Lab 01

Using PowerShell to Find IP Address, DNS and DHCP

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Introduction:

An IP address (Internet Protocol address) is a unique numerical label assigned to every device connected to the internet, essentially acting like an online address that allows data to be sent to the correct location on the network; it's a string of numbers that identifies a device so it can communicate with other devices online

Domain Name Server DNS is a system that translates domain name into IP address which are used by devices to locate each other on the internet. DNS works when a user enters a domain name into their browser, the browser queries a DNS server DNS server returns the IP address for the domain name, The browser uses the IP address to load the requested web page.

Dynamic Host Configuration Protocol DHCP: A network protocol that automatically assigns IP addresses to devices on a network. DHCP also provides other configuration information, such as subnet masks and default gateways.

Classes of IP address. Class C: 255.255.255.0, Class B: 255.255.0.0, Class A: 255.0.0.0. Every IP has two sections, Network portion and Host portion.

Assignment:

In this lab, we would be using common PowerShell to identify IP address, DNS and DHCP.

Requirements:

Windows 10 and above.

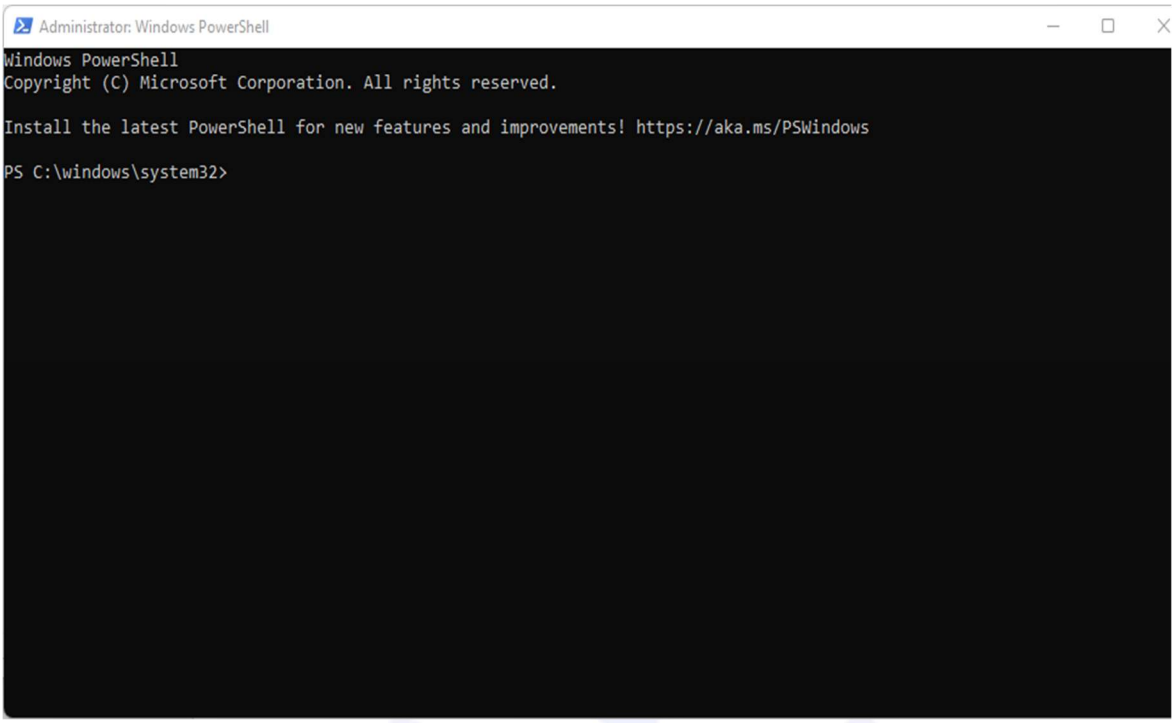
High Speed Internet

Estimated Time:

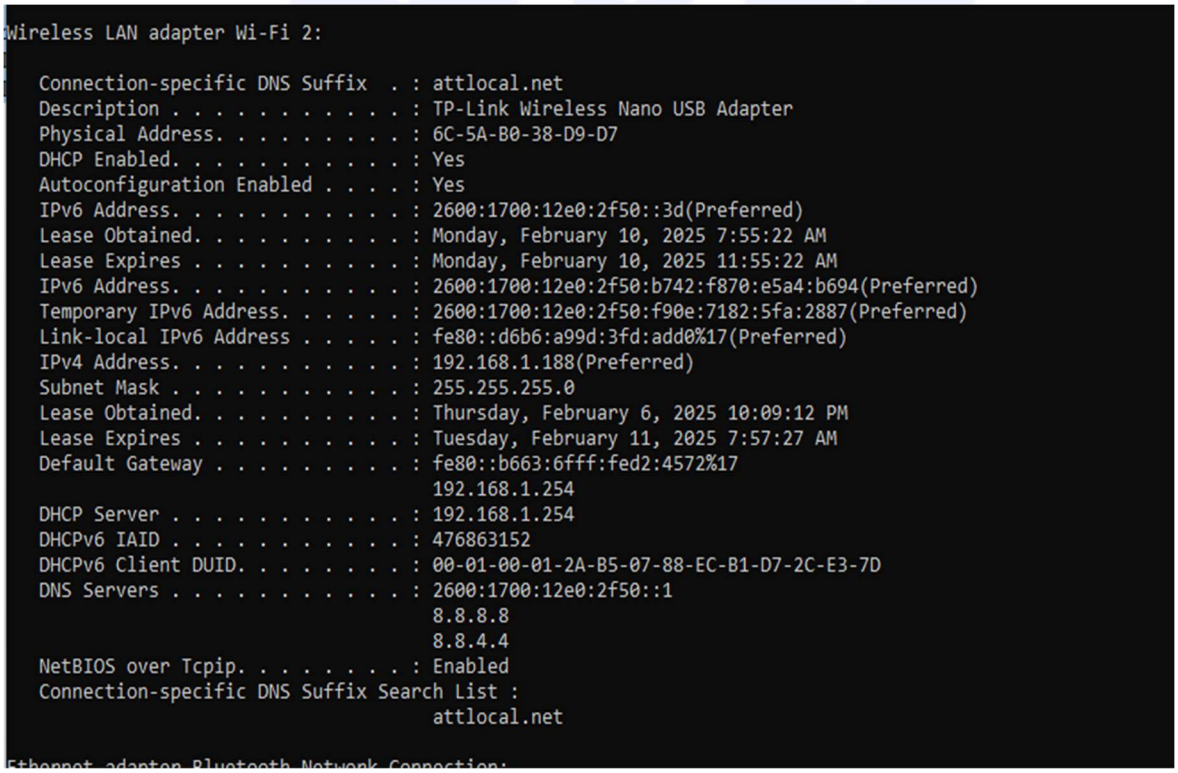
Varies

Activity:

1. Go to your Windows search tab on the Taskbar and type PowerShell. Open the PowerShell utility. Run as an Administrator.



2. Run *ipconfig /all*
   Go to section indicating Wireless LAN adapter wi-fi:



3. Include screenshot of powershell and answer following:
   a. What is the name of your DNS server?
   b. What is your MAC address?
   c. DHCP enabled, does that indicate static or dynamic IP address? Please elaborate.
   d. What is your IP address and IP class do you have?
   e. What is the difference between IPv4 and IPv6 IP address?
   f. What is your host name?

Submit your response to INFO@DELOJIK.COM

SUBMIT BY Thursday February 13 at 6pm US CT.