Transport Layer

Transport layer ensures successful end to end delivery of a message from application to application. It runs on the edge or end system. It only takes message from an application process and place that message successfully on the network edge.

It is not concerned with the how messages are sorted and moved in the network layer.

Core never knows about the information that the transport layer has added to the message, intermediate router and the networking devices never knows about the information added by the transport layer since this information is only for the receiver end, transport layer.

Different transport layer protocols are there ith each protocol offering different set of services.

Internet layer uses IP, IP put its best efforts to transfer a segment from one host to another, transport layer extends this functionality from one application to another application.

Extending host to host delivery to application-to-application delivery is known as transport layer multiplexing and demultiplexing.

Network layer only tries best to deliver a segment to the end, it does not guarantee reception and ordering of segments.