

Name: Noman Siddique

Roll Number: P191664

Session: Fall

Section: BS SE

Ipconfig:

Output

```
C:\Users\HP>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

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

Ethernet adapter VirtualBox Host-Only Network:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::d03d:e68c:537f:b765%22
    IPv4 Address. . . . . : 192.168.56.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . :

Wireless LAN adapter LAN-Verbindung* 14:

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

Wireless LAN adapter LAN-Verbindung* 17:

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

Wireless LAN adapter WLAN:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::1c7a:2e47:e3fa:86db%9
    IPv4 Address. . . . . : 192.168.43.18
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.43.1

Ethernet adapter Bluetooth-Netzwerkverbindung:

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

Ipconfig /all

Output:

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

Windows IP Configuration

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

Ethernet adapter Ethernet:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . :
    Description . . . . . : Realtek PCIe FE Family Controller
    Physical Address. . . . . : EC-8E-B5-35-DC-37
    DHCP Enabled. . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes

Ethernet adapter VirtualBox Host-Only Network:

    Connection-specific DNS Suffix . :
    Description . . . . . : VirtualBox Host-Only Ethernet Adapter
    Physical Address. . . . . : 0A-00-27-00-00-16
    DHCP Enabled. . . . . : No
    Autoconfiguration Enabled . . . . : Yes
    Link-local IPv6 Address . . . . . : fe80::d03d:e68c:537f:b765%22(Preferred)
    IPv4 Address. . . . . : 192.168.56.1(Preferred)
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . :
    DHCPv6 IAID . . . . . : 621412391
    DHCPv6 Client DUID. . . . . : 00-01-00-01-24-9F-17-7B-EC-8E-B5-35-DC-37
    DNS Servers . . . . . : fec0:0:0:ffff::1%1
                           : fec0:0:0:ffff::2%1
                           : fec0:0:0:ffff::3%1
    NetBIOS over Tcpip. . . . . : Enabled

Wireless LAN adapter LAN-Verbindung* 14:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . :
    Description . . . . . : Microsoft Wi-Fi Direct Virtual Adapter #7
    Physical Address. . . . . : 96-E9-79-DB-D2-C7
    DHCP Enabled. . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes

Wireless LAN adapter LAN-Verbindung* 17:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . :
    Description . . . . . : Microsoft Wi-Fi Direct Virtual Adapter #8
```

ipconfig /all | findstr Physical

Output:

```
C:\Users\HP>ipconfig /all | findstr Physical
Physical Address. . . . . : EC-8E-B5-35-DC-37
Physical Address. . . . . : 0A-00-27-00-00-16
Physical Address. . . . . : 96-E9-79-DB-D2-C7
Physical Address. . . . . : 94-E9-79-DB-D2-C7
Physical Address. . . . . : 94-E9-79-DB-D2-C7
Physical Address. . . . . : 94-E9-79-DB-D2-C8
```

ipconfig /all | findstr v4

ipconfig /all | findstr v6

Output:

```
C:\Users\HP>ipconfig /all | findstr v4
IPv4 Address. . . . . : 192.168.56.1(Preferred)
IPv4 Address. . . . . : 192.168.43.18(Preferred)

C:\Users\HP>ipconfig /all | findstr v6
Link-local IPv6 Address . . . . . : fe80::d03d:e68c:537f:b765%22(Preferred)
DHCPv6 IAID . . . . . : 621412391
DHCPv6 Client DUID. . . . . : 00-01-00-01-24-9F-17-7B-EC-8E-B5-35-DC-37
Link-local IPv6 Address . . . . . : fe80::1c7a:2e47:e3fa:86db%9(Preferred)
DHCPv6 IAID . . . . . : 445966713
DHCPv6 Client DUID. . . . . : 00-01-00-01-24-9F-17-7B-EC-8E-B5-35-DC-37
```

