

NAME: USAMA YOUSUF KHAN

ROLL NUMBER: P20-0646

CLASS: BCS 5-A

COMPUTER NETWORKS LAB

LAB TASK #1

SUBMITTED TO MISS HURMAT HIDAYAT

QUESTION 1:

PART A)

IP ADDRESS:

192.168.18.1

PART B)

SUBNET MASK:

255.255.252.0

PART C)

DEFAULT GATEWAY:

192.168.18.1

```
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . : 
Description . . . . . : Microsoft Wi-Fi Direct Virtual Adapter #2
Physical Address. . . . . : A6-02-B9-81-7F-3B
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . : Yes

Wireless LAN adapter Wi-Fi:

Connection-specific DNS Suffix . : 
Description . . . . . : Intel(R) Dual Band Wireless-AC 7265
Physical Address. . . . . : A4-02-B9-81-7F-3B
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . : Yes
IPv6 Address. . . . . : 2400:adcc:15e:8500::3(Preferred)
Lease Obtained. . . . . : Wednesday, September 14, 2022 11:00:14 PM
Lease Expires . . . . . : Thursday, September 15, 2022 11:00:14 PM
IPv6 Address. . . . . : 2400:adcc:15e:8500:395a:3a4e:f6bb:93ce(Preferred)
Temporary IPv6 Address. . . . . : 2400:adcc:15e:8500:5c4a:7a7c:2e8a:a182(Preferred)
Link-local IPv6 Address . . . . : fe80::395a:3a4e:f6bb:93ce%14(Preferred)
IPv4 Address. . . . . : 192.168.18.11(Preferred)
Subnet Mask . . . . . : 255.255.255.0
Lease Obtained. . . . . : Wednesday, September 14, 2022 11:00:14 PM
Lease Expires . . . . . : Thursday, September 15, 2022 12:00:14 AM
Default Gateway . . . . . : fe80::1%14
                          192.168.18.1
```

QUESTION 2:

PART A)

IP ADDRESS:

192.168.18.106

PART B)

IP ADDRESS:

192.168.18.6

PART C)

IP ADDRESS:

192.168.18.206

QUESTION 3:

METHOD 1:

Search for command prompt in windows search option and type ipconfig

```
Wireless LAN adapter Wi-Fi:

Connection-specific DNS Suffix . : 
Description . . . . . : Intel(R) Dual Band Wireless-AC 7265
Physical Address. . . . . : A4-02-B9-81-7F-3B
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
IPv6 Address. . . . . : 2400:adcc:15e:8500::3(Preferred)
Lease Obtained. . . . . : Wednesday, September 14, 2022 11:00:14 PM
Lease Expires . . . . . : Thursday, September 15, 2022 11:00:14 PM
IPv6 Address. . . . . : 2400:adcc:15e:8500:395a:3a4e:f6bb:93ce(Prefe
Temporary IPv6 Address. . . . . : 2400:adcc:15e:8500:5c4a:7a7c:2e8a:a182(Prefe
Link-local IPv6 Address . . . . . : fe80::395a:3a4e:f6bb:93ce%14(Preferred)
IPv4 Address. . . . . : 192.168.18.11(Preferred)
Subnet Mask . . . . . : 255.255.255.0
Lease Obtained. . . . . : Wednesday, September 14, 2022 11:00:14 PM
Lease Expires . . . . . : Thursday, September 15, 2022 12:00:14 AM
Default Gateway . . . . . : fe80::1%14
                          192.168.18.1
```

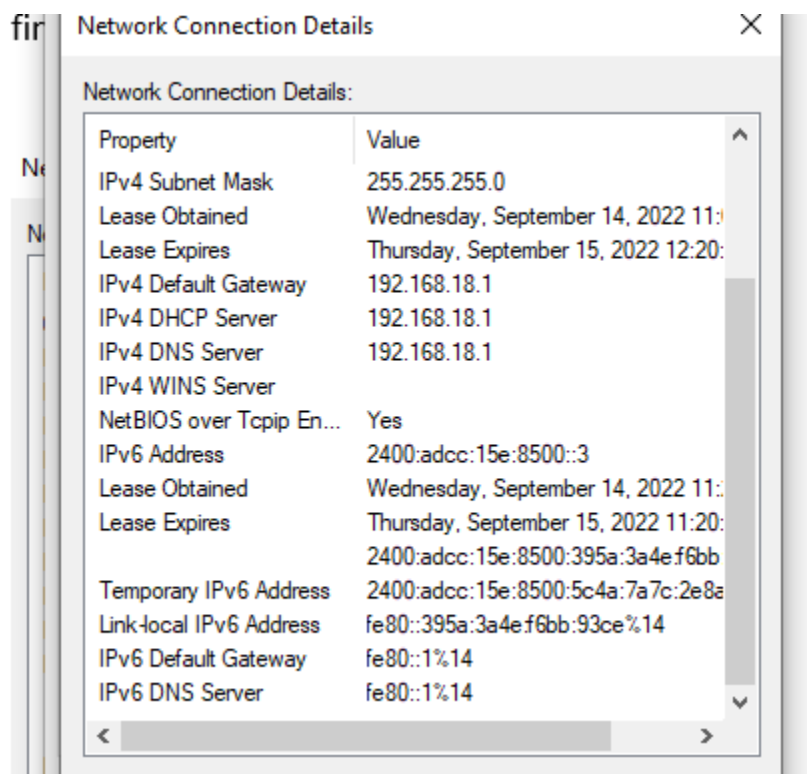
METHOD 2:

Go to settings, then network and internet, then click on wifi, click on the name of the wifi connection and scroll down to properties.

