABLISHED
  TCP    192.168.6.4:58303      dns:domain             TIME_WAIT
  TCP    192.168.6.4:58304      del11s16-in-f10:https  TIME_WAIT
  TCP    192.168.6.4:58305      del11s17-in-f14:https  TIME_WAIT
  TCP    192.168.6.4:58306      del11s16-in-f10:https  TIME_WAIT
  TCP    192.168.6.4:58307      si-in-f189:https       TIME_WAIT
  TCP    192.168.6.4:58308      del12s08-in-f10:https  TIME_WAIT
  TCP    192.168.6.4:58309      del12s02-in-f5:https   TIME_WAIT
  TCP    192.168.6.4:58310      del11s13-in-f14:https  TIME_WAIT
  TCP    192.168.6.4:58311      del03s07-in-f3:https   TIME_WAIT
  TCP    192.168.6.4:58314      52.137.103.96:https    ESTABLISHED
  TCP    192.168.6.4:58315      20.197.71.89:https     ESTABLISHED
  TCP    192.168.6.4:58320      dns:https              TIME_WAIT
  TCP    192.168.6.4:58321      del12s05-in-f14:https  TIME_WAIT
  TCP    192.168.6.4:58323      27:https               TIME_WAIT
  TCP    192.168.6.4:58324      del12s02-in-f5:https   TIME_WAIT
  TCP    192.168.6.4:58326      del12s02-in-f5:https   TIME_WAIT
  TCP    192.168.6.4:58327      13.107.246.37:https    ESTABLISHED
  TCP    192.168.6.4:58328      52.113.196.254:https   ESTABLISHED
  TCP    192.168.6.4:58329      13.107.4.254:https     ESTABLISHED
  TCP    192.168.6.4:58330      204.79.197.222:https   ESTABLISHED
  TCP    192.168.6.4:58332      dns:https              TIME_WAIT
  TCP    192.168.6.4:58333      27:https               TIME_WAIT
  TCP    192.168.6.4:58334      del03s07-in-f3:https   TIME_WAIT
  TCP    192.168.6.4:58335      fra15s46-in-f3:https   TIME_WAIT
  TCP    192.168.6.4:58336      fra15s46-in-f3:https   TIME_WAIT
  TCP    192.168.6.4:58337      dns:https              ESTABLISHED
  TCP    192.168.6.4:61209      192.168.1.251:domain   TIME_WAIT
  TCP    192.168.6.4:64122      dns:https              TIME_WAIT
  TCP    192.168.6.4:64125      dns:https              TIME_WAIT
  TCP    192.168.6.4:64126      del03s13-in-f3:https   TIME_WAIT
  TCP    192.168.6.4:64127      del11s16-in-f10:https  TIME_WAIT
  TCP    [::1]:1521             DESKTOP-HJ13MH2:50263  ESTABLISHED
  TCP    [::1]:50263            DESKTOP-HJ13MH2:1521   ESTABLISHED

C:\Users\student>
```

8TH-NETINFO

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

9TH-SYSTEM INFO

```
Host Name:                    DESKTOP-HJ13MH2
OS Name:                      Microsoft Windows 10 Pro
OS Version:                   10.0.19044 N/A Build 19044
OS Manufacturer:              Microsoft Corporation
OS Configuration:             Standalone Workstation
OS Build Type:                Multiprocessor Free
Registered Owner:             Windows User
Registered Organization:
Product ID:                   00331-20000-00000-AA660
Original Install Date:        9/22/2021, 9:57:08 AM
System Boot Time:             2/17/2022, 3:42:57 PM
System Manufacturer:          Hewlett-Packard
System Model:                 p2-1275il
System Type:                  x64-based PC
Processor(s):                 1 Processor(s) Installed.
                              [01]: Intel64 Family 6 Model 58 Stepping 9 GenuineIntel ~1600 Mhz
BIOS Version:                 AMI 7.13, 3/4/2013
Windows Directory:            C:\WINDOWS
System Directory:             C:\WINDOWS\system32
Boot Device:                  \Device\HarddiskVolume1
System Locale:                en-us;English (United States)
Input Locale:                 en-us;English (United States)
Time Zone:                    (UTC+05:30) Chennai, Kolkata, Mumbai, New Delhi
Total Physical Memory:        3,985 MB
Available Physical Memory:    1,005 MB
Virtual Memory: Max Size:     6,128 MB
Virtual Memory: Available:    1,999 MB
Virtual Memory: In Use:       4,129 MB
Page File Location(s):        C:\pagefile.sys
Domain:                       WORKGROUP
Logon Server:                 \\DESKTOP-HJ13MH2
Hotfix(s):                    11 Hotfix(s) Installed.
                              [01]: KB5009467
                              [02]: KB4562830
                              [03]: KB4570334
                              [04]: KB4580325
                              [05]: KB4586864
                              [06]: KB5003791
                              [07]: KB5010342
                              [08]: KB5006753
                              [09]: KB5007273
```

```
                              [09]: KB5007273
                              [10]: KB5011352
                              [11]: KB5005699
Network Card(s):              2 NIC(s) Installed.
                              [01]: Qualcomm Atheros AR8152 PCI-E Fast Ethernet Controller (NDIS 6.30)
                                    Connection Name: Ethernet
                                    DHCP Enabled:    No
                                    IP address(es)
                                    [01]: 192.168.6.4
                                    [02]: fe80::a438:e73a:357b:bd94
                              [02]: Microsoft KM-TEST Loopback Adapter
                                    Connection Name: Npcap Loopback Adapter
                                    DHCP Enabled:    Yes
                                    DHCP Server:     255.255.255.255
                                    IP address(es)
                                    [01]: 169.254.239.92
                                    [02]: fe80::2888:c64f:fc72:ef5c
Hyper-V Requirements:         VM Monitor Mode Extensions: Yes
                              Virtualization Enabled In Firmware: No
                              Second Level Address Translation: Yes
                              Data Execution Prevention Available: Yes
```