ipconfig /all | findstr /v 00-00-00

Output:

```
C:\Users\HP>ipconfig /all | findstr /v 00-00-00

Windows IP Configuration

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

Ethernet adapter Ethernet:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . :
    Description . . . . . : Realtek PCIe FE Family Controller
    Physical Address. . . . . : EC-8E-B5-35-DC-37
    DHCP Enabled. . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes

Ethernet adapter VirtualBox Host-Only Network:

    Connection-specific DNS Suffix . :
    Description . . . . . : VirtualBox Host-Only Ethernet Adapter
    Physical Address. . . . . : 0A-00-27-00-00-16
    DHCP Enabled. . . . . : No
    Autoconfiguration Enabled . . . . : Yes
    Link-local IPv6 Address . . . . . : fe80::d03d:e68c:537f:b765%22(Preferred)
    IPv4 Address. . . . . : 192.168.56.1(Preferred)
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . :
    DHCPv6 IAID . . . . . : 621412391
    DHCPv6 Client DUID. . . . . : 00-01-00-01-24-9F-17-7B-EC-8E-B5-35-DC-37
    DNS Servers . . . . . : fec0:0:0:ffff::1%1
                           fec0:0:0:ffff::2%1
                           fec0:0:0:ffff::3%1
    NetBIOS over Tcpip. . . . . : Enabled

Wireless LAN adapter LAN-Verbindung* 14:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . :
    Description . . . . . : Microsoft Wi-Fi Direct Virtual Adapter #7
    Physical Address. . . . . : 96-E9-79-DB-D2-C7
    DHCP Enabled. . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes

Wireless LAN adapter LAN-Verbindung* 17:

    Media State . . . . . : Media disconnected
```

>ipconfig /all | findstr /v 00-00-00 | findstr Physical

Output:

```
C:\Users\HP>ipconfig /all | findstr /v 00-00-00 | findstr Physical

    Physical Address. . . . . : EC-8E-B5-35-DC-37
    Physical Address. . . . . : 0A-00-27-00-00-16
    Physical Address. . . . . : 96-E9-79-DB-D2-C7
    Physical Address. . . . . : 94-E9-79-DB-D2-C7
    Physical Address. . . . . : 94-E9-79-DB-D2-C7
    Physical Address. . . . . : 94-E9-79-DB-D2-C8
```


ipconfig/displaydns

Output:

```
C:\Users\HP>ipconfig/displaydns
```

```
Windows IP Configuration

    1.0.0.127.in-addr.arpa
-----
Record Name . . . . : 1.0.0.127.in-addr.arpa.
Record Type . . . . : 12
Time To Live . . . . : 557173
Data Length . . . . : 8
Section . . . . . : Answer
PTR Record . . . . : localhost


    1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.ip6.arpa
-----
Record Name . . . . : 1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.ip6.arpa.
Record Type . . . . : 12
Time To Live . . . . : 557173
Data Length . . . . : 8
Section . . . . . : Answer
PTR Record . . . . : localhost


beacons.gcp.gvt2.com
-----
Record Name . . . . : beacons.gcp.gvt2.com
Record Type . . . . : 5
Time To Live . . . . : 115
Data Length . . . . : 8
Section . . . . . : Answer
CNAME Record . . . . : beacons-handoff.gcp.gvt2.com


Record Name . . . . : beacons-handoff.gcp.gvt2.com
Record Type . . . . : 1
Time To Live . . . . : 115
Data Length . . . . : 4
Section . . . . . : Answer
A (Host) Record . . . : 172.217.19.3


signaler-pa.clients6.google.com
-----
Record Name . . . . : signaler-pa.clients6.google.com
Record Type . . . . : 1
Time To Live . . . . : 60
Data Length . . . . : 4
Section . . . . . : Answer
A (Host) Record . . . : 142.250.181.10


beacons4.gvt2.com
```

ipconfig/flushdns

Output:

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

Windows IP Configuration

Successfully flushed the DNS Resolver Cache.
```

ipconfig/?

Output:

```
C:\Users\HP>ipconfig/?

USAGE:
    ipconfig [/allcompartments] [/? | /all |
        /renew [adapter] | /release [adapter] |
        /renew6 [adapter] | /release6 [adapter] |
        /flushdns | /displaydns | /registerdns |
        /showclassid adapter |
        /setclassid adapter [classid] |
        /showclassid6 adapter |
        /setclassid6 adapter [classid] ]

where
    adapter            Connection name
                        (wildcard characters * and ? allowed, see examples)

Options:
    /?                Display this help message
    /all              Display full configuration information.
    /release          Release the IPv4 address for the specified adapter.
    /release6         Release the IPv6 address for the specified adapter.
    /renew            Renew the IPv4 address for the specified adapter.
    /renew6           Renew the IPv6 address for the specified adapter.
    /flushdns         Purges the DNS Resolver cache.
    /registerdns       Refreshes all DHCP leases and re-registers DNS names
    /displaydns        Display the contents of the DNS Resolver Cache.
    /showclassid       Displays all the dhcp class IDs allowed for adapter.
    /setclassid        Modifies the dhcp class id.
    /showclassid6      Displays all the IPv6 DHCP class IDs allowed for adapter.
    /setclassid6       Modifies the IPv6 DHCP class id.

