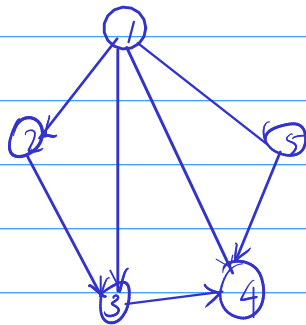


18/11/2020

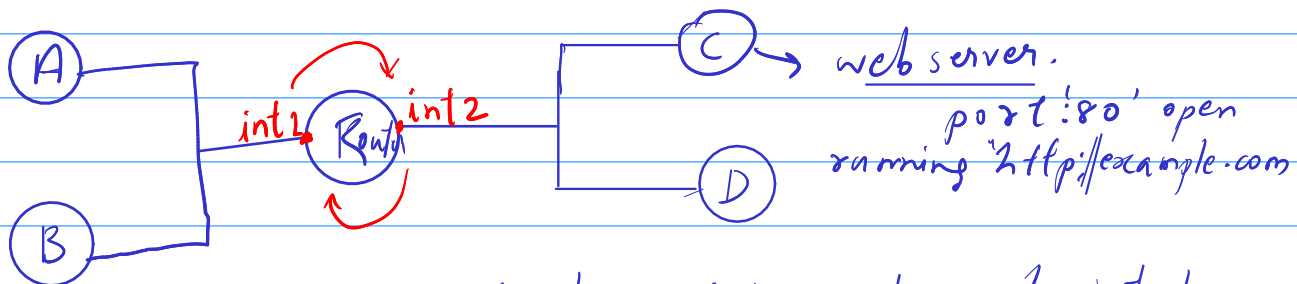
Data link layer \rightarrow node to node data delivery
n/w layer \rightarrow host to host data delivery

node vs host

node \rightarrow very generic term



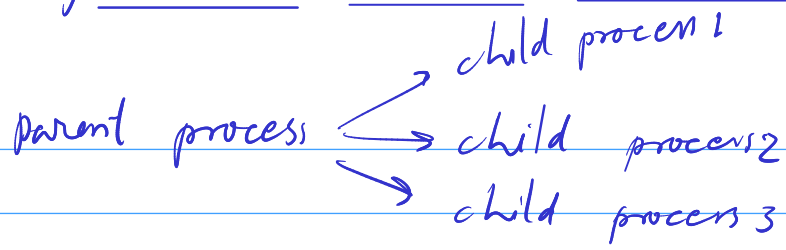
node = { router, server, printer, n/w camera, n/w tv, ... }



Router \rightarrow a router has minimum two n/w interfaces.

Host \rightarrow host is something that hosts a service at the transport layer level and above, i.e., it has a listening port.

⇒ Interprocess communication within a system



⇒ message passing mechanism between two processes is called IPC.

- pipe
 - FIFO (named pipe)
 - Message Queues
 - shared memory
- } traditional IPCs
- } System V IPCs

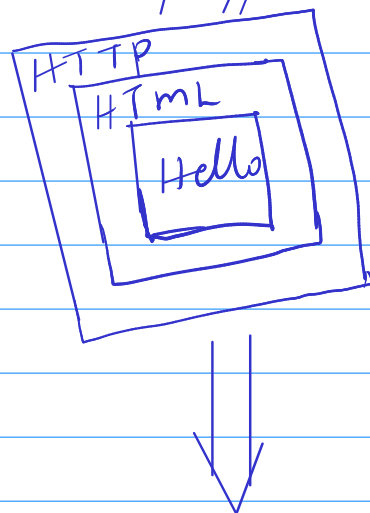
↳ can be used to share messages between unrelated processes.

↳ semaphores are used for access control.

