

NAME :- M.MUSA

ID :- 14531

SEM :- BS (SE) - 4

SEC :- A

SUB :- COMPUTER COMMUNICATION
AND NETWORKS

DATE :- 24/6/2020

Question N.O (1):-

Sol:-

101.10.11.14

255.0.0.0

101.0.0.0

IP address = 101.00.0

Limited broadcast address

As limited broadcast doesn't change from router to another and send message to limited people of an organization so it is "All one's or All zero's".

Limited broadcast address = 255.255.255.255

or

Limited broadcast address = 0.0.0.0.

Question N.O (2):-

Sol:-

id = 14531

14531 = 110001000111

2 | 14531 - 1

2 | 7265 - 1

2 | 3632 - 1

2 | 1816 - 0

2 | 908 - 0

2 | 454 - 0

2 | 227 - 1

2 | 113 - 0

2 | 56 - 0

2 | 28 - 0

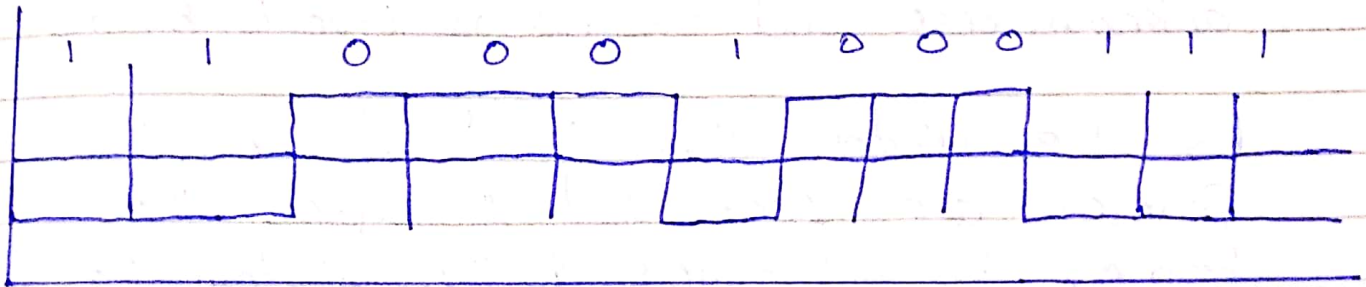
2 | 14 - 0

2 | 7 - 0

2 | 3 - 0

2 | 1 - 1

NRZ-L Scheme Graph



Question N.0 (3):-

Answer:-

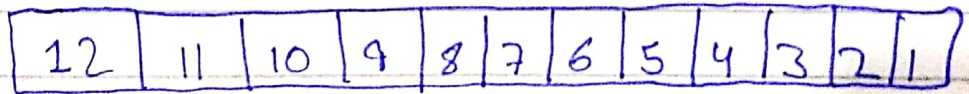
My ID = 14531

ID list = 1

window size = 1

Now if no frames are sent from to B the window has not appeared on the frames

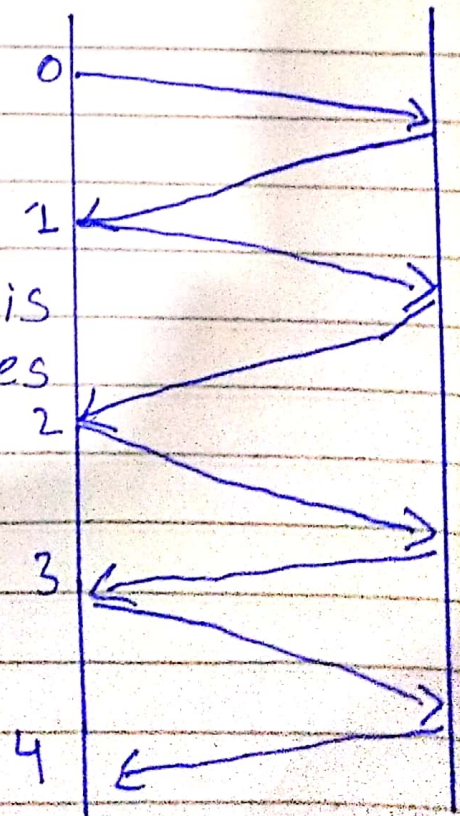
e.g



After A sends frame 0, 1, 2, 3, 4 and the acknowledgement from B for 0, 1 and 2

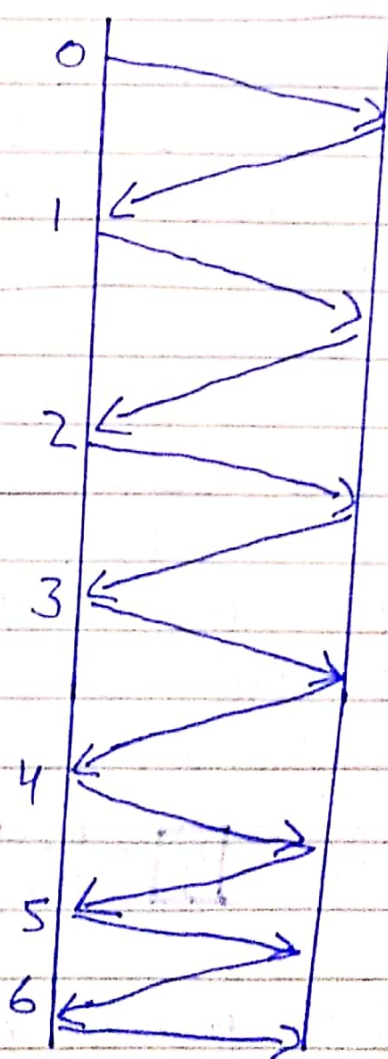
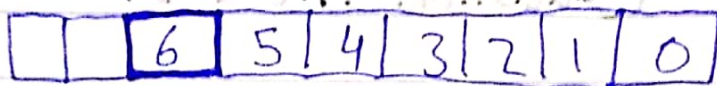


AS the Acknowledgement 1 is received so the window slides forward.



After A sends frame 5, 6 and B acknowledge and the Ack received by A.

As the window size is "1" so 1 frames are sent and 0 after the frames is acknowledged the window size forward.



Question (4),

Sol:-

$$160 \cdot X \cdot ID_{3+4} \cdot 016$$

$$XID = 14531 = 14$$

$$ID_{3+4} = 5+3 = 8$$

So

$$160 \cdot 14 \cdot 8 \cdot 016$$

Group #1:-

$$\text{customer } 001 = 160 \cdot 14 \cdot 8 \cdot 0/28$$

$$\text{customer } 016 = 160 \cdot 14 \cdot 24 \cdot 0/28$$

$$\text{total} = 1024$$

Group #2

$$\text{customer } 017 = 160 \cdot 14 \cdot 25 \cdot 0/27$$

$$\text{" " } 064 = 160 \cdot 14 \cdot 84 \cdot 0/27$$

$$\text{total} = 2048$$

Group #3

$$\text{customer } 001 = 160 \cdot 14 \cdot 85 \cdot 0/28$$

$$\text{" " } 102 = 160 \cdot 14 \cdot 102 \cdot 0/26$$

$$\text{total} = 1024$$

$$\begin{aligned} \text{Number of Allocated address} &= 4096 \\ \text{" " " available " " " } &= 3072 \end{aligned}$$

THE END