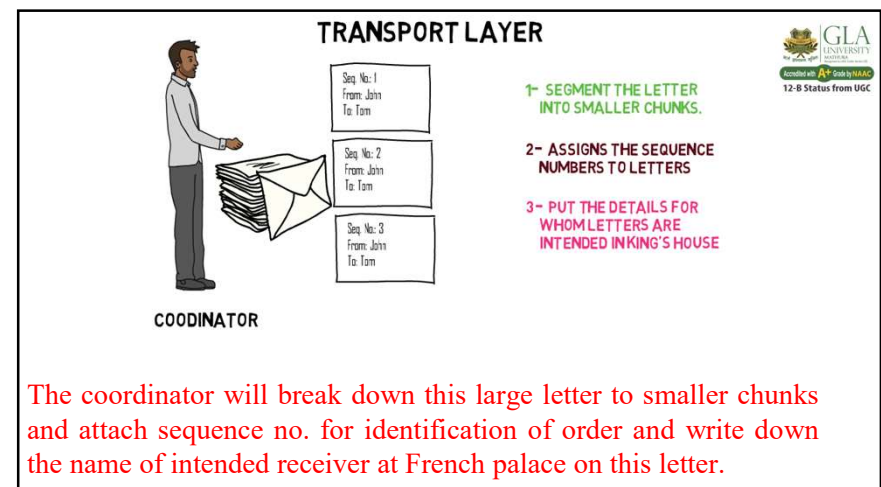
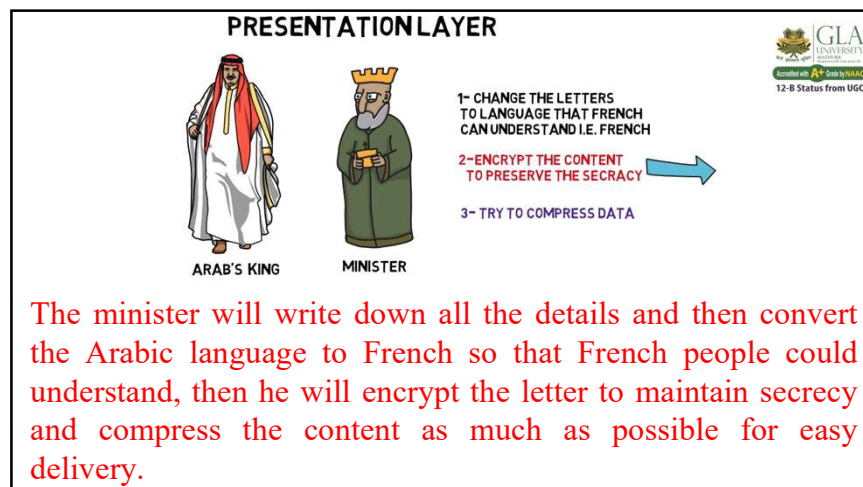
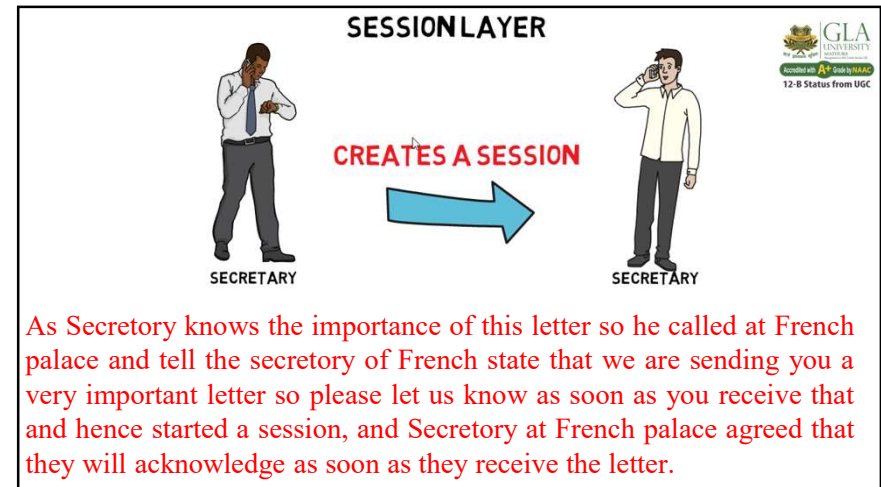
