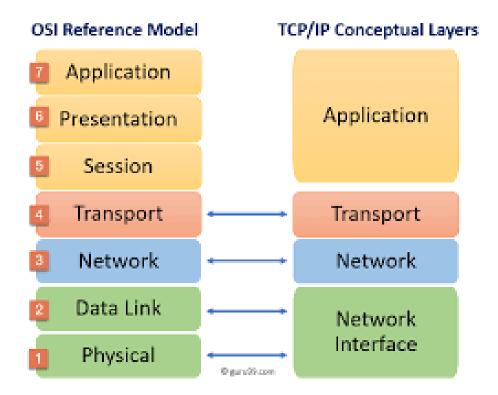
TCP / IP Model

- It stands for Transmission Control Protocol/Internet Protocol.
- The **TCP/IP model** is a concise version of the OSI model.
- It contains four layers, unlike seven layers in the OSI model.
- The layers are:
 - Process/Application Layer
 - Host-to-Host/Transport Layer
 - Internet Layer
 - Network Access/Link Layer



- Network Access Layer: This layer corresponds to the combination of Data Link Layer and Physical Layer of the OSI model.
- **Internet Layer:** This layer parallels the functions of OSI Network Layer.
- **Transport Layer:** This layer is analogous to the **Transport Layer** of the OSI model.
- **Application Layer:** This layer performs the functions of top three layers of the OSI model: Application Layer, Presentation Layer and Session Layer.

<u>OSI</u> TCP/IP

| TCP refers to Transmission Control Protocol. | OSI refers to Open Systems Interconnection. |
|--|--|
| TCP/IP has 4 layers. | OSI has 7 layers. |
| TCP/IP is more reliable | OSI is less reliable |
| TCP/IP does not have very strict boundaries. | OSI has strict boundaries |
| TCP/IP follow a horizontal approach. | OSI follows a vertical approach. |
| TCP/IP uses both session and presentation layer in the application layer itself. | OSI uses different session and presentation layers. |
| TCP/IP developed protocols then model. | OSI developed model then protocol. |
| Transport layer in TCP/IP does not provide assurance delivery of packets. | In OSI model, transport layer provides assurance delivery of packets. |
| TCP/IP model network layer only provides connection less services. | Connection less and connection oriented both services are provided by network layer in OSI model. |
| Protocols cannot be replaced easily in TCP/IP model. | While in OSI model, Protocols are better covered and is easy to replace with the change in technology. |