	Link-local IPv6 address	fe80::395a:3a4e:f6bb:93ce%14
	IPv6 DNS servers:	fe80::1%14
	IPv4 address:	192.168.18.11
	IPv4 DNS servers:	192.168.18.1
	Manufacturer:	Intel Corporation
	Description:	Intel(R) Dual Band Wireless-AC 7265
	Driver version:	19.51.30.1
	Physical address (MAC):	A4-02-B9-81-7F-3B

METHOD 3:

Go to control panel>Network and sharing center>change adapter settings>click on name of connection>prompt will show up so click on details>scroll down to find IP address.



METHOD 4:

Search system information>click on components on left panel>click on network>click on adapter>scroll down to find ip address of current connection you are using

Driver	C:\WINDOWS\SYSTEM32\DRIVERS\KDNIC.SYS (6.1.0.0, 32.52 KB (33,296 bytes)...
Name	[00000001] Intel(R) Dual Band Wireless-AC 7265
Adapter Type	Ethernet 802.3
Product Type	Intel(R) Dual Band Wireless-AC 7265
Installed	Yes
PNP Device ID	PCI\VEN_8086&DEV_095A&SUBSYS_50108086&REV_61\A402B9FFF817F3B00
Last Reset	9/14/2022 10:20 PM
Index	1
Service Name	Netwtw04
IP Address	192.168.18.11, fe80::395a:3a4e:f6bb:93ce, 2400:adcc:15e:8500:5c4a:7a7c:2e8a:...
IP Subnet	255.255.255.0, 64, 128, 64, 128
Default IP Gateway	192.168.18.1, fe80::1
DHCP Enabled	Yes
DHCP Server	192.168.18.1
DHCP Lease Expires	9/15/2022 12:20 AM
DHCP Lease Obtained	9/14/2022 11:20 PM
MAC Address	A4:02:B9:81:7F:3B
Memory Address	0xD0CFE000-0xD0CFFFFF
IRQ Channel	IRQ 4294967277
Driver	C:\WINDOWS\SYSTEM32\DRIVERS\NETWTW04.SYS (19.51.30.1, 8.25 MB (8,65...

METHOD 5:

POWERSHELL GIP COMMAND:

Search powershell>type in command “gip”>find ip address

```
me Windows PowerShell
Windows PowerShell
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y Try the new cross-platform PowerShell https://aka.ms/pscore6
nat PS C:\Users\Usama> gip
d
nt InterfaceAlias      : Wi-Fi
InterfaceIndex       : 14
InterfaceDescription : Intel(R) Dual Band Wireless-AC 7265
NetProfile.Name      : Stormfiber 68
IPv6Address          : 2400:adcc:15e:8500:395a:3a4e:f6bb:93ce
                    : 2400:adcc:15e:8500::3
IPv4Address          : 192.168.18.11
IPv6DefaultGateway   : fe80::1
IPv4DefaultGateway   : 192.168.18.1
DNSServer            : fe80::1
                    : 192.168.18.1

InterfaceAlias      : Bluetooth Network Connection
InterfaceIndex      : 11
InterfaceDescription : Bluetooth Device (Personal Area Network)
NetAdapter.Status   : Disconnected

InterfaceAlias      : Ethernet
InterfaceIndex      : 16
InterfaceDescription : Broadcom NetXtreme Gigabit Ethernet Plus
NetAdapter.Status   : Disconnected

PS C:\Users\Usama> fii
```


METHOD 6:

POWERSHELL Get-NetIPConfiguration:

Search powershell>type in command “Get-NetIPConfiguration”>find ip address

```
PS C:\Users\Usama> Get-NetIPConfiguration

InterfaceAlias      : Wi-Fi
InterfaceIndex       : 14
InterfaceDescription : Intel(R) Dual Band Wireless-AC 7265
NetProfile.Name      : Stormfiber 68
IPv6Address          : 2400:adcc:15e:8500:395a:3a4e:f6bb:93ce
                    : 2400:adcc:15e:8500::3
IPv4Address          : 192.168.18.11
IPv6DefaultGateway   : fe80::1
IPv4DefaultGateway   : 192.168.18.1
DNSServer            : fe80::1
                    : 192.168.18.1

InterfaceAlias      : Bluetooth Network Connection
InterfaceIndex       : 11
InterfaceDescription : Bluetooth Device (Personal Area Network)
NetAdapter.Status    : Disconnected

InterfaceAlias      : Ethernet
InterfaceIndex       : 16
InterfaceDescription : Broadcom NetXtreme Gigabit Ethernet Plus
NetAdapter.Status    : Disconnected
```