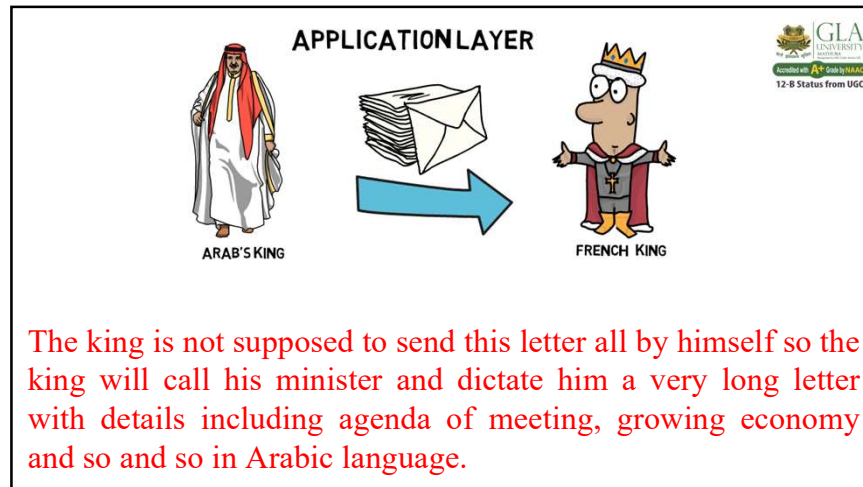
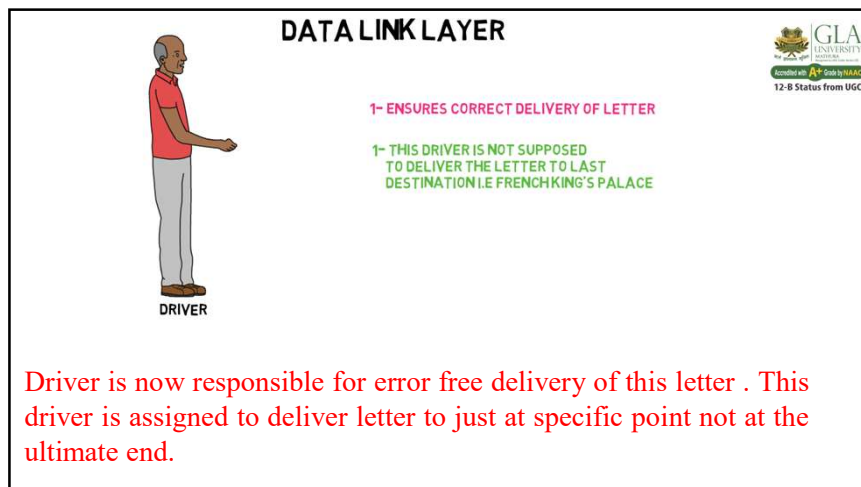
