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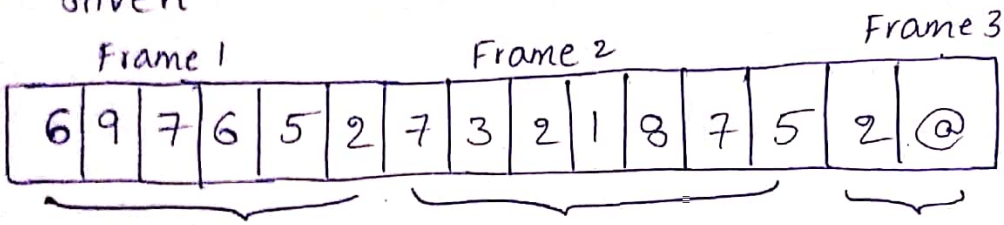
CNS (Tutorial-1)

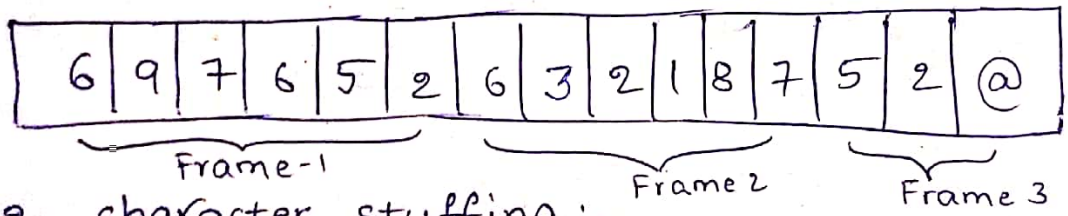
In-Tutorial

1. Send a message "9765232187 5@" character count framing method :-

Given



Due to error the character count of frame2 is changed from 7 to 6, Then the frames will be



2. character stuffing :-

Given:-

I SCREAM YOU SCREAM WE ALL SCREAM FOR AN ICECREAM

The stuffing byte is 'ESC'

SCREAM I ESC SCREAM YOU ESC (SOF)

SCREAM WE ALL ESC SCREAM FOR AN ICECREAM SCREAM (EOF)

3. Given

FLAG	STX	YOUR	SUBMISSION	IS

FLAG	GED	FLAG	ETX

The data passed to the recieverside is 'your submission is flagged'.

The disadvantage is to transfer small bit of data, it takes more bits for the character stuffing

4. i) The code word 201 = 11001001

Bit stuffing

flag = 01111110

01111110 11001001 01111110

ii) Given

0110 11111111 00 11111 0 1111111 11111 0000

7 1's

FLAG = 01111110

01111110 01101111110 100 11111 0 1111110 11110000

FLAG

stuffed Bit

stuffed Bit

01111110

FLAG

iii) data = 011011111

FLAG = 01110

01110 011011011 01110

↓

stuffed Bit

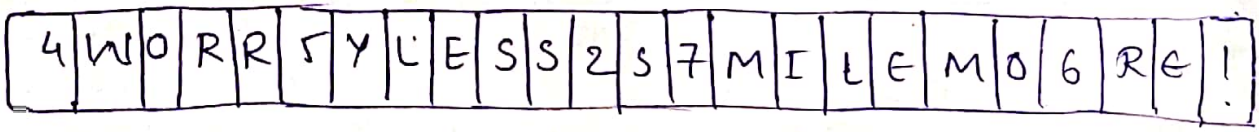
→ If we write the stuffed bit there, then it can be considered as a flag so the next data will not included in the receiver side.

POST Tutorial

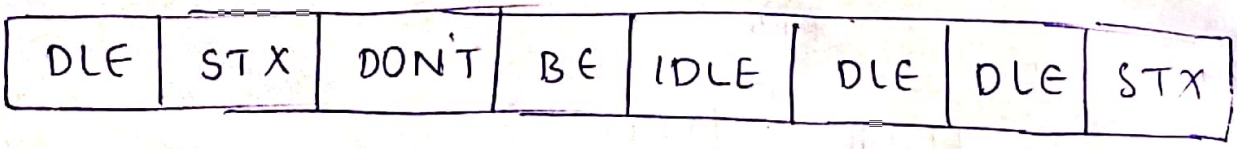
1. Data :- WORRY LESSSMILEMORE!

Given data into frames as sizes

4, 5, 2, 7, 6



2. Given



Data :- Don't be IDLE

3. Data = 111000111001111

FLAG = 01111110

After bit stuffing

01111110 111000111001111 01111110

FLAG DATA FLAG

4. Data = 01111110 11101111101111101101111C

FLAG

01111110

FLAG

Flag = 01111110

Before Bit stuffing,

data = 11101111101111101011110

stuffed bit, stuffed bit

because the stuffed bit must be added it we get 6 according to the flag

∴ data = 11101111111111011110