PORT-NUMBERS:

Port numbers are used to identify specific services or processes running on a computer or network device. They allow network communications to be directed to the appropriate application or service

1. Port 22: SSH (Secure Shell) - Used for secure remote access and administration.
2. Port 23: Telnet - A protocol for unencrypted remote access to a device or server.
3. Port 25: SMTP (Simple Mail Transfer Protocol) - Used for email transmission between mail servers.
4. Port 53: DNS (Domain Name System) - Used for DNS queries and responses.
5. Port 80: HTTP (Hypertext Transfer Protocol) - Used for unencrypted web browsing.
6. Port 443: HTTPS (HTTP Secure) - Used for secure web browsing over SSL/TLS.
7. Port 110: POP3 (Post Office Protocol version 3) - Used for receiving email.
8. Port 143: IMAP (Internet Message Access Protocol) - Used for retrieving email from a remote mail server.

9. Port 389: LDAP (Lightweight Directory Access Protocol) - Used for directory services.
10. Port 443: LDAPS (LDAP Secure) - Used for secure LDAP communications over SSL/TLS.
11. Port 3389: RDP (Remote Desktop Protocol) - Used for remote desktop access on Windows systems.

Jenkins:

- ❖ Default HTTP Port: **8080**
- ❖ Default HTTPS Port: 8443

Nexus:

- ❖ Default HTTP Port: **8081**
- ❖ Default HTTPS Port: 8443

Apache Tomcat:

- ❖ Default HTTP Port: **8080**
- ❖ Default HTTPS Port: 8443

SonarQube:

- ❖ Default HTTP Port: **9000**

httpd (Apache HTTP Server):

- ❖ Default HTTP Port: **80**
- ❖ Default HTTPS Port: 443

Nginx:

- ❖ Default HTTP Port: **80**
- ❖ Default HTTPS Port: 443

JFrog Artifactory:

- ❖ Default HTTP Port: **8081**
- ❖ Default HTTPS Port: 8443

ifconfig: This command is used to display or configure network interfaces. It shows the current network configuration of all active interfaces on the system, including IP addresses, MAC addresses, and other network details.

syntax:

   ifconfig

ip addr show

ping: The ping command is used to test network connectivity and verify if a remote host is reachable. It sends ICMP echo requests to the specified IP address or domain name and waits for an ICMP echo reply. This command is useful for troubleshooting network connectivity issues.

syntax:

 ping google.com

traceroute: The traceroute command helps to trace the path that packets take from your computer to a destination host. It shows the route taken by packets and displays the IP addresses of each hop along the way. It can be used to diagnose network routing problems.

syntax:

   sudo apt install inetutils-traceroute

   traceroute google.com

netstat: The netstat command displays active network connections, routing tables, and various network statistics. It provides information about open ports, listening services, and established connections on the system. This command is useful for monitoring network activity.

netstat -a

nslookup: The nslookup command is used to query the Domain Name System (DNS) to obtain domain name or IP address information. It can be used to troubleshoot DNS-related issues or to check DNS records.

nslookup google.com

systemctl and service are both tools used in Linux systems to manage system services, but they differ in their approach and functionality

Syntax:

systemctl [OPTIONS] [COMMAND] [SERVICE]

start: Start a service or a group of services.

stop: Stop a service or a group of services.

restart: Restart a service or a group of services.

reload: Reload the configuration of a service or a group of services.

enable: Enable a service or a group of services to start automatically at boot time.

disable: Disable a service or a group of services from starting automatically at boot time.

status: Show the status of a service or a group of services.

Examples:

sudo systemctl status sshd: Check the status of the SSH service.

sudo systemctl start httpd: Start the Apache HTTP Server service.

sudo systemctl stop nginx: Stop the Nginx service.

sudo systemctl restart mysql: Restart the MySQL service.

sudo systemctl enable named: Enable the BIND DNS service to start automatically at boot time.

Service command:

service [OPTIONS] SERVICE COMMAND

start: Start a service.

stop: Stop a service.

restart: Restart a service.

reload: Reload the configuration of a service.

status: Show the status of a service.

Examples:

sudo service sshd status: Check the status of the SSH service.

sudo service httpd start: Start the Apache HTTP Server service.

sudo service nginx stop: Stop the Nginx service.

sudo service mysql restart: Restart the MySQL service.

sudo service named reload: Reload the configuration of the BIND DNS service.