Problem Session 6: Networking

Wednesday, May 6, 2020

1. Assume you are communicating over a TCP connection with a window size of 3. The client wants to send a sequence of five packets to the server. Assume that the packets each contain one byte, and the sequence number of the first packet is 1. Assume that the third packet set by the client and the third ACK sent by the server get lost. What is the sequence of messages that will be exchanged by the client and the server?

2. Some researchers have proposed TCP variants that respond to congestion events by reducing their window size by a small constant amount. How would such protocols interact with existing TCP implementations?

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3. How would you modify the server code from you networking assignment to support multiple concur-

rent connections?