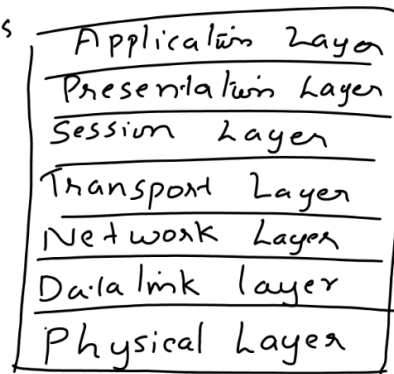
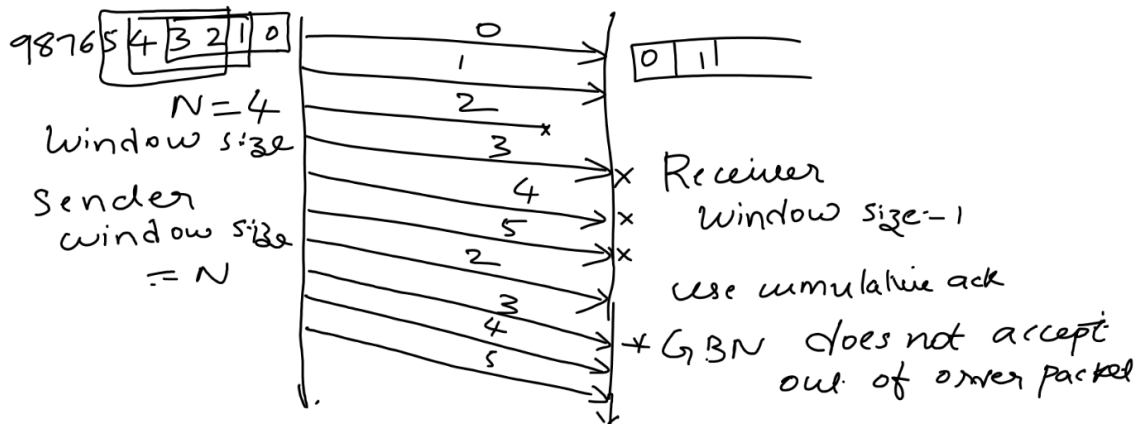


OSI  
Layers



## Go Back N ARQ



## Selective repeat ARQ

- re-transmit only lost packet
- accept out-of-order PKts
- $WS = WR$

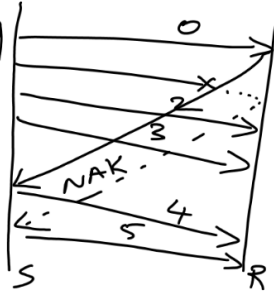
7 6 5 4 3 2 1 0

For GBN,

$$WS = 2^K - 1$$

$$= 2^2 - 1$$

$$= \underline{\underline{3}}$$



Seq NO = 8  
we use 3 bits to rep.

000 001 ... 111

K is no. of bits, 3

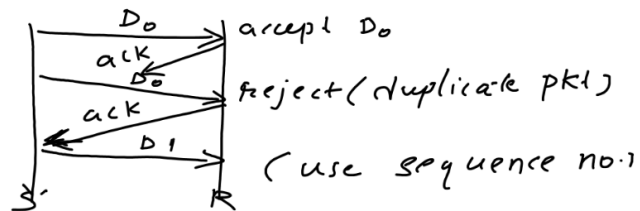
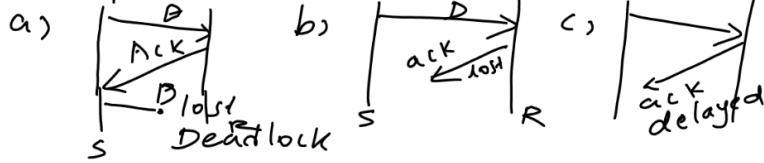
$$2^{3-1} = 2^2 = 4$$

$$WS = \underline{\underline{4}}$$

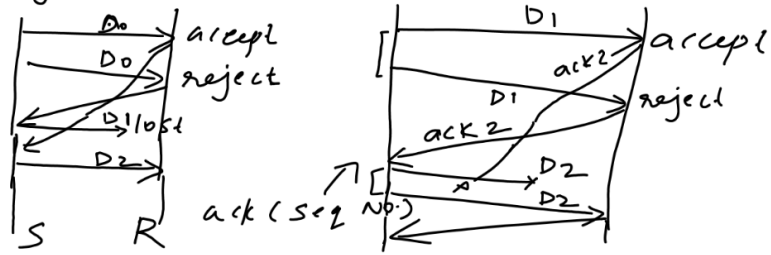
DLL

i) Flow control

Stop & wait



Delayed ack



Stop & wait + timer + seq. no.  
(for both data & ack)