

List of commands to be familiar with!!

- **ipconfig**: Displays the computer's current IP address, subnet mask, and default gateway addresses
- **ipconfig /all**: Displays all information about the network adapter, including the physical address, DHCP and DNS servers, subnet mask, and default gateway
- **nslookup** : The nslookup command is a command-line tool that helps users find the IP address or DNS record of a domain name, or the domain associated with an IP address
 - nslookup klh.edu.in
 - nslookup amazon.in
 - nslookup www.amazon.in
- **tracert**: The tracert command is a diagnostic tool that helps identify network issues by showing the path a packet takes from one system to another
 - Try the following.
 - tracert www.amazon.in
 - tracert amazon.in
 - tracert (your neighbor's laptop IP)
 - tracert klh.edu.in
 - From the above outputs what is the IP address of the respective website? (domain)
- **netsh**: Netsh is a command-line tool that lets users configure and display network settings on a computer
 - Try : netsh wlan show interface

- netsh interface ipv4 show config
- **ping**
 - ping www.amazon.in
 - ping www.google.com
- **telnet:** We can use the Telnet command to connect to a port on a remote server to verify if the path from our computer to that server is open over that port. Telnet was originally built to remotely control and manage mainframe computers from distant terminals. It has largely been replaced by other technologies for secure remote control of computers, because Telnet sends data in **plain text**.

To Enable telnet:

- Go to **Start > Control Panel > Programs**
- Under **Programs and features**, click **Turn Windows features on or off**
- Check the box for **Telnet Client**
- Click **OK**
- **netstat:** The netstat command is a networking tool that displays network status and protocol statistics. It can be used for troubleshooting, configuration, and monitoring network connections
 - netstat -e -s : To display both the Ethernet statistics and the statistics for all protocols

- `netstat -s -p tcp udp`: To display the statistics for only the TCP and UDP protocols
- `netstat -o 5`: To display active TCP connections and the process IDs every 5 seconds