**Protocols Use and Port addresses:**

1. **HTTP (Hypertext Transfer Protocol) - Port 80**

Purpose: Used for transferring hypertext, commonly used for web browsing.

1. **HTTPS (HTTP Secure) - Port 443**

Purpose: Secure version of HTTP, providing encrypted communication for secure web browsing.

1. **FTP (File Transfer Protocol) - Port 21**

Purpose: Used for file transfer between a client and a server.

1. **SSH (Secure Shell) - Port 22**

Purpose: Provides secure remote access and secure file transfers.

1. **SMTP (Simple Mail Transfer Protocol) - Port 25**

Purpose: Used for sending email messages between servers.

1. **DNS (Domain Name System) - Port 53**

Purpose: Resolves domain names to IP addresses, translating human-readable addresses to machine-readable ones.

1. **DHCP (Dynamic Host Configuration Protocol) - Port 67/68**

Purpose: Automatically assigns IP addresses and network configuration to devices on a network.

1. **POP3 (Post Office Protocol 3) - Port 110**

Purpose: Retrieves email from a mail server to a client device.

1. **IMAP (Internet Message Access Protocol) - Port 143**

Purpose: Allows access and management of email stored on a mail server from multiple devices.

1. **Telnet - Port 23**

Purpose: Enables remote command-line access to a server or networking device.

1. **SNMP (Simple Network Management Protocol) - Port 161**

Purpose: Used for network management and monitoring of network-connected devices.

1. **NTP (Network Time Protocol) - Port 123**

Purpose: Synchronizes clocks on networked devices to a common time reference.

1. **RDP (Remote Desktop Protocol) - Port 3389**

Purpose: Allows remote access and control of a Windows-based computer.

1. **SIP (Session Initiation Protocol) - Port 5060/5061**

Purpose: Used for initiating, modifying, and terminating real-time sessions like voice and video calls over IP networks.

1. **SMB (Server Message Block) - Port 445**

Purpose: Provides file sharing, printer services, and other networking capabilities between devices.

1. **LDAP (Lightweight Directory Access Protocol) - Port 389**

Purpose: Accesses and maintains distributed directory information services.

1. **PPTP (Point-to-Point Tunneling Protocol) - Port 1723**

Purpose: Establishes VPN connections for secure remote access to private networks.

1. **ICMP (Internet Control Message Protocol) - No specific port (uses IP protocol)**

Purpose: Used for network diagnostics, error reporting, and control messages.

1. **RTSP (Real-Time Streaming Protocol) - Port 554**

Purpose: Manages control aspects of real-time media streaming sessions.

1. **DHCPv6 (Dynamic Host Configuration Protocol for IPv6) - Port 546/547**

Purpose: Assigns IPv6 addresses and network configuration to devices on a network using IPv6.