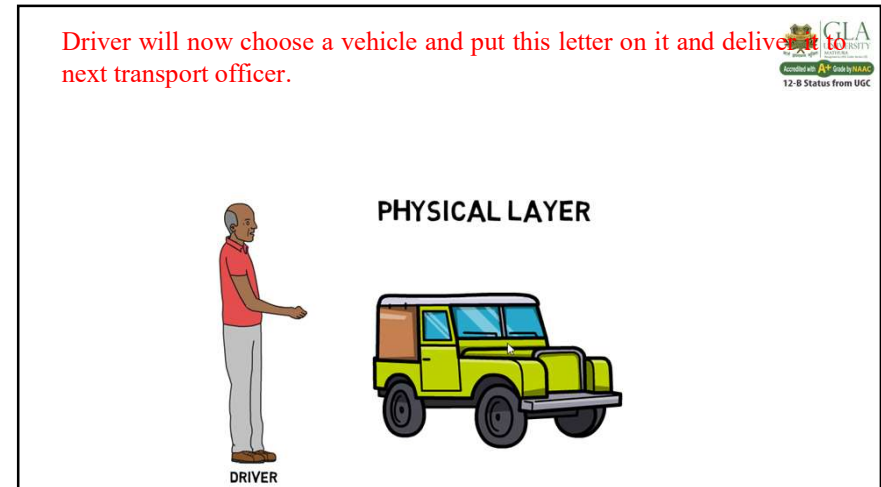
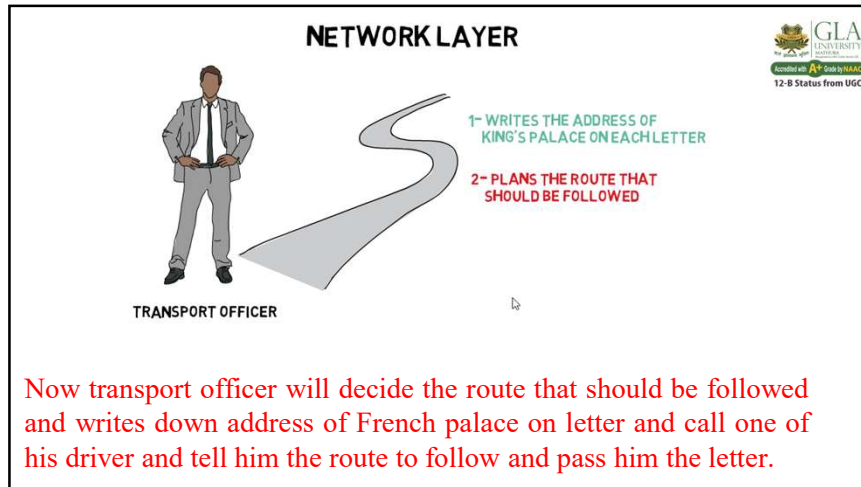
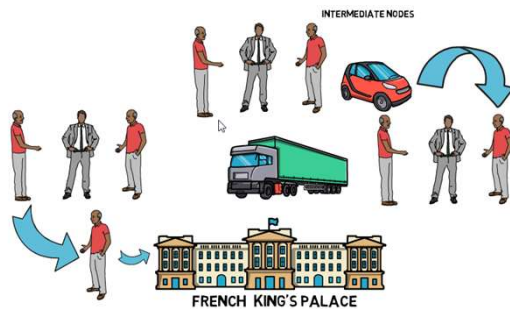


