EXPNO: 7

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Flow Control at Data Linklayer

Aim:

White a program to implement from control as data link layer using sliding window protocol. simulate the flower control frames from one node to another

Features:

- -> Input window size and message
- -> sends window size frame at a time
- -> writes frames to sender buffer
- -> recieves leads frames, sends ACK Or NALK
 to recieves buffer.
- -> sender reade ACKINACK and continues or resends frames.
- > You can manually edit the files to simulate ellors.

CODE:

import random class sender:

def-init- (self, total-frames, window size):

self. total-frames = total-frames

Sell : window size = window size

sely-base = 0

("Lana 2 mail out 1910)

self-next-seq= 0

des send- frames (cels):

Prints" In Esendel J Total frames to sent dell. total - frames;

while self. base I sell. total - brames:

while self. next. sequseq. base + seq. window size.

and self. next-seq 2 self. total-brames
print(f[sender] sending frame

Lself. next-seq 3)

def ack_recieved(self-ack):

Print(| "[sender] Acknowledgement
recieved

for frame Lack 3")

it ack >= self.base:

self. base = act+1

class Receiver:

def receiver. frame (self, frame_no, sender):

if random. choice ([True, False]):

prints (f" [Receiver] Received Frame 2 brame_no3")

sender. ack-received (brame no)

else:

print (f"[Receiver] Frame 15 some loct(No Ack Sent)4)

if_name_-=="-main_-";

total_frames = 5
window_size = 3
Sender = sender (total-brames, window-size)
Leceiver = Leceiver()
Sender. Lend-frames (Leceiver)

OUTPUT:

Enter total number of prames: 5

Enter window size: 3

[sender] Total Frames to send:5

[sender] sending brame o

[sender] sending brame 1

[sender] sending brame 2

[Receiver] successfully received brance o to 2

[sender] sending brame 3

Esender Sending Grame 4

[Receiver] Frame 4 lost or corrupted

Csender J Timeout Resending window from frame 3.

[sender] sending brame 3

Esenders sending Grame 4

[Receiver] Acknowledgement received for frame 4.

transmission completed

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