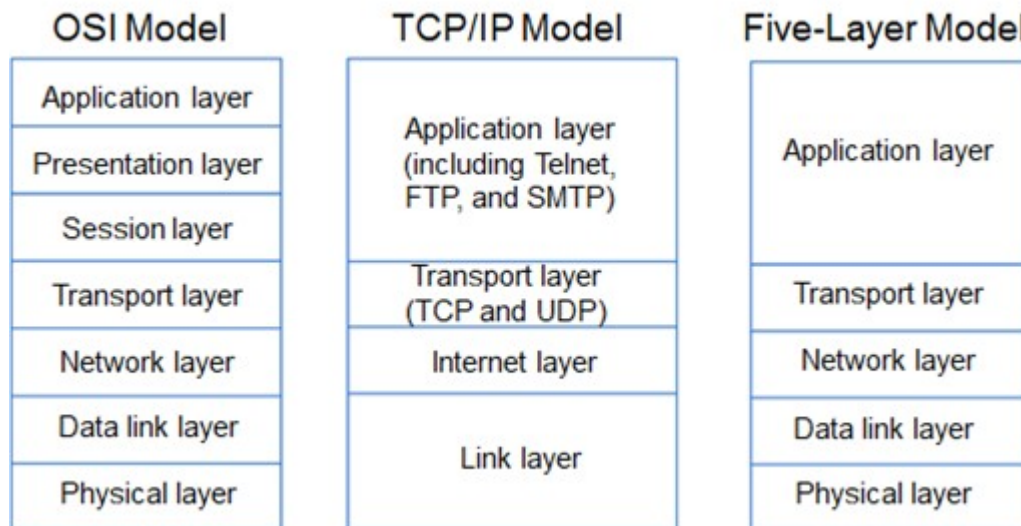


In networking ,the most commonly used model is 5-layer model besides OSI model and 4 -layer model with some changes made to 5-layer model.



#### *Physical Layer:*

This layer comprises of the **Cat-6 cables** used to send or receive the encapsulated Ethernet frame that comprises of IP datagram and TCP segment and the Network ports to which the cables are connected to determine the connections between devices through LED's

#### *Data Link Layer:*

This is the layer where connection between nodes(devices) in a network is ensured through switches.

#### *Network Layer:*

This layer uses IP predominantly to find the correct network where the destination node is present through Routers which connects .

#### *Transport Layer:*

This layer uses **TCP(Transfer Control Protocol)/UDP(User Datagram Protocol)**. TCP makes connection to server through system ports and to clients through ephemeral ports . **Multiplexing and De-multiplexing** processes are made through these ports.

### *Application Layer:*

This layer uses various protocols depending on the applications. For example, **HTTP(Hyper Text Transfer Protocol)** is used by the web-servers and the web-pages.

### [What is a computer port?](#)

A port is a virtual point where network connections start and end. Ports are software-based and managed by a computer's operating system. Each port is associated with a specific process or service.