Name: Avinash singh

Roll: AC-1255

Internet Technologies

ASSIGNMENT

Practical-1:. Display your systems IP Address, Subnet mask using ipconfig, and find out the network address and the maximum number of systems possible on your network and range of IP addresses available to these systems.

```
C:\Users\saara>ipconfig

Windows IP Configuration


Ethernet adapter Ethernet 2:

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

Unknown adapter Local Area Connection:

   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* 2:

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

Wireless LAN adapter Wi-Fi:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . : fe80::20ee:d6e:1c2f:5ea%4
   IPv4 Address. . . . . . . . . . . : 10.135.2.150
   Subnet Mask . . . . . . . . . . . : 255.255.0.0
   Default Gateway . . . . . . . . . : 10.135.1.1

Ethernet adapter Bluetooth Network Connection:

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


C:\Users\saara>
```

```
C:\Users\saara>arp -a

Interface: 10.135.2.150 --- 0x4
  Internet Address      Physical Address      Type
  10.135.1.1            ec-13-db-e7-ae-81     dynamic
  10.135.255.255        ff-ff-ff-ff-ff-ff     static
  224.0.0.2             01-00-5e-00-00-02     static
  224.0.0.22            01-00-5e-00-00-16     static
  224.0.0.251           01-00-5e-00-00-fb     static
  224.0.0.252           01-00-5e-00-00-fc     static
  224.0.0.253           01-00-5e-00-00-fd     static
  239.255.255.250       01-00-5e-7f-ff-fa     static
  255.255.255.255       ff-ff-ff-ff-ff-ff     static

C:\Users\saara>ipconfig/all

Windows IP Configuration

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

Ethernet adapter Ethernet 2:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :
   Description . . . . . . . . . . . : ExpressVPN TAP Adapter
   Physical Address. . . . . . . . . : 00-FF-9A-44-48-8B
   DHCP Enabled. . . . . . . . . . . : Yes
   Autoconfiguration Enabled . . . . : Yes

Unknown adapter Local Area Connection:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :
   Description . . . . . . . . . . . : ExpressVPN Wintun Driver
   Physical Address. . . . . . . . . :
   DHCP Enabled. . . . . . . . . . . : No
   Autoconfiguration Enabled . . . . : Yes

Wireless LAN adapter Local Area Connection* 1:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :
   Description . . . . . . . . . . . : Microsoft Wi-Fi Direct Virtual Adapter
   Physical Address. . . . . . . . . : 92-E8-68-A2-81-29
   DHCP Enabled. . . . . . . . . . . : Yes
```

```
Wireless LAN adapter Local Area Connection* 2:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :
   Description . . . . . . . . . . . : Microsoft Wi-Fi Direct Virtual Adapter #2
   Physical Address. . . . . . . . . : 92-E8-68-A2-81-39
   DHCP Enabled. . . . . . . . . . . : Yes
   Autoconfiguration Enabled . . . . : Yes

Wireless LAN adapter Wi-Fi:

   Connection-specific DNS Suffix  . :
   Description . . . . . . . . . . . : MediaTek MT7921 Wi-Fi 6 802.11ax PCIe Adapter
   Physical Address. . . . . . . . . : 90-E8-68-A2-81-19
   DHCP Enabled. . . . . . . . . . . : Yes
   Autoconfiguration Enabled . . . . : Yes
   Link-local IPv6 Address . . . . . : fe80::20ee:d6e:1c2f:5ea%4(Preferred)
   IPv4 Address. . . . . . . . . . . : 10.135.2.150(Preferred)
   Subnet Mask . . . . . . . . . . . : 255.255.0.0
   Lease Obtained. . . . . . . . . . : 29 August 2022 08:54:41
   Lease Expires . . . . . . . . . . : 29 August 2022 23:24:55
   Default Gateway . . . . . . . . . : 10.135.1.1
   DHCP Server . . . . . . . . . . . : 10.135.1.10
   DHCPv6 IAID . . . . . . . . . . . : 59828328
   DHCPv6 Client DUID. . . . . . . . : 00-01-00-01-2A-63-5C-66-90-E8-68-A2-81-19
   DNS Servers . . . . . . . . . . . : 10.2.1.13
                                       10.2.1.16
   NetBIOS over Tcpip. . . . . . . . : Enabled

Ethernet adapter Bluetooth Network Connection:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :
   Description . . . . . . . . . . . : Bluetooth Device (Personal Area Network)
   Physical Address. . . . . . . . . : 90-E8-68-A2-81-18
   DHCP Enabled. . . . . . . . . . . : Yes
   Autoconfiguration Enabled . . . . : Yes
```

```
C:\Users\saara>tracert 10.135.2.150

Tracing route to Avinash-singh [10.135.2.150]
over a maximum of 30 hops:

  1    <1 ms    <1 ms    <1 ms  Avinash-singh [10.135.2.150]

Trace complete.

C:\Users\saara>
```