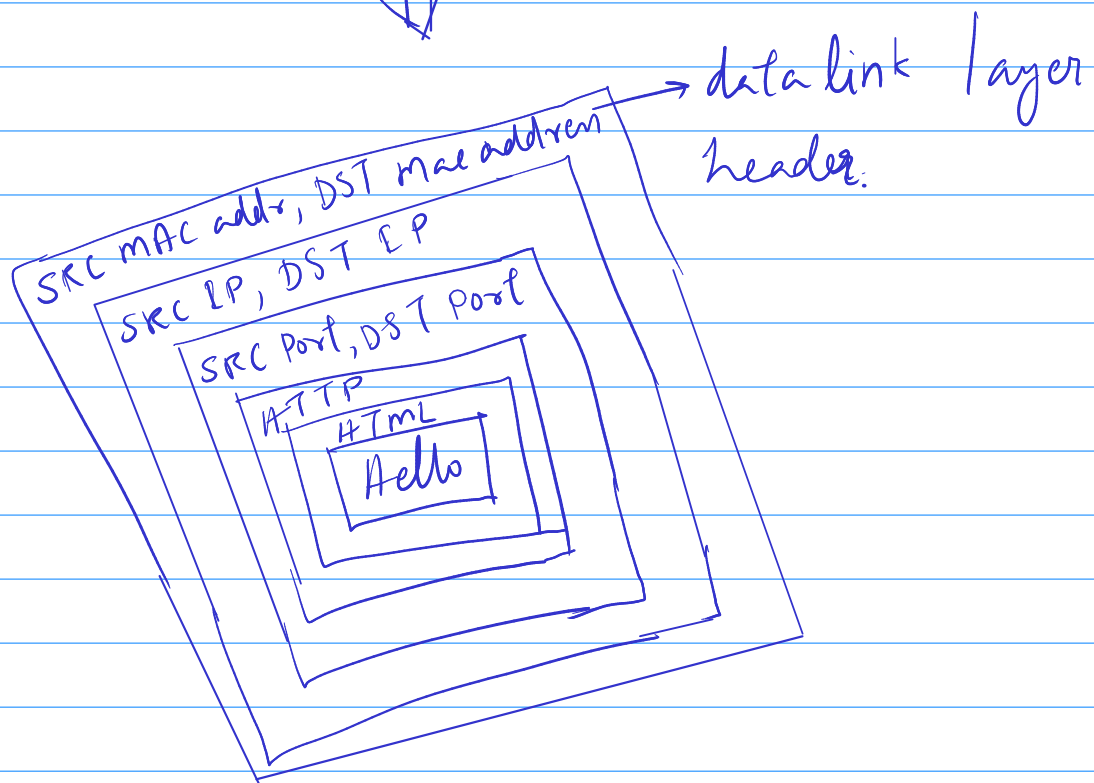
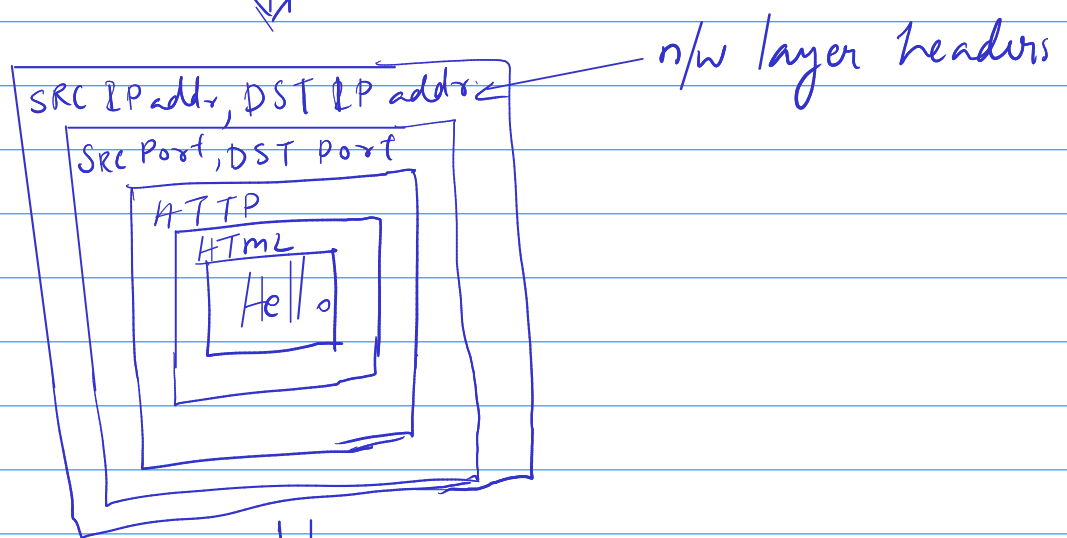
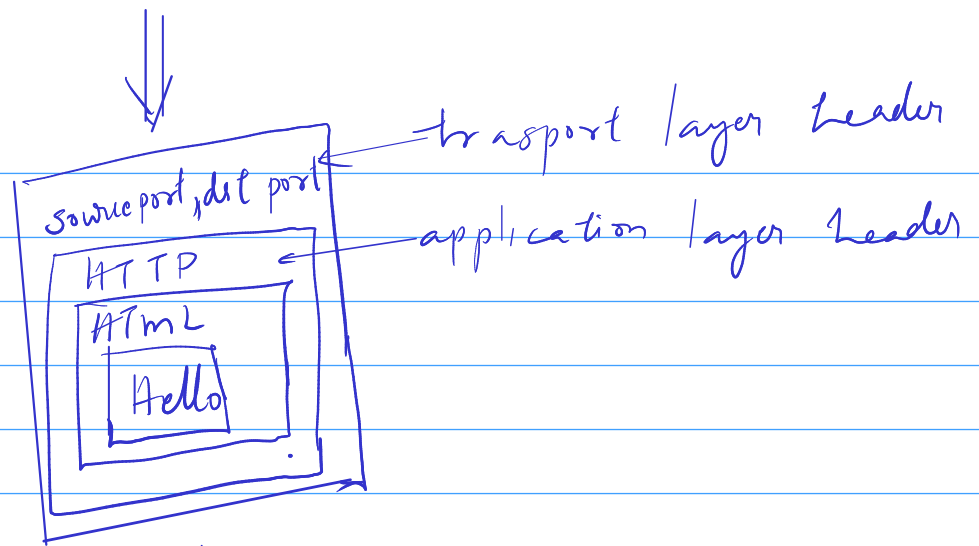
Interprocess Commr. in n/w'ed systems

