Here is the prototype project specs

1- Sender Process: generate packets at uniform rate, once each 200 msec. Each packet using malloc and is a C/C++ structure that has header and data. Header contains destination (selected randomly from 3 and 4), sequence number (32-bits) starts from 0 and increments per destination, and length (16-bits) (initially length is fixed at 1000 bytes containing header).
2- Switch node: Receives packet from senders. Packet is dropped with probability p=0.01 or otherwise forwarded based on the destination in the packet header to receiver 3 or 4. If the packet is forwarded, it reaches destination after 200 msec. If the packet is dropped, it is released using free.
3- Receiver node: counts the number of received packets and using sequence number counts number of lost packets. Upon receiving a packet, it releases it using free. If it receives packet not destined to it, it should log an error.