OSI Model

- The open system interconnection(OSI) model was developed by the international organization for standardization(ISO).
- The OSI model has seven layers.
    1. Physical layer
    2. Data link layer
    3. Network layer
    4. Transport layer
    5. Session layer
    6. Presentation layer
    7. Application layer

Physical layer:

- The lowest layer of the OSI reference model is the physical layer.
- The physical layer contains information in the form of bits.
- It is responsible for transmitting individual bits from one node to the next.
- The physical layer is also responsible for synchronization of bits, line configuration, physical topology, transmission mode.

Data link layer:

- The data link layer contains information in the form of frames.
- The data link layer is responsible for moving frames from one node to the next node.
- Responsibilities of the data link layer include framing, physical addressing, flow control, error control, access control.

Network layer:

- The network layer contains information in the form of packets.
- The network layer is responsible for delivery of individual packets from source host to the destination host.
- Responsibilities of the network layer include routing (The process of path selection in any network.) and logical addressing.

Transport layer:

- The transport layer contains information in the form of messages.
- The transport layer is responsible for delivery of a message from one process to another.
- Responsibilities of the transport layer include service point addressing,flow control, error control, connection control, and segmentation and reassembling.

Session layer:

- The session layer is responsible for dialog control, and synchronization.

Presentation layer:

- The presentation layer is responsible for translation, compression(Reduces no of bits contained in the information.), and encryption(Process of converting normal message to

meaningless message.), and decryption (Process of converting meaningless message into its original form.).

Application layer:

- The application layer is responsible for providing services to the user.