

Report

1. No. of retransmissions

Probability	No. of transmissions	Length of string	Average no. of transmission
0.05	48	46	1.04
0.1	51	46	1.10
0.15	63	46	1.36
0.2	68	46	1.47
0.25	75	46	1.63
0.3	90	46	1.95
0.35	94	46	2.04
0.4	127	46	2.76
0.45	111	46	2.41
0.5	154	46	3.34

2. Messages and their formats

- a. Atomic data structure for storing data send over streams
struct data
 - int msg_len : No. of bytes of msg
 - void *msg : Initially void would store the actual msg
- b. Message for storing packet that are being send
struct sendPacket
 - struct sockaddr_in to : receiver's address
 - int type : acknowledgement or genuine message
 - int seq_id : sequence id
 - struct data d : data stored in the msg
- c. Message for storing packet that are being received
struct recvPacket
 - struct sockaddr_in from : sender's address
 - struct data d : data stored in the msg
- d. Message for storing unacknowledged sent packets
struct unAckPacket
 - time_t t : time message sent
 - struct sendPacket p : packet sent in case re-sending may be necessary

3. Data structures

- a. Cyclic queue for storing messages to be send
struct sendBuffer
 - int front : Beginning index
 - int end : Ending index
 - int size : No. of msgs present in queue
 - struct sendPacket **p :

- b. Cyclic queue for storing messages to be received
struct recvBuffer
 - int front : Beginning index
 - int end : Ending index
 - int size : No. of msgs present in queue
 - struct recvPacket **p :

- c. Array for storing unacknowledged msgs
struct unAckTable
 - int size : No. of unacknowledged msgs
 - struct unAckPacket **p :

- d. Array for storing received msgs
struct recvIDs
 - int size : No. of received msgs
 - int *IDs :