

Programming Assignment question

In this assignment, you will develop a simulation application that has a sender and receiver in C. The sender sends two types of packets using UDP sockets every 100 ms(milliseconds) and every 150 ms repeatedly. The packet structure should contain a packet type(1 or 2), sequence number, byte array of 1024 bytes (payload), and a trailer for the checksum of the entire packet (bitwise XOR). The receiver application receives these packets using 4 threads. The first thread checks the received packets for errors. The second thread processes the packets of type 1. The third thread processes the packets of type 2. The fourth thread periodically (every 300th ms) prints the number of packets of each type received. You may use the pthread library and any synchronization primitives.