The default is to display only the IP address, subnet mask and
default gateway for each adapter bound to TCP/IP.

For Release and Renew, if no adapter name is specified, then the IP address
leases for all adapters bound to TCP/IP will be released or renewed.

For Setclassid and Setclassid6, if no ClassId is specified, then the ClassId is removed.

Examples:
    > ipconfig                ... Show information
    > ipconfig /all           ... Show detailed information
    > ipconfig /renew         ... renew all adapters
    > ipconfig /renew EL*     ... renew any connection that has its
                                name starting with EL
    > ipconfig /release *Con* ... release all matching connections,
                                eg. "Wired Ethernet Connection 1" or
                                "Wired Ethernet Connection 2"
```

ipconfig /all >D:\result.txt

Output:

```
C:\Users\HP>ipconfig /all >D:\result.txt

C:\Users\HP>
```

nslookup google.com

output:

```
C:\Users\HP>nslookup google.com
Server:      UnKnown
Address:     192.168.43.1

Non-authoritative answer:
Name:        google.com
Addresses:   2a00:1450:4019:80d::200e
             142.250.181.142
```

nslookup

142.250.181.142

Output:

```
C:\Users\HP>nslookup
Default Server:  UnKnown
Address:         192.168.43.1

> 142.250.181.142
Server:          UnKnown
Address:         192.168.43.1

Name:            fjr04s09-in-f14.1e100.net
Address:         142.250.181.142
```

ipconfig /release

Output:

```
C:\Users\HP>ipconfig /release

Windows IP Configuration

No operation can be performed on Ethernet while it has its media disconnected.
No operation can be performed on LAN-Verbindung* 14 while it has its media disconnected.
No operation can be performed on LAN-Verbindung* 17 while it has its media disconnected.
No operation can be performed on Bluetooth-Netzwerkverbindung while it has its media disconnected.

Ethernet adapter Ethernet:

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

Ethernet adapter VirtualBox Host-Only Network:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::d03d:e68c:537f:b765%22
    IPv4 Address. . . . . : 192.168.56.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . :

Wireless LAN adapter LAN-Verbindung* 14:

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

Wireless LAN adapter LAN-Verbindung* 17:

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

Wireless LAN adapter WLAN:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::1c7a:2e47:e3fa:86db%9
    Default Gateway . . . . . :

Ethernet adapter Bluetooth-Netzwerkverbindung:

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

C:\Users\HP>ipconfig /renew

Windows IP Configuration

No operation can be performed on Ethernet while it has its media disconnected.
No operation can be performed on LAN-Verbindung* 14 while it has its media disconnected.
No operation can be performed on LAN-Verbindung* 17 while it has its media disconnected.
No operation can be performed on Bluetooth-Netzwerkverbindung while it has its media disconnected.

Ethernet adapter Ethernet:
```


ipconfig /renew

Output:

```
C:\Users\HP>ipconfig /renew

Windows IP Configuration

No operation can be performed on Ethernet while it has its media disconnected.
No operation can be performed on LAN-Verbindung* 14 while it has its media disconnected.
No operation can be performed on LAN-Verbindung* 17 while it has its media disconnected.
No operation can be performed on Bluetooth-Netzwerkverbindung while it has its media disconnected.

Ethernet adapter Ethernet:

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

Ethernet adapter VirtualBox Host-Only Network:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::d03d:e68c:537f:b765%22
    IPv4 Address. . . . . : 192.168.56.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . :

Wireless LAN adapter LAN-Verbindung* 14:

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

Wireless LAN adapter LAN-Verbindung* 17:

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

Wireless LAN adapter WLAN:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::1c7a:2e47:e3fa:86db%9
    IPv4 Address. . . . . : 192.168.43.18
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.43.1

Ethernet adapter Bluetooth-Netzwerkverbindung:

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

C:\Users\HP>
```

ipconfig/release *Wi-Fi*

Output:

```
C:\Users\HP>ipconfig/release *Wi-Fi*

Windows IP Configuration

The operation failed as no adapter is in the state permissible for
this operation.

C:\Users\HP>
```