Exercícios

17. (Tanenbaum, Cap 3, #2) 2. The following character encoding is used in a data link protocol: A: 01000111; B: 11100011; FLAG: 01111110; ESC: 11100000 Show the bit sequence transmitted (in binary) for the four-character frame: A B ESC FLAG when each of the following framing methods are used:
    a) Character count.
    b) Flag bytes with byte stuffing.
    c) Starting and ending flag bytes, with bit stuffing.
18. (Tanenbaum, Cap 3, #6) When bit stuffing is used, is it possible for the loss, insertion, or modification of a single bit to cause an error not detected by the checksum? If not, why not? If so, how? Does the checksum length play a role here?
19. (Tanenbaum, Cap 3, #14) What is the remainder obtained by dividing $x^7 + x^5 + 1$ by the generator polynomial $x^3 + 1$?
20. (Tanenbaum, Cap 3, #16) Data link protocols almost always put the CRC in a trailer rather than in a header. Why?

Exercícios

A seguinte sequência foi recebida:

111110001100

Sabe-se que foi utilizado a codificação de Hamming.

A sequência está correta? Se não, qual o valor correto dos dados?