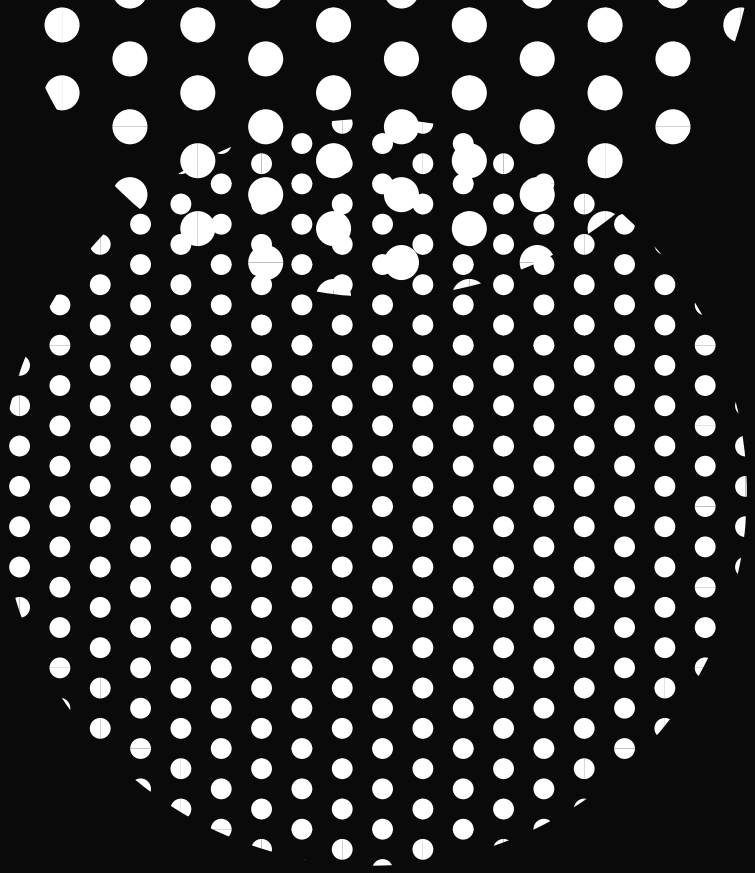
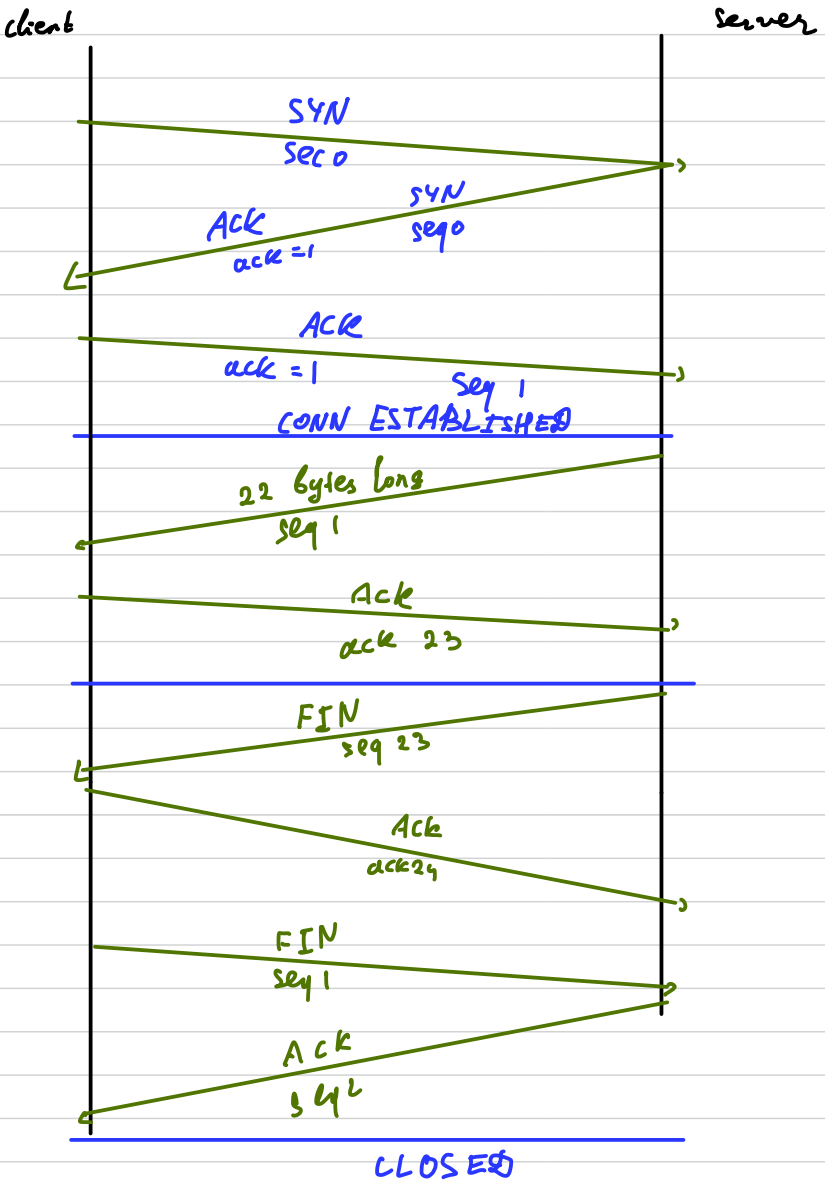
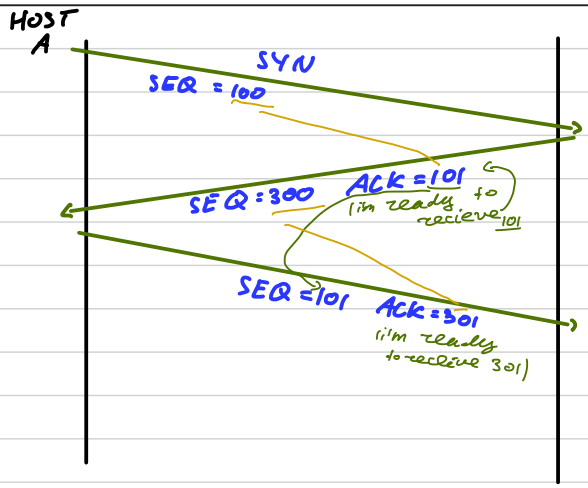



client
server
SYN
seq 0
SYN
seq 0
ACK
ack = 1
ACK
ack = 1
seq 1
CONN ESTABLISHED
22 bytes long
seq 1
Ack
ack 23
FIN
seq 23
Ack
ack 24
FIN
seq 1
Ack
seq 2
CLOSED



ACK = start byte + size of packet + 1

Syn = takes 1 byte
ack = doesn't take any byte

RTO = retrans. time out
RTT = round trip time
RTTm = measured
RTTs = smoothed

first one: $RTTs = RTTm$

second one: $RTTs = (1-t)\underbrace{RTTs}_{\text{old one}} + t \cdot \underbrace{RTTm}_{\text{new measured}}$

default $t = \frac{1}{8}$

Dev RTT = "standart deviation"

$DevRTT = \frac{RTT}{2}$

$DevRTT = (1-\beta)DevRTT + \beta|RTTm - RTTs|$

$\beta = 0.125$

$RTO = RTTm + 4 \cdot DevRTT$

RTTd = deviated
how much does it vary from average RTT

1ms = 0.001 sec

transmission = we send
reception = we receive

MSS = maximum segment size
MTU = maximum transmission unit

CWnd = congestion window (limit of unacknowledged data in bytes)
rwnd = receive window