

Quiz-3 SET A

Name:

ID:

Section:

The server sends the 18th **data segment (20,000 bytes)** with a sequence number of 100,035 and an acknowledgment number of **155000**. For every message, the data segment size doubles compared to the previous one. The 8th request message from the client (**with sequence number 180,000 and message size 8,00 bytes**) was lost. The client's request message size doubles after every 4 messages. Initially, the receiver window (RWND) of the client and server are **10,000,000 bytes and 20,000,000 bytes**, respectively.

1. Determine the Initial Sequence Numbers (ISN) of both the client and the server.
2. Calculate the client's RWND after receiving the 18th segment.
3. **The lost 8th request message was resent after the 18th data segment.**

If the acknowledgment number of the 19th segment is **M in the Selective Repeat protocol** and **N in the Go-Back-N protocol**, verify whether the statement $N = 2000M - 405$ is correct or not.

Quiz-3 SET B

Name:

ID:

Section:

The server sends the 18th data segment (20,000 bytes) with a sequence number of 120,035 and an acknowledgment number of 155020. For every message, the data segment size doubles compared to the previous one. The 4th request message from the client (**with sequence number 180,000 and message size 8,00 bytes**) was lost. The client's request message size doubles after every 4 messages. Initially, the receiver window (RWND) of the client and server are 10,000,000 bytes and 20,000,000 bytes, respectively.

Determine the Initial Sequence Numbers (ISN) of both the client and the server.

2. Calculate the client's RWND after receiving the 18th segment.

3. The lost 8th request message was resent after the 18th data segment.

If the acknowledgment number of the 19th segment is M in the Selective Repeat protocol and N in the Go-Back-N protocol, verify whether the statement $N = 2040M - 505$ is correct or not.