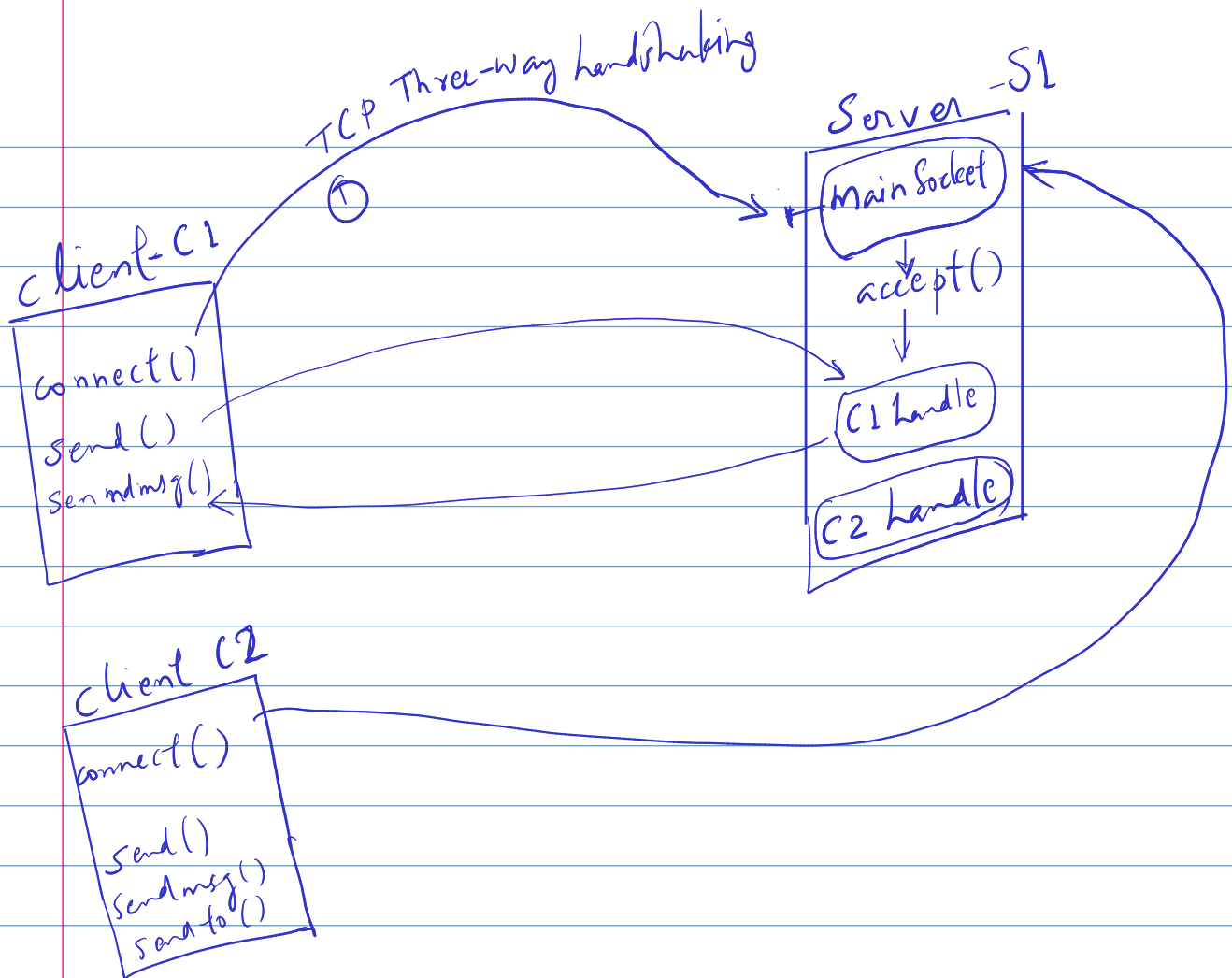
Ex: I am loading a website:

<https://www.google.com> in the browser



→ application layer





	client	server
connection initiation request	connect()	accept()
service request	send/sendmsg/ read/write/recv()	send/sendmsg() read/write/recv()

Network Byte Order and Host Byte Order

Big Endian format \Leftrightarrow n/w Byte Order

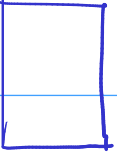
Little Endian format \Leftrightarrow Host Byte Order

socket()

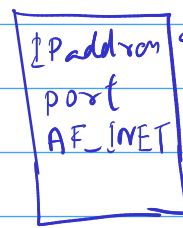


Socket object is created →

sock. obj

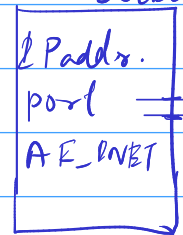


bind()



Socket Object

listen()



Socket Object

← port is open and socket is waiting for incoming new connections.