

CS & IT ENGINEERING

COMPUTER NETWORKS

TCP & UDP

Lecture No 05

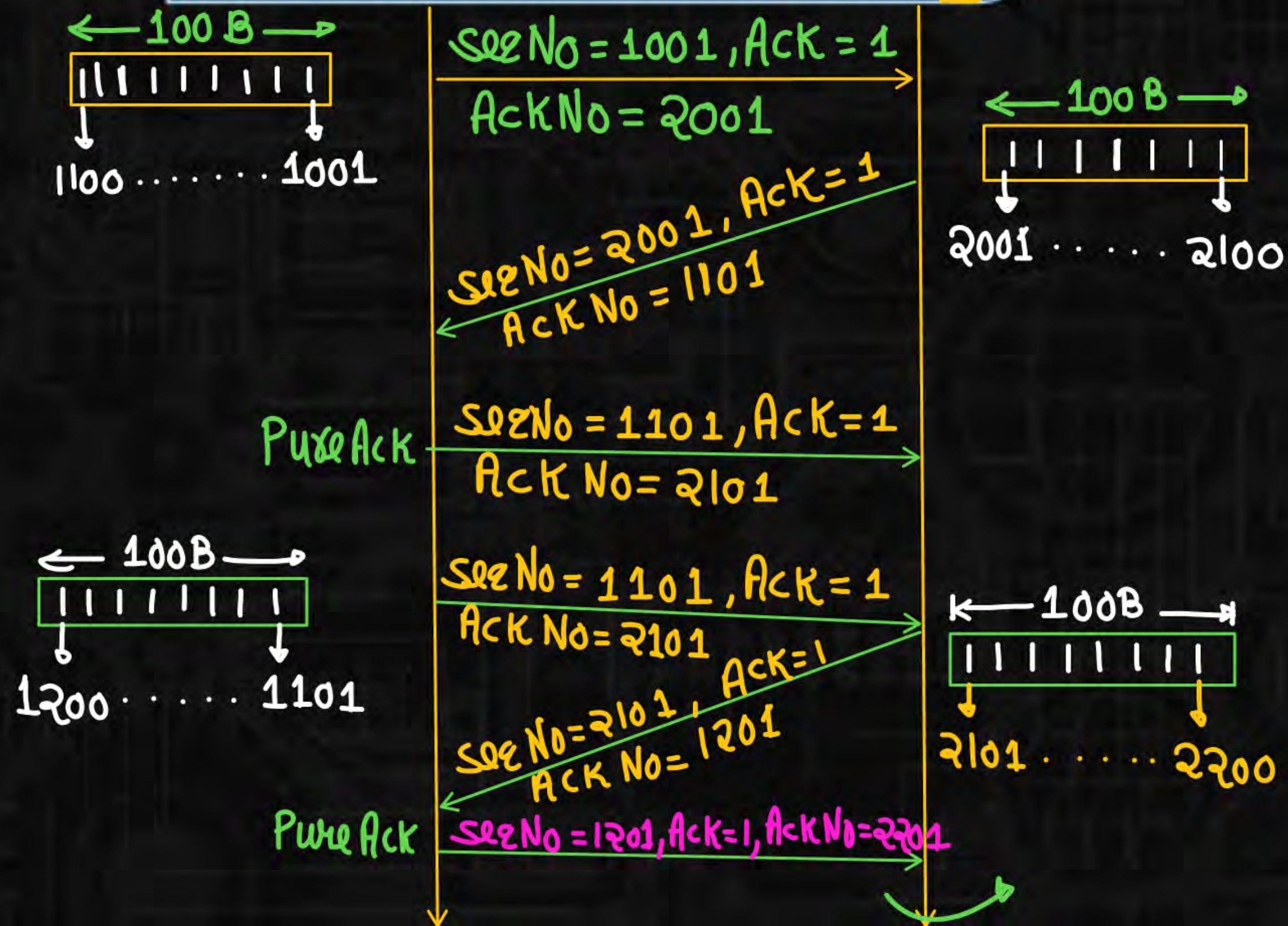


By- Ankit Doyla Sir

State transition Diagram



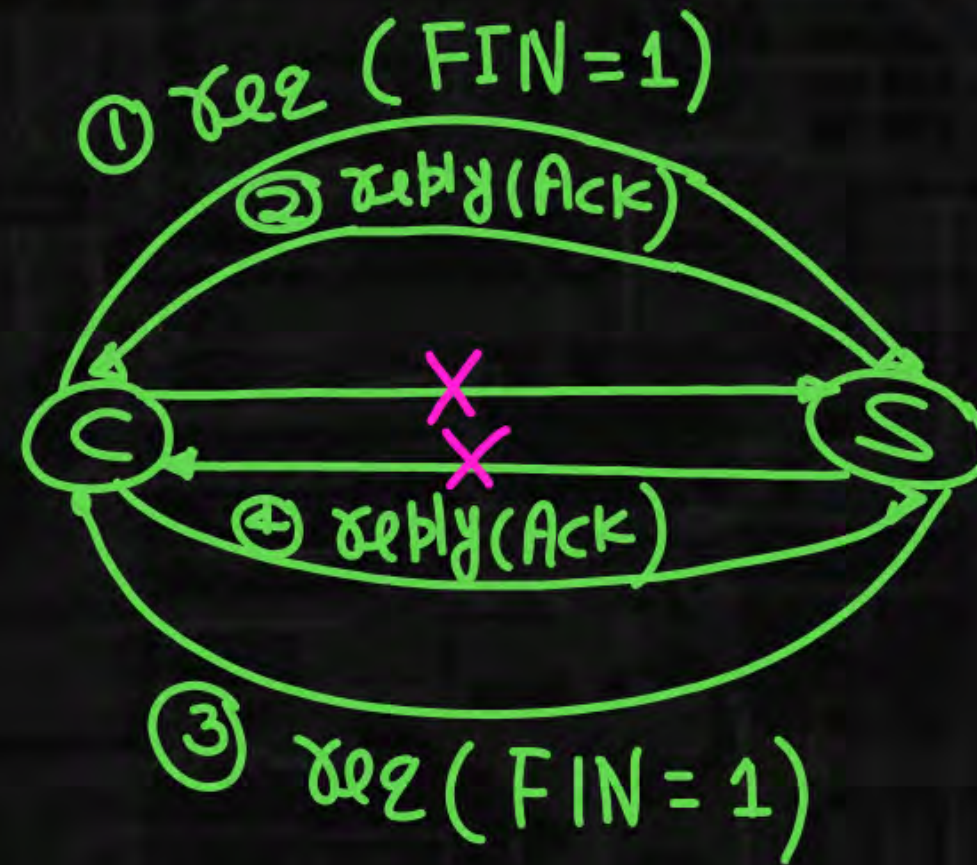
Data Transfer Phase



Connection Termination Phase

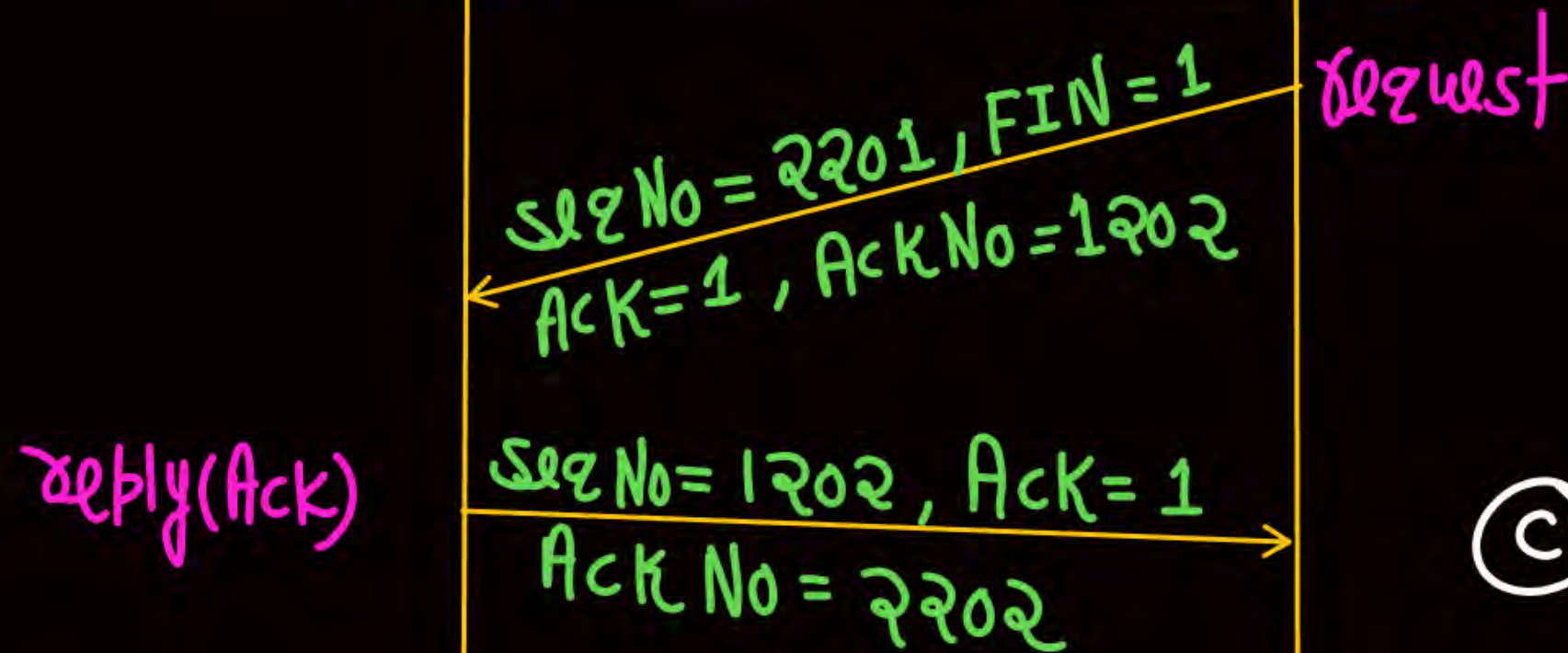
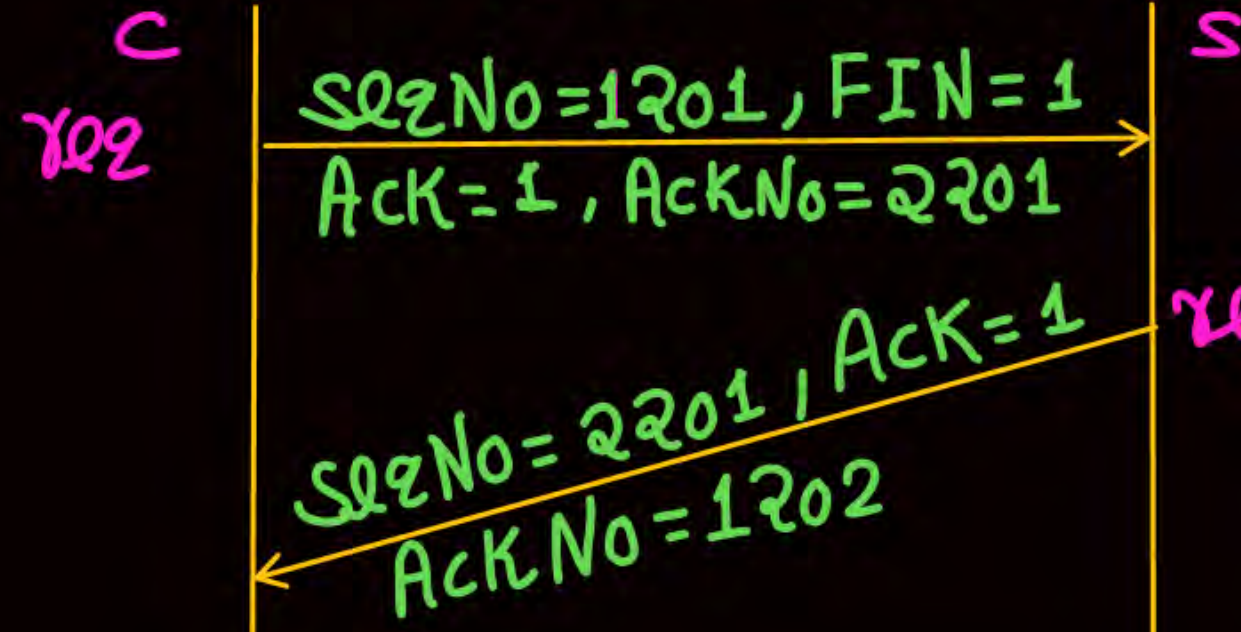


- FIN Flag is used in the connection termination phase



connection termination is a 4 way Handshaking

Connection termination



Note:-

FIN segment cannot carry data but it consume one sequence number.

Q.1

Gate
2021
(2M)



Consider the three-way handshake mechanism followed during TCP connection establishment between hosts P and Q. Let X and Y be two random 32-bit starting sequence numbers chosen by P and Q respectively. Suppose P sends a TCP connection request message to Q with a TCP segment having SYN bit = 1, SEQ number = X, and ACK bit = 0. Suppose Q accepts the connection request. Which one of the following choices represents the information present in the TCP segment header that is sent by Q to P?

☒ A

SYN bit = 1, SEQ number = Y, ACK bit = 1, ACK number = X+1, FIN bit = 0

☐ B

SYN bit = 0, SEQ number = X+1, ACK bit = 0, ACK number = Y, FIN bit = 1

☐ C

SYN bit = 1, SEQ number = X+1, ACK bit = 0, ACK number = Y, FIN bit = 0

☐ D

SYN bit = 1, SEQ number = Y, ACK bit = 1, ACK number = X, FIN bit = 0

