**What is Protocols?**

* In networking, a protocol is **a set of rules** for formatting and processing data.
* There are various types of protocols:
* Transmission Control Protocol (TCP)
* Internet Protocol (IP)
* User Datagram Protocol (UDP)
* Post office Protocol (POP)
* Simple mail transport Protocol (SMTP)
* File Transfer Protocol (FTP)
* Hyper Text Transfer Protocol (HTTP)
* Hyper Text Transfer Protocol Secure (HTTPS)

Let's discuss each of them briefly:

* + - * + **Transmission Control Protocol (TCP):** TCP is a popular communication protocol which is used for communicating over a network.
        + **Internet Protocol (IP):** IP is designed explicitly as addressing protocol. It is mostly used with TCP.
        + User Datagram Protocol (UDP): UDP is a substitute communication protocol to Transmission Control Protocol implemented primarily for creating loss-tolerating and low-latency linking between different applications.
        + Post office Protocol (POP): POP3 is designed for receiving incoming E-mails.
        + Simple mail transport Protocol (SMTP): SMTP is designed to send and distribute outgoing E-Mail.
        + File Transfer Protocol (FTP): FTP allows users to transfer files from one machine to another. Types of files may include program files, multimedia files, text files, and documents, etc.
        + **Hyper Text Transfer Protocol (HTTP):** HTTP is designed for transferring a hypertext among two or more systems. HTML tags are used for creating links. These links may be in any form like text or images.
        + **Hyper Text Transfer Protocol Secure (HTTPS):** HTTPS is abbreviated as Hyper Text Transfer Protocol Secure is a standard protocol to secure the communication among two computers one using the browser and other fetching data from web server.