A king in Arab country wants to send an invitation letter to king in France.

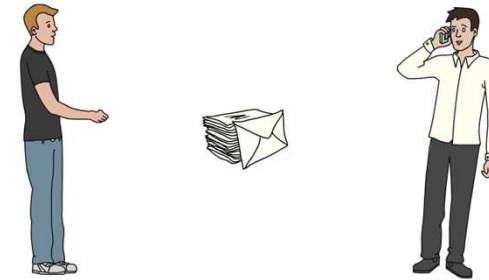




The lower three layers are responsible for physical delivery of letter, and the first layer that works inside French palace at receiver end would be transport layer



Now, Secretary will acknowledge Arab's Secretary that they have received the letters



The first person who receives letter inside French palace is French coordinator. He accepts the letter and combined them using sequence numbers and made them a single unit.

### TRANSPORT LAYER

1- TOM WILL RECEIVE LETTER IN FRENCH KING'S HOUSE BECAUSE HE WAS SPECIFIED FROM SENDER SIDE  
2- TOM WILL COMBINE LETTERS USING SEQUENCE NUMBERS AND MAKE A SINGLE LETTER



Step No: 3  
From: John  
To: Tom

Step No: 3  
From: John  
To: Tom

Step No: 3  
From: John  
To: Tom



Minister will receive the letter and will confirm that the language format is French, then he will decrypt and decompress the letter

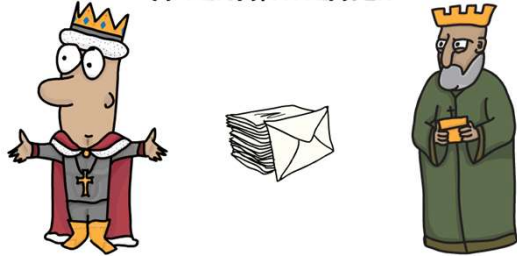
### PRESENTATION LAYER

1- DECOMPRESS  
2- DECRYPT  
3- CHECK THE LANGUAGE / FORMAT IS UNDERSTANDABLE



Once all done he will provide the letter to king of France.

### APPLICATION LAYER



### Data Link Layer (DLL) (Layer 2)

Logical Link Control

Medium Access Control

Responsible for the node to node delivery of the message

Characteristics

Framing:

Physical addressing:

Error control:

Flow Control:

Access control:

### Physical Layer (Layer 1)

It is responsible for the actual physical connection between the devices

Characteristics

Bit synchronization:

Bit rate control:

Physical topologies:

Transmission mode:

### Network Layer (Layer 3)

It is responsible for the transmission of data from one host to the other located in different networks

Characteristics

Routing:

Logical Addressing:

## Transport Layer (Layer4)

It is responsible for the End to End delivery of the complete message.



Segmentation and Reassembly:  
Service Point Addressing:

Characteristics



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## Presentation Layer (Layer6)

The data from the application layer is extracted here and manipulated as per the required format to transmit over the network



Translation :  
Encryption/ Decryption :  
Compression :

Characteristics



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## Session Layer (Layer5)

It is responsible for establishment of connection, maintenance of sessions, authentication and also ensures security.



Session establishment,  
maintenance and termination :  
Synchronization :  
Dialog Controller :

Characteristics



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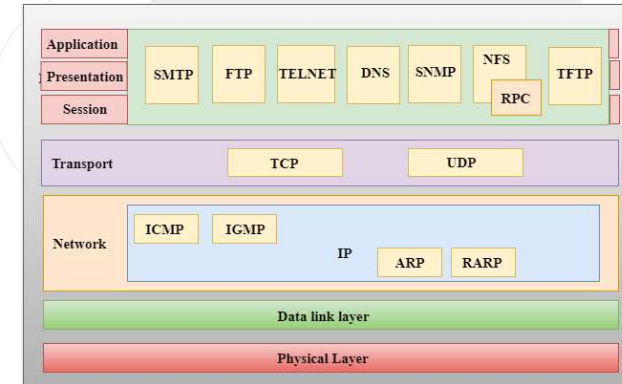
## Application Layer (Layer7)

Applications produce the data, which has to be transferred over the network.



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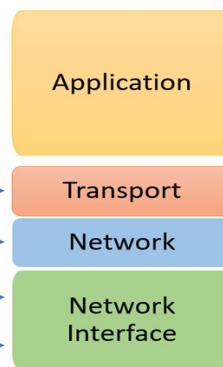
# OSI Vs TCP/IP



## OSI Reference Model




## TCP/IP Conceptual Layers



## OSI

It has 7 layers	It has 4 layers
OSI is a generic, protocol independent standard, acting as a communication gateway between the network and end user.	TCP/IP model is based on standard protocols around which the Internet has developed. It is a communication protocol, which allows connection of hosts over a network.
In OSI model the transport layer guarantees the delivery of packets.	In TCP/IP model the transport layer does not guarantee delivery of packets. Still the TCP/IP model is more reliable.
OSI is a reference model around which the networks are built. Generally it is used as a guidance tool.	TCP/IP model is, in a way, an implementation of the OSI model.



**// Quotations are commonly printed as a means of inspiration and to invoke philosophical thoughts from the reader.**