Roll No: 19P-0067

Name: Abdullah Tahir Khurshid

Section: 5-B

Lab no: 1

Command: Ipconfig

Output:

```
C:\Users\Abdullah>ipconfig

Windows IP Configuration


Ethernet adapter Ethernet:

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

Wireless LAN adapter Local Area Connection* 11:

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

Wireless LAN adapter Local Area Connection* 12:

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

Command:

ipconfig/all

Output

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

Windows IP Configuration

    Host Name . . . . . . . . . . . . : ABD-Desktop
    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 Gaming GbE Family Controller
    Physical Address. . . . . . . . . : 14-CB-19-CD-0F-95
    DHCP Enabled. . . . . . . . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes

Wireless LAN adapter Local Area Connection* 11:

    Media State . . . . . . . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :
    Description . . . . . . . . . . . : Microsoft Wi-Fi Direct Virtual Adapter #3
    Physical Address. . . . . . . . . : 82-D2-1D-C4-E5-F5
    DHCP Enabled. . . . . . . . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes

Wireless LAN adapter Local Area Connection* 12:

    Media State . . . . . . . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :
    Description . . . . . . . . . . . : Microsoft Wi-Fi Direct Virtual Adapter #4
    Physical Address. . . . . . . . . : C2-D2-1D-C4-E5-F5
    DHCP Enabled. . . . . . . . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes

Ethernet adapter Ethernet 2:

    Media State . . . . . . . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :
    Description . . . . . . . . . . . : Kaspersky Security Data Escort Adapter
    Physical Address. . . . . . . . . : 00-FF-FA-B1-28-DA
    DHCP Enabled. . . . . . . . . . . : No
    Autoconfiguration Enabled . . . . : Yes

Wireless LAN adapter Wi-Fi:

    Connection-specific DNS Suffix  . :
```

Command:

Ipconfig /release

Output:

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

Windows IP Configuration

No operation can be performed on Ethernet while it has its media disconnected.
No operation can be performed on Local Area Connection* 11 while it has its media disconnected.
No operation can be performed on Local Area Connection* 12 while it has its media disconnected.

Ethernet adapter Ethernet:

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

Wireless LAN adapter Local Area Connection* 11:

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

Wireless LAN adapter Local Area Connection* 12:

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

Ethernet adapter Ethernet 2:

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

Wireless LAN adapter Wi-Fi:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . : fe80::cce4:bd6d:23fb:d868%19
   Default Gateway . . . . . . . . . :

C:\Users\Abdullah>
```

Command: Ipconfig /renew

Output:

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

Windows IP Configuration

No operation can be performed on Ethernet while it has its media disconnected.
No operation can be performed on Local Area Connection* 11 while it has its media disconnected.
No operation can be performed on Ethernet 2 while it has its media disconnected.

Ethernet adapter Ethernet:

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

Wireless LAN adapter Local Area Connection* 11:

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

Ethernet adapter Ethernet 2:

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

Wireless LAN adapter Wi-Fi:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . : fe80::cce4:bd6d:23fb:d868%19
   IPv4 Address. . . . . . . . . . . : 192.168.0.108
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . . . . : 192.168.0.1
```

Command:

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

Output

```
C:\Users\Abdullah>ipconfig /all | findstr /v 00-00-00 | findstr Physical
   Physical Address. . . . . . . . . : 14-CB-19-CD-0F-95
   Physical Address. . . . . . . . . : 82-D2-1D-C4-E5-F5
   Physical Address. . . . . . . . . : C2-D2-1D-C4-E5-F5
   Physical Address. . . . . . . . . : 00-FF-FA-B1-28-DA
   Physical Address. . . . . . . . . : 80-D2-1D-C4-E5-F5
```

Command:

ipconfig /all | findstr v4

Output

```
C:\Users\Abdullah>ipconfig /all | findstr v4
   IPv4 Address. . . . . . . . . . . : 192.168.0.108(Preferred)
```

Command:

ipconfig /displaydns

Output:

