40. Bit Stuffing

110110010011011101100010011011

Node 1 ------------------------------------------------------------ Node 2

In the above example, there’s a sequence of bits which are as same as the header and trailer rule.

The above example can cause the frame error if it is not resolved.

These scenarios occurs often and are solved using Bit Stuffing.

In Bit stuffing, a random bit - either 0 or 1 is spaced between the sequences in the data portion which may cause errors.

Without bit stuffing -

110110010011011101100010011011

Node 1 ------------------------------------------------------------ Node 2

After Bit Stuffing -

1101100100110111001100010011011

Node 1 ------------------------------------------------------------ Node 2

(0 is added between the red set of bits)