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

Windows IP Configuration

    array615.prod.do.dsp.mp.microsoft.com
    ----------------------------------------
    Record Name . . . . . : array615.prod.do.dsp.mp.microsoft.com
    Record Type . . . . . : 1
    Time To Live  . . . . : 2553
    Data Length . . . . . : 4
    Section . . . . . . . : Answer
    A (Host) Record . . . : 20.54.24.246


    client.wns.windows.com
    ----------------------------------------
    Record Name . . . . . : client.wns.windows.com
    Record Type . . . . . : 5
    Time To Live  . . . . : 22
    Data Length . . . . . : 8
    Section . . . . . . . : Answer
    CNAME Record  . . . . : wns.notify.trafficmanager.net


    Record Name . . . . . : wns.notify.trafficmanager.net
    Record Type . . . . . : 1
    Time To Live  . . . . : 22
    Data Length . . . . . : 4
    Section . . . . . . . : Answer
    A (Host) Record . . . : 20.198.162.76


    sdeconfig.kaspersky-labs.com
    ----------------------------------------
    Record Name . . . . . : sdeconfig.kaspersky-labs.com
    Record Type . . . . . : 1
    Time To Live  . . . . : 2590
    Data Length . . . . . : 4
    Section . . . . . . . : Answer
    A (Host) Record . . . : 40.127.154.148


    dc1-file.ksn.kaspersky-labs.com
```

Command: ipconfig /flushdns

Output:

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

Windows IP Configuration

Successfully flushed the DNS Resolver Cache.

C:\Users\Abdullah>
```

Command : ipconfig /?

Output:

```
C:\Users\Abdullah>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"
```

Command: nslookup

Output:

```
C:\Users\Abdullah>nslookup google.com
Server:  dns.google
Address:  8.8.8.8

Non-authoritative answer:
Name:    google.com
Addresses:  2a00:1450:4019:809::200e
          142.250.181.14


C:\Users\Abdullah>
```

Command:nslookup 142.250.181.14

Output:

```
C:\Users\Abdullah>nslookup 142.250.181.14
Server:  dns.google
Address:  8.8.8.8

Name:    fjr04s05-in-f14.1e100.net
Address:  142.250.181.14
```

Command: ipconfig /release6

output

```
C:\Users\Abdullah>ipconfig /release6

Windows IP Configuration

No operation can be performed on Ethernet while it has its media disconnected.
No operation can be performed on Local Area Connection* 11 while it has its media disconnected.
No operation can be performed on Local Area Connection* 12 while it has its media disconnected.
No operation can be performed on Ethernet 2 while it has its media disconnected.

Ethernet adapter Ethernet:

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

Wireless LAN adapter Local Area Connection* 11:

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

Wireless LAN adapter Local Area Connection* 12:

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

Ethernet adapter Ethernet 2:

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

Wireless LAN adapter Wi-Fi:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . : fe80::cce4:bd6d:23fb:d868%19
   IPv4 Address. . . . . . . . . . . : 192.168.0.108
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . . . . : 192.168.0.1
```

command:ipconfig /renew6

```
C:\Users\Abdullah>ipconfig /renew6

Windows IP Configuration

No operation can be performed on Ethernet while it has its media disconnected.
No operation can be performed on Local Area Connection* 11 while it has its media disconnected.
No operation can be performed on Local Area Connection* 12 while it has its media disconnected.
No operation can be performed on Ethernet 2 while it has its media disconnected.
```

Command: ipconfig /all | findstr IPv4

Output:

```
C:\Users\Abdullah>ipconfig /all | findstr IPv4
    IPv4 Address. . . . . . . . . . . : 192.168.0.108(Preferred)
```

Command:ipconfig /all >F:\abc.txt

Output:

```
C:\Users\Abdullah>ipconfig /all >F:\abc.txt
```

Command: ipconfig /? >F:\xyz.txt

Output:

```
xyz.txt - Notepad
File  Edit  Format  View  Help

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.
```